

CLOTA Tryouts For Spring Show Set By Director

Tryouts for "Here Lies Jeremy Troy," the first production of the 1971 season by the Community Light Opera and Theater Association, will take place on Monday and Tuesday, February 1 and 2 at the CLOTA Hangar, Upjohn and China Lake Blvd. Tryouts will begin at 7:30 p.m.

"There are five wonderfully-funny parts in 'Jeremy,'" stated director Ed Romero. "Jeremy and Kathryn Troy, a successful young couple in their early '30s; Charlie Bickle, an unsuccessful artist of about the same age; Tina Winslow, a wacky young part-time model and would-be actress; and Sven Ivorsen, Jeremy's somewhat glibbe, middle-aged boss."

Romero, who is well known to local audiences for his fine direction of "David and Lisa," for CLOTA last year, and for his performances on the stage, such as Prof. Higgins in "My Fair Lady," said that the roles are about of equal length and dialogue. "Prior experience is not necessary," he elaborated. "Any interested person is welcome to tryout."

"Here Lies Jeremy Troy," is a classic example of an audacious lie building up to monstrous proportions, with confusion leading to misunderstandings and finally chaos for a harried Jeremy, who is desperately trying to save his marriage, job and future.

Romero announced that rehearsals will be held three times a week, commencing on February 22. The play will run for four performances at the Burroughs Lecture Center: April 9, 10, 16 and 17.

According to Romero, an innovation in stage settings (and a first for IWW little-theater), will be the use of a full-sized, two-story set, now being designed by David Chapman. A set two stories high was not possible for Valley productions prior to the availability of the Lecture Center.

"Quality theater is now possible," Romero said, "and our shows can now be presented in an atmosphere of comfort, ease, visibility and good acoustics."

"The building of our set will naturally be quite an undertaking," the director confided, "and people are needed to aid in its construction," he went on. Persons interested in helping backstage for this production are asked to contact Romero, at NWC Ext. 2264.

Sky Marshall Employment

(Continued from Page 7)
of training.

General physical requirements include: no limitations on height or weight, no history of fainting or epilepsy, eyesight in the range of 20-40 to 20-70 but correctable to 20-20, free from marked deformities, free range of motion in all limbs, no missing fingers or toes, and no varicose veins.

Promotion opportunities for Customs Security Officers extend to grade GS-9, with further opportunities for supervisory positions and for advancement to special agent or to other Customs technical positions.



"MAD HAT" WINNERS—Winners of the "most unique hats" at the Military Wives luncheon were (l-r): Sandy Eilers, 4th place; Faye Rasmussen, honorable mention; Leah Little, 2nd place; Valda Brown, 3rd place; Patty Bender, 1st place; and Jan Spradley, honorable mention. The luncheon, held at the Commissioned Officers' Mess on January 26, was hosted by military wives of the Naval Air Facility. Recent arrivals to NWC were welcomed by Mrs. W. J. Moran, wife of the NWC Commander, were: Mmes. C. Birdwell, Jr., John C. Clinton, L. C. Bender, A. Debodisco, and Dan S. Eilers.

—Photo by PH2 D. E. Hart, USN

AAUW To Sponsor 'Tasting Tea'

The China Lake Branch of the American Association of University Women will sponsor a tasting tea on Sunday, February 7, from 2-4 p.m. at the Community Center. The tasting tea will offer the public a chance to sample regional cooking in the United States and the theme for the event is "Eating Your Way through the U.S.A."

There will be five tables

representing five different areas of the United States. Each table will have seven different dishes which might include main dishes, desserts, biscuits and rolls, appetizers, and other specialties. The five areas and the table chairman for each are: Pennsylvania Dutch, Mrs. Marvin Backman; New England, Mrs. Robert Glenn; South, Mrs. Edwin Swann; Southwest, Mrs. Phillip

Roper; and Far West, Mrs. Paul Amundsen. General chairmen for the event are Mrs. Carl Austin and Mrs. E. F. Diede.

Tickets may be purchased from members of AAUW or at the door on Sunday. Prices are \$1.50 for adults and recipe books will be furnished for each adult ticket. Coffee, punch and tea will be the beverages served. Children's tickets for those under twelve years of age are priced at 75¢ each. Mrs. John Petersen is directing ticket sales and the recipe books are being compiled under the chairmanship of Mrs. K. R. Wetzel. Mrs. E. W. Anderson and Miss Eleanor Eng are assisting Mrs. Wetzel.

All proceeds will go into the AAUW scholarship fund which provides a local college scholarship to a graduating Burroughs High School senior girl and to the national AAUW program which provides graduate study awards for women.

The public is invited to attend and sample recipes which offer different ideas to tempt the appetite.

Two Surplus Property Sales Scheduled At MCSC, Barstow

Two sales of surplus property are slated within the next two weeks at the Marine Corps Supply Center's Property Disposal Branch, MCSC Barstow.

A retail sale will be held Jan. 30 between 9 a.m. and 1 p.m. in the east end of bldg. 165, and will be open to all military and civilian personnel of the Center and to the general public.

Many items of interest will be offered, such as wooden "home type" desks, metal office-type desks, dressers, dining tables, common tools and hardware and a special table of fifty-cent items.

All sales will be on a cash-and-carry basis and buyers will be required to immediately remove items purchased. Personal checks will not be accepted and the sale will be conducted on a "first come, first serve" basis.

On Feb. 4, an auction sale of Department of Defense surplus property, also on a cash-and-carry basis, will be held at the Property Disposal Branch Lot 371, on the south side of Joseph L. Boll

Avenue. Registration will begin on the day of the sale at 8 a.m. The sale will start at 9 a.m. Property may be inspected daily 8 a.m. through 3:30 p.m. until the day of the sale, except Saturdays and Sundays.

This will be an auction type sale, with the highest bidder being awarded the item. Mailed, telephonic or telegraphic bids will be accepted. Personal checks will be accepted. Government employees and military personnel may participate in this sale providing their duties do not include any functional or supervisory responsibility for or within the Defense Property Disposal program, or their agents or immediate families.

Property Disposal personnel will load the heavy equipment onto the buyer's vehicle. The buyer can remove the property on the same day or may elect to remove it within five working days of the sale. Loading will not be accomplished until after the completion of the sale.

SHOWBOAT

MOVIE RATINGS
The objective of the ratings is to inform parents about the suitability of movie content for viewing by their children.
(G) - ALL AGES ADMITTED
General Audiences
(GP) - ALL AGES ADMITTED
Parental Guidance Suggested
(R) - RESTRICTED
Under 17 requires accompanying Parent or Adult Guardian

FRI 29 JANUARY 1971

"MACHINE GUN MCCAIN" (94 Min)
John Cassavetes, Britt Ekland

7:30 p.m.
(Crime Drama) Ex-con is hired to rob a Las Vegas casino but it's found that it's owned by the Mafia and the attempt to stop him fails. (GP)

Shorts: "Ghost Talks" (14 Min)

SAT 30 JANUARY

MATINEE—
"SNOW WHITE & THE THREE STOOGES" (107 Min)

1:00 p.m.
Shorts: "Eight Ball Bunny" (7 Min)

—EVENING—

"R.P.M." (91 Min)
Ann Margret, Anthony Quinn

7:30 p.m.
(Drama) Liberal sociology prof is chosen to present dissident radical's demands to college trustees in this tale of campus unrest that culminates in unnecessary violence. (R)

Shorts: "Chili Corn Corny" (7 Min)

"Big Surf" (9 Min)

SUN 31 JANUARY

"THE MALTESE BIPPY" (92 Min)

Rowan & Martin, Julie Newmar

7:30 p.m.

(Comedy) TV's hottest team made this howler about a fast-buck film producer (Dan) and his sex film star (Dick) who get involved with werewolves. (G)

Shorts: "Pluto's Blue Note" (7 Min)

"Sweden Lovely" (9 Min)

MON 1 FEBRUARY

NEW YORK

PRO MUSICA CONCERT

TUES AND WED 2-3 FEBRUARY

"AIRPORT" (136 Min)

Burt Lancaster, Dean Martin

7:30 p.m.

(Drama) One wild day in the life of an airport manager makes this film the hit of the season. The professional stowaway, the bomb threat, an airliner stuck just off the runway, the smuggler, it's all here in one big dramatic package to make an absorbing crowd-pleasing story. (G)

THURS AND FRI 4-5 FEBRUARY

"TAKE A GIRL LIKE YOU" (99 Min)

Hayley Mills, Oliver Reed

7:30 p.m.

(Comedy-Drama) Country girl goes to the big city to become a teacher, and boards with a politician and his family. Between the politico, and her dates, Hayley has quite a time keeping her chastity. (R)

Shorts: "Pink Package Plot" (7 Min)

Golf Tourney Slated Feb. 6

Entries are now being accepted for the China Lake Golf Club's first tournament of the year, the "Cross Country" event, scheduled for February 6.

The unusual tournament will be played on a special 14-hole course layout and should appeal to the golfer who enjoys tournaments as well as the golfer who enjoys the challenge of playing a "new" golf course.

A map of the rerouted holes is currently on display at the Golf Course clubhouse along with the sign-up sheet for the event.

Entry fee is \$2 and the sign-up deadline is 5 p.m., February 5.

From _____

TO _____

PLACE STAMP HERE



Vol. XXVI No. 4 Naval Weapons Center, China Lake, California Jan. 29, 1971

Admiral Zumwalt Contends:

'Beards Do Not Detract From Navy's Mission'

Does the hirsute facial splendor appearing on Navy men signal the end of the order and discipline and the time-honored traditions of smartness the Navy has known in the past?

No, not according to the man who relaxed the Navy rules on beards and sideburns, Admiral Elmo R. Zumwalt Jr., chief of naval operations.

"I have yet to be shown how neatly trimmed beards, sideburns, or neatly-shaped Afro haircuts contribute to military delinquency or detract from a ship's ability to carry out its combat function," he said.

The admiral's answer came in a speech before the Commerce and Industry Association in New York during which he discussed the Navy's retention problems and personnel policies.

He said the Navy's ability to retain men "borders on the verge of a catastrophic personnel crisis."

While the carrier forces should maintain a 35 per cent first-term reenlistment rate, he said, "our present rate on Atlantic Fleet carriers is less than three per cent."

The admiral said revamping the regulations on beards, sideburns and hair styles is representative of the changes "we must accommodate ourselves to if we are going to compete successfully in today's youth market."

He said personnel policy changes are judged "in the light of whether they contribute to good order and discipline, and whether or not they

would have a helpful or harmful effect on the traditions of our Service."

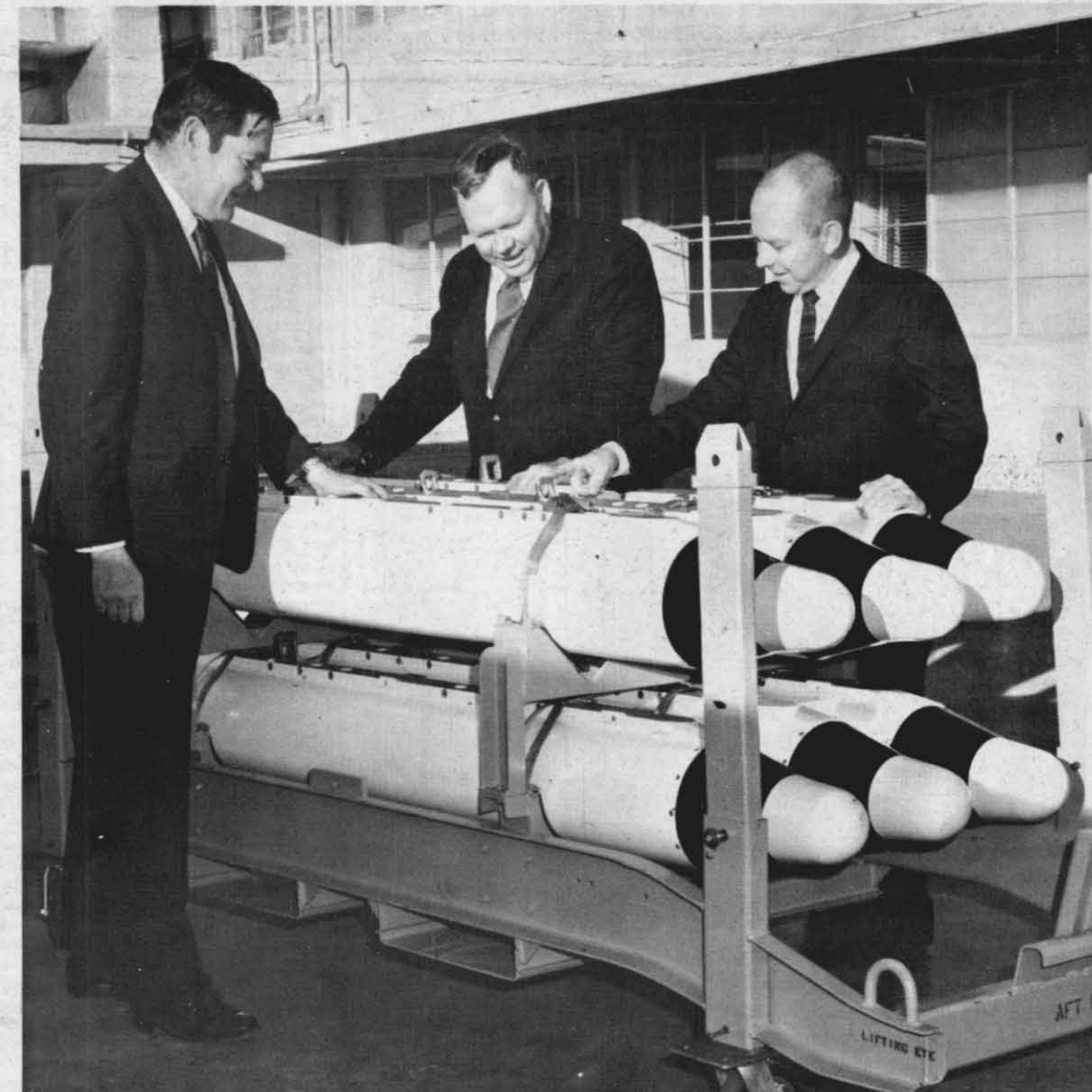
Z-gram 70

Adm. Zumwalt spelled out the policy he wants followed, however, in his latest Z-gram (Z-70), the contents of which are quoted below, and which will soon be incorporated into Center Instruction 1020.2K.

"As a result of my recent field trips and personal contacts with Navymen, plus the high incidence of correspondence, it is clear to me that further amplification of and change to policy is required in two areas covered in NAVOP Z-57, namely hair grooming and uniforms, these changes will be incorporated in the next change to U. S. Navy Uniform Regulations.

"A. Hair grooming: The Navy does not prescribe nor distinguish among styles of haircuts. A wide variety in a neat manner, is acceptable. The determination of hair styles, within the criteria detailed below, is an individual decision.

"(1) Hair will be neat, clean, trimmed, and present a groomed appearance. Hair will not touch the collar except for the closely cut hair at the back of the neck and that will present a tapered appearance. Hair in front will be groomed so that it does not fall below the eyebrows when a person is uncovered and will not bush out below the band of a properly worn headgear. In no case shall the bulk (Continued on Page 5)



SIRE MEETING—Approximately 110 personnel participated in the recent quarterly System Information Review and Exchange (SIRE) meeting held last week on the Center. Representatives from NMC, NOL, NADC, NSRDC, NRL and the Air Force's Rocket Propulsion Laboratory, in addition to representatives from NWC and NAVAIR were in attendance. The meeting was

called to discuss and exchange views regarding the AGILE missile program. Above, (l-r) Phil Ankeney, AGILE Program Director, L. S. McDonald, NAVAIR AGILE Manager, and C. W. "Zip" Mettenburg, NWC AGILE Program Manager, review the launch tube mockups used in loading and storing the AGILE missile.

—Photo by PH2 D. E. Hart.

Center Plays Significant Role In Navy Pollution Abatement Program

The magnitude of environmental pollution has increased to such a degree that considerable public awareness and interest in this area has been greatly aroused. The complexity and scope of the problems involved are such that concern for their solution extends to practically all aspects of the military establishment, both in this country and abroad. As a result, legislative trends at every level of government have led to adoption of stringent pollution control regulations. Such trends have been felt for the past few years, as a matter of fact, as evidenced by DOD Directive 5100.50 of January 4, 1966, which established responsibilities and policy concerning environmental pollution control at all DOD installations.

In the Navy, an Environmental Pollution Control Program has been established to prevent and control such pollution through proper planning, design development, and improved operation and maintenance of weapons, equipment, facilities and utilities.

The Navy Environmental Pollution Control Program is now a primary part of the effort of the service and its importance is reflected in the extent to which the problems of pollution are currently being pursued.

Managed By DCONM
Over-all management of the Navy Environmental Pollution Control Program has been assigned to the Deputy Chief of Naval Material. Specifically, he is responsible for: providing general instruction and technical direction with respect to the design, acquisition, operation, main-

tenance and support of Naval military weapons, equipment, facilities and utilities vis-a-vis improvement of the environment through pollution control; working with local, state, and other federal agencies, regarding mutual problems and goals; and reporting on the progress of the program.

The Deputy is assisted in this work by the Naval Facilities Engineering Command, the Naval Ship Systems Command, the Naval Air Systems Command, and the Naval Ordnance Systems Command. All of the above have been ordered to initiate appropriate action within their respective commands to identify sources and problems of pollution and to assure effective and efficient control among their resources and personnel in compliance with the objectives of the Environmental Pollution Program.

NWC Has Major Role
In this regard, the Naval Weapons Center has been asked by the Naval Ordnance Systems Command to bring its expertise to bear on the problems of pollution abatement that deal with disposal of propellants, explosives and pyrotechnic (PEP) materials and their associated ordnance. Specifically, the Center has been asked to identify the problems, determine pollutants, and find alternate methods of disposing of these materials other than those that are currently being used. NWC has also been asked to act as consultant to the Ordnance Systems Command regarding pollution abatement research and development activity at other Navy facilities.

To effect these goals, a pollution abatement committee has been set up at NWC to provide inputs to identification, data gathering, and solutions. The committee consists of Dr. A. S. Gordon, Head of the Research Department's Chemical Kinetics Branch; Norm Rumpf, Head of the Propulsion Development Department's Explosives and Pyrotechnics Division; Dean Couch, Paul Rivette, Ron Vetter, Dr. George Handler, Dr. C. D. Lind, and Art Breslow, also of Code 45; K. S. Skaar, Safety Department Head; Paul Cuykendall, Industrial Hygienist; and Dr. Rick Roberts of the Systems Development Department.

The Committee is headed by Dr. H. J. Grying, whose regular job is Technical Advisor on Explosives to the Propulsion Development Department's Explosives and Pyrotechnics Division.

The committee works closely with Dr. Adolph Amster, over-all coordinator of this phase of Ordnance Systems Command's pollution abatement work that deals with propellants, explosives and pyrotechnic materials.

The committee also works (Continued on Page 7)

Inside . . .

| | |
|-------------------------------|---|
| Marijuana Chemistry | 2 |
| Dr. Leipnik's Book | 3 |
| Whiskey Flats Days | 4 |
| New Holidays | 5 |
| Sports | 6 |
| Surplus Sale | 8 |



HELP LINE GIFT—Rita Rousell, treasurer of the Indian Wells Valley Nurses' Club, presents a donation from that group to Victor L. Rehn, Help Line treasurer. Dr. Rehn, who is a physicist in the Research Department, expressed his gratitude on behalf of the Help Line organization, noting that the free crisis intervention service could not operate without the generous support of community organizations such as the Nurses' Club, whose donations provide the funds necessary to pay phone bills and meet other financial needs.

Help Line
Crisis Intervention
CALL 446-5531

CENTER LIBRARY LISTS NEW BOOKS

- A complete list of new books is available in the library.
- Fiction**
- Dick—Ubik
 - Dickson—Mutants
 - Guareschi—Don Camillo meets the Flower Children.
 - Gunther—Indian Sign
 - Stadley—Autumn of a Hunter
 - Stewart—The Crystal Cave.
 - Williams—The Siege of Trencher's Farm
 - Barber—The Midnighters.
 - Cleeve—You Must Never Go Back.
 - Elliott—Listen to the Silence.
 - Laski—The Dominant Fifth.
 - Patten—Red Runs the River.
 - Sanders—Baneful Sorceries.
- Non-Fiction**
- Brock—Alice's Restaurant Cookbook
 - David—Flying Saucers Have Arrived!
 - Everson—A Pictorial History of the Western Film
 - Keating—Alaska
 - Kennedy—Very Lovely People
 - Larson—Deserts of America
 - Lewis—Carnival
 - Richette—The Throwaway Children
 - Stegner—The Sound of Mountain Water
 - Townsend—Up the Organization
 - Kresh—Power of the Unknown Citizen.

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RADM. W. J. Moran, NWC Commander
H. G. Wilson, Technical Director
K. H. Robinson, Head, Technical Information Department
William P. Valente, Jr., Editor
Jack C. Lindsey, Staff Writer
Lucille Edwards, Editorial Assistant
PHCS C. E. Bruce, PH1 D. C. Manderscheid, PH2 Delmar E. Hart, PH3 Anthony Curiale, PH3 Ronald G. Mills, Staff Photographers

DEADLINES:
News Stories Tuesday, 4:30 p.m.
Photographs Tuesday, 11:30 a.m.
The Rocketeer receives American Forces Press Service material. All are official U.S. Navy photos unless otherwise identified. Printed weekly with appropriated funds by a commercial firm in compliance with NavExOS P-35, revised July 1958. Office at Nimitz and Lauritsen.
Phones 3354, 3355, 2347

DIVINE SERVICES

Protestant (All-Faith Chapel)—
Morning Worship—10:00 a.m.
Sunday School—8:30 a.m., Chapel Annex 1, 2, 4 (Dorms 5, 6, 8) located opposite Center Restaurant.

Roman Catholic (All-Faith Chapel)—
Holy Mass—5:00 p.m., Saturday (Fulfills Sunday obligation); 7, 8:30 and 11:15 a.m. Sunday.
Daily Mass—11:30 a.m. in Blessed Sacrament Chapel. First Saturday, 8:30 a.m.
Confessions—4 to 5 p.m. Saturday, and 8 to 8:25 a.m. Sunday.
NWC Jewish Services (East Wing All-Faith Chapel)—8 p.m. every first and third Friday.
Sabbath School—10 a.m. to noon, every first and third Saturday.
Unitarian Fellowship—(Chapel Annex 95, 95 King Ave.)—Sundays, 7:30 p.m.

PROMOTIONAL OPPORTUNITIES

Applications for positions listed in this column will be accepted from current NWC employees and should be filed with the persons named in the ad. All others desiring employment with the Naval Weapons Center may contact the Employment Division, Code 452, Extension 2069. Current applications (SF-171) or Standard Form 172 should be submitted bringing your work history up to date if one has not been submitted within the last 6 months. The fact that positions are advertised in this column does not preclude the use of other means to fill these positions. Part of the ranking process of those rated as basically qualified will be a supervisory appraisal form that will be sent to the employees present and most recent previous supervisor. Selection shall be made without discrimination for any nonmerit reason.

Supervisory Policeman, GS-083-11, PD No. 484003, Code 843—This position is that of Head, Police Division, Code 843, who is responsible for the Center's physical security program. As Chief of Police, the incumbent is the advisor to the Command in all matters pertaining to law enforcement, crime prevention and sabotage or espionage investigations. Minimum Qualification Requirements: 5 years experience which has given the applicant a broad knowledge of police operations, practices, and techniques. The experience must have included making arrests, protecting life and property, maintaining law and order, investigating accidents, preventing crime and preserving the peace. At least one year of required experience must have been at a level of difficulty and responsibility comparable to the GS 9 level. Job Related Criteria: Ability to supervise is required. A Bachelor of Science degree in police science is desirable.

File applications for the above with Linda Grossman, Bldg. 34, Room 204, X-2925-2476. Warehouseman, WG4907-45, JD No. 33, 2591—Performs a number of tasks in connection with the physical receipt, storage or issue of supplies. Receives, checks, stows, counts, issues and assembles supplies of all types in accordance with established supply systems, procedures and methods. Minimum Qualification Requirements: Rating will be on the basis of existing J-element standards in accordance with CSC X118C. Applicants must submit a supplemental experience statement. Forms can be picked up in Rm. 206, Personnel Department.

Secretary (Stenography), GS-318-4 or S, Code 257—Serves as Secretary for the Control Division, Supply Department. Receives telephone and personal callers, processes incoming/outgoing correspondence, performs stenographic duties as required. Minimum Qualification Requirements: Two years for the GS-4 and two and one-half years for the GS-5 of experience in typing, stenographic or general experience with the physical receipt, storage or issue of supplies. Receives, checks, stows, counts, issues and assembles supplies of all types in accordance with established supply systems, procedures and methods. Minimum Qualification Requirements: Rating will be on the basis of existing J-element standards in accordance with CSC X118C. Applicants must submit a supplemental experience statement. Forms can be picked up in Rm. 206, Personnel Department.

ACS Speaker Discusses Chemistry Of Marijuana

By Dr. Arnold Adicoff

Professor William Mosher of the University of Delaware addressed the Mojave Desert Section of the American Chemical Society last Friday evening at the Hideaway Restaurant on the subject of the Chemistry of Marijuana.

In introducing the subject, he pointed out that marijuana has been available and in use for some 4,000 years, and used moderately within ghetto societies. The recent concern with marijuana, its chemistry and effects, began when the youth of middle and upper income families became involved with the drug.

In discussing the chemistry of tetrahydrocannabinol, the active marijuana principle, four forms having the same chemical formula but different spatial arrangements of atoms are possible. Of these four forms, only two possess high hallucinatory capabilities.

A number of synthetic methods were discussed for preparing the pure tetrahydrocannabinol required for accurately controlled research into the effects of the drug. The pure drug is also needed for researches into modification of the drug so that beneficial improvements can be obtained and intensified for prescribed medical and psychiatric use. A number of these synthetic methods involve the use of hazardous chemicals that would be fatal to the user if not completely removed from the final product.

Much of the misinformation concerning the drug, both in youth circles and in the concerned adult groups, arises from variable activity of the natural product and, therefore, poorly documented and controlled experiments in its use. A sample of the pure drug, as low as 5 milligrams, is adequate to produce an hallucinatory effect in a 160-lb. individual. Marijuana from different sources and grown in various parts of the world are of different purities. Many sources contain none or very little of the active tetrahydrocannabinol. This accounts for the variability in results commonly described by individuals using the drug. Aged, naturally derived drugs, contain less of the active material than the fresh drug because of the degrading effects of light, air, and moisture.

No deaths have been reported that can be directly attributed to a marijuana overdose because the current method of ingestion by smoking is self-regulating in that one becomes physically unable to smoke enough to achieve a toxic state because of the hallucinatory physically disabling effect.

If the pure material were to become available, it would be certain that overdoses and fatalities would become more frequent since the effect upon the central nervous system is quite large. One can, in that case, also anticipate a more frequent occurrence of bad trips.

In discussing habitual effects, and the marijuana-hard drug syndrome observed by law enforcement, Professor Mosher felt that the cause of the syndrome is actually more social and the result of misinformation than a real predisposition. The reason for this is that adult society, with much L. Zaharias, and the Benedictine by Capt. Robert E. McCall.



Prof. William Mosher

require less marijuana, with time, to obtain the euphoric or hallucinatory condition, the cause was ascribed to the long residence time of the drug and/or the still active metabolized components in the body. Marijuana is found to remain in the body for times as long as eight to ten days. It is stored in the fatty tissue of the body and brain. The long residence time should be a matter of serious concern to all persons. The large increase in appetite of the marijuana user is not well understood. The noticeable eye reddening is attributable to smoke irritation.

While Professor Mosher believes that marijuana should be considered in a fashion similar to ethyl alcohol, he is very seriously concerned with the use and abuse of the drug by youth. The youth years are those during which the individual learns to adapt and deal with the uncertainties and frustrations of life. The use of marijuana denies the individual this important learning experience and a "cop out" on life is achieved so that the individual remains psychologically crippled and immature. It has been noted, in addition, that students using marijuana perform much more poorly than those who are not using the drug. It is not certain whether this effect can be attributed to the memory loss effect that has been documented or because of a decreased study interest by the user.

With further careful quantitative work, the effects of marijuana will, shortly, be better understood in both the psychological and the physiological sciences. Despite the currently disturbing social problem, one can anticipate that some medically useful and desirable compounds can be developed as a result of research in this area.

Center Leaders Schedule Prayer Breakfast Tues.

A Presidential Prayer Breakfast for military and civilian men of the Naval Weapons Center will be held in the Center Restaurant beginning at 6 a.m. Tuesday. There will be no charge for the breakfast.

Persons interested in attending should make reservations with the All Faith Chapel office, Ext. 3506, by noon Monday, so that the Chapel office can inform the Center Restaurant staff of the expected attendance. Food will be served from 6 to 6:30 a.m.

The breakfast provides an opportunity for the men of the Center to come together in a common cause of devotion and fellowship around the breakfast table," said I. I. (Bud) Shull, breakfast chairman.

Capt. Gerald W. Jauchler will enceed the program which will include an Invocation by William P. Pierce, opening remarks by RADM. William J. Moran, NWC Commander, brief pre-taped messages by President Nixon and Secretary of Defense Melvin Laird, songs by the Medallions Quartet, comprised of Clay Panlaqui, Warren Stump, Henry Wair, and Ray Becker, scripture reading by HM-3 John Cawley, an inspirational message by Jerry L. Reed, group singing led by Jerome L. Zaharias, and the Benedictine by Capt. Robert E. McCall.

Center Assists NAVORD In Pollution Research

(Continued from Page 1)

closely with the Naval Ordnance Environmental Health Group which, among other responsibilities, conducts periodic surveys regarding the amount of emission that is being deposited into the surrounding air and water at the twenty installations that they review; and the Naval Weapons Station, Yorktown, which is specifically looking into alternatives for using the Deep Water Dump, the method now being used to dispose of excess or unusable ordnance.

The committee is currently exploring several alternative methods and aids to problem solution in the area of pollution abatement which include: Recycling (reclamation and reuse), Biodegradation, Dumping in Tectonic Sinks, and Electroreduction.

Recycling

Given the ground rule that pollution from Propellant, Explosive and Pyrotechnic materials (PEP) is to be eliminated if possible, it is believed that almost all ordnance could be recycled. Electrolytic cutting of ordnance items (a method that has been used at NWC) is one approach that would allow ready access to materials—others would include developing a method of purifying the material to recover specification grades, and developing a recovery process to recover the active ingredients from plastics. The latter would involve crushing or grinding methods, swelling, solvent extraction, and physical separation plus chemical attack.

Biodegradation

Biodegradation is the process that a material cycles through to return to its original form after it has served its intended purpose. For instance, biodegradable detergents are designed to break down to harmless products in sewage after they have been used to clean clothes. Accordingly, future ordnance materials would be designed so that their by-



RESEARCH DEPT. AWARDS—During recent ceremonies held in Michelson Laboratory, Dr. G. J. Plain, Associate Department Head, presented awards to: (1st row, l-r) Walter Caffery, 30-yr. Fed.; Dr. Edward Fay, 20-yr. NWC; Dr. H. Dean Mallory, patent; Dr. Pierre St. Amand, patent; Dr. W. S. McEwan, patent; Dr. L. A. Burkardt, patent; (2nd row, l-r) Dr. William Finnegan, patent; Irwin Koff, 20-yr. NWC; Dr. William McBride, 20-yr. Fed. and NWC; Carl Morley, patent; Dr. F. K. Odencrantz, patent; Raymond King, patent; and Joseph Thomas, Benny Sugg and 5-yr. NWC. Carl Morley, an employee of the Electronic Systems Dept. was included in the ceremonies as he has been conducting work for his department in the Chemistry Wing of the Research Department. Not present for the photo were Charles D. Stanifer, patent award, and Arnold Green, 20-yr. Fed.

Sky Marshall Slots Open To Vets

Servicemen completing active duty tours may be eligible for employment as "sky marshals" by the Treasury Department's Bureau of Customs, it has been announced here. Likewise, servicemen nearing discharge may be released from service up to 90 days early if they are accepted for such positions.

The Defense Department will cooperate with the Treasury and Transportation Departments in a priority effort to recruit 2,100 Customs Security Officers — sky marshals — according to a message to the Secretaries of the Military Departments and the Chairman of the Joint Chiefs of Staff from Assistant Secretary of defense for Manpower and Reserve Affairs Roger T. Kelley.

Sky marshals will be responsible to deter smuggling and pilferage and detect and prevent criminal acts both at airports and in flight on U.S. flag commercial aircraft. The marshals will be based at key "gateway" airports, officials noted, and will spend two out of every three months flying.

In his message, Mr. Kelley noted that President Nixon has requested that a permanent force of security personnel be recruited and trained within the next six months.

Personnel who are due for separation from active duty in the near future and who are interested in working as sky marshals should request to be administered an appropriate Civil Service examination — either the Federal Service Entrance Examination (FSEE) or Junior Federal Assistant (JFA) examination, depending on education and experience.

Sky marshals will be hired under the high-priority program as GS-4, GS-5 or GS-7 Customs Security Officers, with annual starting salaries of \$5,853, \$6,348 and \$8,098 respectively. Higher salary rates will be paid to personnel assigned to the New York City and Newark, N.J., metropolitan areas.

Because of the nature of air security duties, long air flights will provide ample opportunity for paid overtime, spokesmen noted, and accommodations in foreign countries will be paid on an actual expense basis up to \$40 per day.

It was noted that the Bureau of Customs will recruit from sources other than the Defense Department as well. Applications will be processed on a first-come, first-serve basis, and applicants can apply whether stationed within the United States or overseas.

General qualifications require that a sky marshal be a U.S. citizen, male, at least 21 years of age, in excellent physical condition, be able to pass an appropriate Civil Service examination, be able to pass a Bureau of Customs psychological test and oral interview, pass a background investigation, have no serious police record, possess a military record meeting standards for honorable discharge, and successfully complete four weeks

Youth Center Basketball Leagues Report Week of Big Games

Pee Wee Division

After three straight defeats by the Bulldogs, the Red Devils finally broke the ice, posting a 10-7 victory last Saturday morning. The first two games were decided by one and four points respectively, with the third game seeing the Bulldogs display a well-rounded, balanced attack when seven players each scored a basket in posting a 14-4 win.

Midget Division

The Bears, who opened the season as if they would go undefeated, were upset by the vastly improved Bruins, 29-20.

The game, which was fairly even at half-time (18-17, Bruins), finally began to swing in the Bruins favor as they outscored the Bears, 7-2, in the third quarter.

Kirk Gilbert scored 12 points for the losers, while leading scorer of the game, Eric Weathersbee, tallied 16 points, followed by Ricky Nolans' 9 points for the winning Bruins.

In other games, the Trojans defeated the Indians, 15-6, and the Huskies defeated the Beavers, 24-11.

With the Trojans and Huskies winning, they are now tied with the Bruins and Bears in a four-way battle for first place.

Junior League

The two undefeated teams finally met, both carrying a 2-0 record into the ballgame, but the Bucks outthrust the Stars, 29-28, to take over sole possession of first place.

In other Junior games, the Sonics defeated the Rockets, 39-23, to tie for second place and the Bulls climbed out of last place with a 45-44 win over the Suns in a closely contested game.

Senior League

The Celtics and Knicks remained undefeated last week to keep their 2-0 records intact.

The Celtics defeated the Lakers, 45-40, and the Knicks nipped the Hawks, 44-42. In the other Senior game, the Pistons edged the Bullets.



EMPLOYEES GARNER PATENTS—Systems Development Department employees of Code 304 who received patents recently were: back row (l-r) Maurice Westfall, Stuart Fields, Claude Brown, and Vernon Logue. Westfall, Fields, and Logue received a group award; Brown received a single patent award. Leroy Marquard, Code 304 Division Head, and Dr. Ivar E. Highberg, Department Head, front row (l-r) presented the awards.

Cutsinger Rolls 693 To Set Season Mark

Chuck Cutsinger rolled the highest series of the season in the Friday Night Mixed Foursome League January 15, a 693 which included a 269 game. Chuck's other two games were 234 and 190. Other scores of note that evening: Bill Tomaras, 635; Sam Schoenhals, 633. Royce Dowd led the ladies with a 581 and Darlene Herbstreit turned in a 576 effort. Maggie Branson had a 538 and Jeannie Crom a 523. Kay Weeks rolled a 532.

On January 22 Allen Smith's 670 led the parade of high scoring. Jim Netzer had a 614 and Jack Brown a 609. Smith's 670 included games of 225 and 249. Willie Johnson was high for the women, rolling a 594. Mag Branson had a 552 and Darlene Herbstreit a 533. Alice Cutsinger had 502.

Wilma's series included a big 237 game and Pat Noland hit her first biggie, a 205.

Premier League
R. C. Jones put together games of 214-212-246 for a 672 series to lead the scoring last Monday. Leo Montano also turned in a triple-200: 205-224-200 for a 629 series. Fred Akins had 225 and 626, Thad Brightwell a 620; Ken Dalpiaz, 624; Jack Brown, 611; Joe Kokosenski, 605; John Ito a 604, and Gordy Zurn a 226.

Ace-TV held on to their league lead by whipping Mercury Movers 3 games. Arden's Dairy also won three from Tim's Place. Allied Vending took two from NAF as did Boyd's Auto Parts from Ridgcrest Lanes.

Midway League
Phil Roper shot the high series for the evening, 616, behind the scores of 220-216-180. Ernie Lanterman had a 236 and Dan Ryan a 234. Bob Jordy rolled a 221.

Wed. Nite Handicap
Connie Evans' 548 was the high series for the evening, followed by Mary Jane Clark (515); Sue Lewis (513) and Alice Cutsinger (503). Marian Sievert had a 213 and a 517, and Jenny Slates rolled a 206.

Kids' Leagues
In the Preps, Jeri Jeffris had a 133 game to lead a parade of 10 children over the 100 mark. Richard Hoffer, Kathy Byrne,

Bonner Pryor, Cathy Bauers, Marvin Titus, Kurt Rockwell, Larry Boyd, Richard Evert and Annette Lindsey were the big shooters.

David Furstenberg led the Bantam league boys' scoring with a 166 game and a 468 series. David Schad had the high game, a 172 effort, and a 445 series. Mike Lindsey shot 162 and 453. Diane Witwer rolled 157 and Reni Titus 156.

In the Junior-Senior League, Randy Stedman rolled 195 and 515 which was followed closely by Craig LaFleur, who shot 192 and 514. David Branson had an even-200 game and a 494 series while Rick Brandinger shot 172 and 492. Young Mike Hall, whose average is a mere 108, showed a lot of promise with a 200 game while brother Scot Hall, whose average is 106, rolled a 193.

Bettye Clark led the young ladies with 175 and 434 followed by Sheilah Simmonds 162-427. Susan Jones had a 165. Lori Presnell (101 average) rolled a 150 game.

Desert League
Pat Keegan topped the league with a 634 series and John Dowd racked up a 608. Paul Cordle rolled a big 258 and Ed Simmonds had a 253.

Ding-a-Lings
The Twinkle Toes rolled 2184 and The Go Getters 766 to lead team scoring while Mary Shepard's 528 and Sharon Babbitt's 184 led individual scoring, in action January 21.

Koffee Klutchers
Lori Boyd had a 506 and a 190 to lead individual scoring on January 26. Paulette Treat also had a 190 game. The Bowl-onies (cute) shot 780 and Team No. 6 had 2220 for team highs.

Women's Scratch
The powerful Monday Night Women's Scratch League tallied some good scores on January 25 at Hall Memorial Lanes. Shirley Thiele rolled a 223 followed by Darlene Herbstreit's 222. Maggie Branson had a 215 and Willie Johnson a 214. Connie Evans rolled a 576 series, Patty Maxwell, 567, Erma Erickson, 564, and Lee Fox 555.



BURROS LOSE IN FINAL MATCH—For the second consecutive week the Burroughs varsity wrestling squad lost a close one. Antelope Valley took the final match of the evening to win 24-23, and the Burros Golden League record slipped to 1-2 as a result. The picture above was taken at a match against Kennedy, which Burroughs also lost in the final match. —Photo by PH3 R. G. Mills

Bud Eyre Squad Back In Contention

Mired deep in the basketball standings a week ago, Bud Eyre Chevrolet moved back into prominence by scoring impressive victories over NAF and the NAF Officers on the 1-2 shooting of Tom Westcott and Joe Jones.

The Bud Eyre team began the week by outrunning the third place NAF Hawks with fourth quarter fireworks.

Leading only 41-37 at the end of the third period, Westcott and Jones turned the game into a convincing 63-51 victory.

Westcott scored 20 and Jones 23 to tie NAF's Kent Turner (23) for high-point honors.

They returned to the court Thursday to top the NAF Officers 72-47, and lift their season record to 5-3.

Westcott was the game's leading scorer with 25 points, followed by Jones (20) and the Officers' Larry Gire (18).

League leaders Loewen's and Ace TV both extended their season records to 7-0 with balanced attacks.

Ace TV used five men in double figures to outgun leading scorer Gary Ziegler, as Ace defeated the Pioneers, 81-52.

Ted Bailey scored 20 to lead Ace with help from Tim Higgins (14), Tom Wee (12), Jerry Kissick (12) and Gary Anderson (10). Ziegler was the game's leading scorer with 23.

The Loewen's Lions had little trouble in pounding the Chaparrals, 85-17. Jimmy Ayers and Nelson Wals each scored 16 points to lead the Lions, followed by Garry Clark (12) and Carl Ames (10).

The NAF Hawks dropped their third straight game by falling to the Hustlers, 51-48, two days after their loss to Bud Eyre.

The Hawks roared to an 18-5 lead at the end of the first quarter, and retained a 27-17 advantage at halftime.

But the Hustlers narrowed the gap to six points at the end of the third quarter and then outscored NAF, 19-10, in the final period for the victory.

Harley Blue led the Hustlers with 16 points (nine in the fourth quarter), followed by Dale Dowd with 14.

The race for third place continued, as VX-5, California Telephone and the Wallbangers all scored wins to stay at the heels of

the league leaders.

VX-5 scored 16 straight points at the beginning of the game and then held on to defeat Genge, 58-40. Herman Bowman led all scorers with 13 points, followed by teammate Doug Karpstein with 12.

Mike Hanson and John Martin led Genge with 11 points each. California Telephone held a mere 33-30 lead at the end of three periods, then went into a turndown to race past the Pins and Needles, 61-38.

Whidden topped CTC scorers with 16 points, with help from Foote who scored 12 (ten in the final period).

James Brown scored 16 for the Pins and Needles and Jesus Garcia 14.

The Wallbangers also took advantage of the Pins and Needles and recorded a 75-31 win.

Doug Kinney led the Wallbangers with 25 points, followed by Mick Rindt with 20 and Brad Royer with 16.

The Saints jumped to a 17-point halftime lead and then held on as Food Service rallied in the second half. The Saints, led by Rod Dorman's 20 points, managed to preserve a 68-65 win for their third straight triumph.

Carl Hall (15) and Dave Taylor (13) contributed to the Saints' attack.



BURROUGHS GOLDEN LEAGUE ROUND-BALLERS—The Burroughs High School varsity basketball team currently own a 4-2 record in Golden League competition following a loss to Apple Valley and a win over Barstow. The team poses for a pre-game photo above. They are, front row, l-r: Don Branson, Paul Viellenave, Bruce Hillard, Billy Bruce, Dick Graham and Mike Dowd. Back row, l-r: Coach Bill Moore, Dave Seeley, Greg Ritchie, Dave Farrington, Mark Moore, Jon Allan and Randy Stedman. The Burros will play Palmdale tonight at 8 p.m.

R. A. Gould Wins Annual Sierra Desert Gun Club Hunter's Shoot

R. A. Gould is the sort of person you wish to avoid if he's mad at you. On Saturday, January 23, dead-eye Gould fired 479 with 12 bullseyes, out of a possible 500-50x, to win the annual Hunters Field Match, held by the Sierra Desert Gun Club. Shooting a custom 22-250 caliber rifle, Gould zeroed in on the targets at the NWC Hi-Power Rifle Range to defeat all other marksmen in the meet.

Don Herigstad won the Marksman-Sharpshooter class with a 458-2X total, using a Model 1894 25-35 caliber Winchester Rifle.

Due to a lack of competitors in the Expert and Master classes, stage awards were presented in the combined MKS-SS (marksman-Sharpshooter) classes only. Those winners were R. Dickus and D. Herigstad at the 200 yard range, and H. Frageman at the 100 yard range.

The Hunters Field Match is designed to allow the participants a chance to shoot their regular hunting rifles under simulate field conditions, without competing against match rifles and specialized target shooting equipment.

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NWC Conducting Management Program Review

The Center is currently conducting a cyclical position management program review which is to be completed by 31 May 1971. The program objective is to improve organization and use of manpower by identifying problems and roadblocks to the best use of manpower, documenting the problems, and developing plans of action to alleviate the problems.

The objective is accomplished through a systematic review of organizations, functions, positions, and personnel performance. The review is being conducted by line management in three phases: (1) a review of total organization and functions to determine if and where changes are needed, (2) a review of functions, positions, and personnel performance within each department, and (3) a joint evaluation of department organization, functions, positions, and performance of key personnel by the Department Head and the Deputy Commander, or Deputy Technical Director. Results of the review are documented on NWC Forms 5310-3 and 5310-3A.

Some of the desired benefits of the review are: optimum current organization for accomplishment of the mission, the best combination of functions for each position, a proper match of position and person for best use of manpower, a complete definition of the problems which exist with actions indicated to alleviate them, and a positive schedule for completing the actions.

Position management is a function of line management with staff support to the program provided by Central Staff, Code 1703, and the Personnel Department. Suggestions for position management improvements are invited by the departments and staff groups. (Details regarding the position management review are contained in NWC Instruction 5310.3A)

ESB Hires New Manager For Food Services

C. John DiPol, Chairman of the Employee Services Board, announces the Employee Services Board will take over the operations of the Food Services on the Center, effective 1 February 1971. Previously the Food Services were operated by a Concessionaire under the supervision of the Employee Services Board.

Richard Connaughton has been hired as Manager of the Food Services operation, by the Employee Services Board. Connaughton comes to the Center with a background of 17 years in the food business.

Within a short time, it is planned to have the Dining Room, (Station Restaurant) open from 7 a.m. to 7 p.m., seven days a week, with special emphasis on evening and weekend operations.

As are all of the Employee Services Board operations, the Food Services is operated for the benefit of all Center Employees and is one of the facilities that support the Recreation Council.



20-YEAR PIN PRESENTED—W. R. Riley, former head of NWC's Personnel Department recently awarded a 20-year NWC service pin and a 20-year Federal Service pin to his secretary, Alice Day. The Personnel Department is now headed by Ray Harrison, a former Head of that department, who has returned from a two-year overseas tour in the Philippines. The latter action was effective on January 25.

'Tis the Season for Many Viruses, Those Tiny, Engimatic Whatsises

Nothing takes more advantage of a gracious host than a virus.

The result can be a bad case of the flu, a miserable cold, or any number of other diseases, including such familiar childhood ailments as chicken pox, mumps, and measles.

A true parasite, the virus is a minute entity that shows no sign of life until it bumps into an obliging host cell. Then nucleic acid from the intruder may become part of the cell, and the virus can reproduce itself—a prime characteristic of living things.

Seeks a Good Match

Every virus particle, or virion, contains a central core of nucleic acid surrounded by a protein coating, the National Geographic Society says. When a good match exists between virion and cell, the two may become attached. In some cases, the acid enters alone. More commonly, the cell swallows the virion whole, mistakenly treating it as food.

Like a well-trained saboteur, the nucleic acid causes the healthy cell to cease normal functions and start manufacturing copies of the virus. Within half an hour perhaps 100 to 200 viruses are produced. The cell bursts, and the viruses scatter, each ready to invade another cell.

Vaccines have effectively controlled many of the viruses that storm the body's natural defenses, reports the National Institute of Allergy and Infectious Diseases.

However, one of the most common virus-caused illnesses, the common cold, still defies preventive efforts since it is caused by at least 60 different viruses. Each would require a separate vaccine.

Some viruses live in peaceful co-existence with healthy cells for years before symptoms of infection appear. The cell continues its normal activities, even dividing into other cells. Then, for no known

reason, one of these begins wildly producing copies of the dormant virus.

Assume Many Shapes
Viruses can take the form of pretzels, corkscrews, raspberries, tadpoles, toothpicks, needles, and cupcakes.

Whatever their appearance, they are fantastically tiny. About one million could fit into a single red blood cell. It would take one million-million-million polio viruses to fill a ping-pong ball.

No one ever saw a virus until 1939, though they were known to exist decades earlier. Only in the last 20 years, with the help of electron microscopes and high-speed centrifuges, have scientists been able to identify, photograph, and measure them.

Once in a test tube, a virus can enjoy a long life. A sample preserved for three decades in one laboratory could still kill rats.

Several hypotheses have been suggested to explain the origin of viruses. They may have evolved from disease-producing bacteria. Some virologists believe they were once part of normal cells that lost the ability to reproduce except by becoming parasites.

New Prices

Effective February 2 1971, the price of hair-cuts at the Employee Services Board Barber Shop will be \$1.75. Flat tops and regular hair cuts will be the same price. Other services will be raised proportionally.

This is the first increase in prices since February 1969. Any profits from the operation of the Barber Shop go to the Joint Navy-Civilian Recreation Council for the benefit of all employees of the Center, according to C. John DiPol, Chairman, Employee Services Board.

Dr. Leipnik Co-Authors Book On Plasma Physics

Dr. Roy Leipnik, of the Research Department's Mathematics Division, and Prof. H. S. Green, consultant to the Physics Division, have co-authored a 600-page treatise published last month by Wolters-Noordhoff, a scientific publisher located in the Netherlands.

The first of two books on theoretical plasma physics to be authored by the two men, "Sources of Plasma Physics" discusses all of the pre-requisites, both physical and mathematical, for plasma physics. Topics covered include: Classical and quantum statistical mechanics; electromagnetism; theory of fluids; electrostatics; basic magneto hydrodynamics; and the molecular theory of neutral fluids.

Appendices on probability theory, matrices and tensors, Fourier analysis, distribution theory, calculus of variations, and thermodynamics are included.

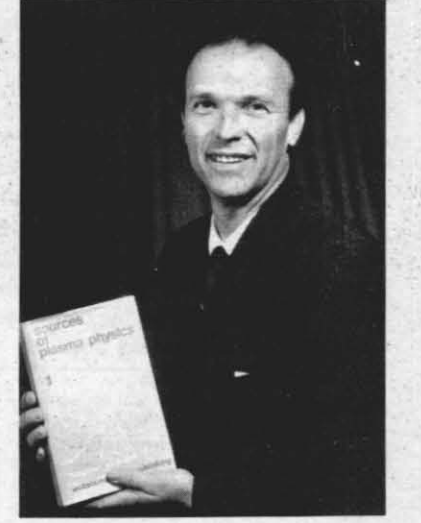
In the second volume, plasma devices and phenomena, advanced magneto hydrodynamics, and the classical and quantum kinetic theory of plasmas will be examined, and some original work of the authors presented. The second volume should appear on the market early next year.

Dr. Leipnik and Prof. Green began their collaboration in 1958, when Prof. Green first visited NWC from Australia, where he is Professor of Mathematical Physics at the University of Adelaide. A former President of the Australian Physical Society, Prof. Green is also the author of "Molecular Theory of Fluids," in collaboration with Nobel Prize-winner Max Born. He is also written "Statistical Theory of Fluids" (an article in the

authoritative Handbuch der Physik), "Matrix Mechanics," and "Order-Disorder Phenomena," along with many articles in physics journals.

Dr. Leipnik, now Senior Research Scientist at NWC, has worked in Code 30 and Code 60 since 1956. He has written several joint papers with Prof. Green on theoretical physics, as well as other articles in mathematics, statistics and information theory for the trade journals.

Since 1958, Dr. Leipnik has twice



Dr. Roy Leipnik

visited Australia and Prof. Green has made three trips to NWC. In addition, they have worked together at the University of Florida, in Gainesville, most recently during the 1970 fall quarter. Prof. Green is expected to visit NWC again sometime in February for consultation on solid state plasma physics. This will be a side trip for the Australian who will be on his way home after visiting at Michigan State University, Princeton and Florida.

Red Cross Officers WSI Course

A Water Safety Instructor course will be offered by the Red Cross at the Center Plunge on Saturday mornings beginning this Saturday, January 30. The classes will be held from 8 to 11 a.m. and continue for ten Saturdays.

To enroll in the course, a student must be 17 years of age or older and possess a Senior Lifesaving Certificate.

Water Safety Instructors are

authorized for a period of two years. At that time, they are eligible for reauthorization if they have taught at least one course of record or have received their training during the authorization period.

Those who need passes to enter the Center, or who want further information may contact Pat Bersie at 375-5982.



COMPLETES 1000 HOURS IN A-7's—Lt. J. Vomastic, right, of VX-5, receives congratulations from Arnie Vang, Ling Temco Vought senior base representative, immediately after completing his 1000th hour in A-7 Corsair 11-s. Lt. Vomastic began flying the A-7 in 1968 with VA-27 and flew 234 combat missions before being assigned to VX-5 in June, 1970. Lt. Vomastic achieved the landmark on his last flight at VX-5. He has since been reassigned to Naval Test Pilot School, Patuxent River, MD. —Photo by PH1 D. L. King

Concert Association Offers New York Pro Musica This Monday At Theater

The third offering of the Civic Concert Association's 1970-71 season, The New York Pro Musica, will appear on the Center Theater stage Monday, February 1, at 8 p.m.

Under the direction of Dr. John Reeves White, Pro Musica will provide China Lake concert-goers with the glorious musical masterpieces of the ages that produced the genius of Shakespeare, Leonardo da Vinci, Dante and van Eyck.

Pro Musica was founded in 1953 by the late Noah Greenberg, who remained its Musical Director until his death in January, 1966. Dr. White, the second Musical Director, has ensured the continuity of this remarkable ensemble in four brilliant seasons of more than 400 concerts. Noah Greenberg was fired with the conviction that early music could become a vital force in our time and, indeed, music of the centuries prior to J. S. Bach has acquired a

Partial season tickets will be available at the box office on the night of the New York Pro Musica concert, February 1, for the remainder of the 1970-71 season. Prices for the rest of the season, including a "bonus concert" February 11, are \$8.50, \$7 and \$5.50.

new vitality in the years since Pro Musica has come into existence. The ensemble's repertoire is as vivid and richly colored as any aspect of the broad and event-filled era from which it is drawn. A Pro Musica concert is an exciting excursion into the great musical past; sacred works first performed in the cathedrals of 13th Century France; lusty songs, dances and delicate ballades from the medieval French court and countryside; dramatic pieces of Renaissance Spain; music in the great Flemish tradition, and the sounds of glittering Tudor reign in England.

Not restricting itself to the concert stage, Pro Musica presents in full costume three 13th Century music dramas: "The Play of Daniel," "The Play of Herod," and "A Marian Play for Easter," which have become permanent treasures of the American musical scene. Pro Musica's restoration of Renaissance dance, costume and poetry of music in "An Entertainment for Elizabeth" has been called "A feast for the eye, the ear, and the mind."

Supported by its excellent library of available scholarly editions, microfilms, and books dealing with every aspect of Medieval and Renaissance music, the services of a research associate, and its now famous collection of early instruments, the 10 superb soloists and their conductor have attained a height of authenticity and artistry which has won them the plaudits of both scholars and critics, and a legion of devotees throughout the world.

Their recent tour of the Soviet Union and two South American tours were considered triumphs of the first order. In addition, the group has made appearances at music festivals in Berlin, Spain, Holland, Israel, Spoleto and Dubrovnik, where they were greeted with warm appreciation.

The instruments used by this unique group are of themselves exceptionally interesting. Many are ancestral to our well known musical instruments of today. All, except the viola da gamba are modern constructions, modeled after old instruments in various collections.

RECORDERS are members of the flute family and were made in consort or families. Praetorius in his Syntagma Musicum of 1619 shows eleven sizes, but states that the higher voices were seldom used "as they shriek so."

VIOLE DA GAMBA of all sizes, even the smallest, were held between the legs. In general they have six strings and sloping shoulders in contrast to the straight shoulders of the violin family. The body is thicker than that of the violin, the strings more loosely strung, and the fingerboard is fretted.

The LUTE, the most popular and revered instrument of the Renaissance, is a plucked string instrument. It is tuned in the same relationships as the viola da gamba and, with the exception of the top or "chanterelle" string, is double strung (two strings tuned to the same pitch).

The PSALTERY is nothing more than a sound board with varying numbers of strings across it, which are activated by means of plectra or the fingers. It appears in innumerable shapes and sizes in paintings of the Middle Ages and the Renaissance.

The KRUMMHORN, a soft wind instrument, derives its name from its curved body. Its double reed is encased in a wooden cap, the cap having a hole at the top through which the player blows.

The KORTHOLT is a capped double-reed like the Krummhorn and is a close relative of the Sordun and the Dulzian. Its double bore permits a remarkably wide range relative to its size.

The RAUSCHPFEIFE is a loud wind instrument with a capped double reed. Having a most piercing sound, it was made in families for use in outdoor performances.

The TRANSVERSE FLUTE, still in regular orchestral use, has been changed considerably from its original state. Made of wood, not silver, it did not acquire its elaborate key system until the late 19th century.

The CORNETT combines characteristics of both the brass and woodwind families. The sound is produced via a cup mouthpiece, somewhat like that of the modern trumpet, but the instrument is made of wood and is fingered after the manner of a recorder.

The SACKBUT is the Renaissance equivalent of a trombone, of all the old instruments the one that has changed the least in appearance technique.

The PORTATIVE is a small organ consisting of one rank of stopped flue pipes. The REGAL is also a one rank organ whose tones are produced by reed pipes with wooden resonators. Both were widely used as ensemble instruments during the Middle Ages and Renaissance.

The HARPSICORD is a keyboard instrument in which the sound is produced by "jacks" which pluck the strings when a key is struck. Pro Musica's harpsichord was built by William Dowd and has two sets of strings at 8' pitch and one at 4' pitch.

The Washington Post recently analyzed the unique success of this ensemble: "There are certain things you can count on in a Pro Musica concert which separate it from many other ensembles specializing in older music. Certainly what they do is authentic, but more than that, it is alive. It is music."



WINS PICKERING AWARD—Arthur G. New, right, Commander of Flotilla 75, U.S. Coast Guard Auxiliary, Lake Isabella, and former Public Education Officer for Flotilla 76, China Lake, was the 1970 recipient of the Pickering Award, conferred annually by the 11th District Auxiliary for outstanding accomplishment in the field of Public Instruction in Boating Safety. Robert McKnight, left, Commander of Flotilla 76, stood in for Earl E. Hart, Staff Officer for Public Education of the 7th Division, USCGA, in presenting the trophy and citation to Commander New.

107th Anniversary

Whiskey Flat Days To Be Commemorated February 11

The 107th anniversary of Kernville will be commemorated during the 15th Annual Whiskey Flat Days, February 11 through 15, according to Lloyd Spradlin, president of the Kernville Chamber of Commerce, sponsors of the event.

Three major categories: most original, open to adults; most original, open to juniors, elementary through high school age; and most amusing. An example is this winner of yester-year: "Beware of the fate Of Dead-Eye Dick Instead of boom His gun went click."

Those who wish to enter the contest must submit their entries on or before Feb. 6, may be delivered by hand (or buckboard) to the Whiskey Flat General Store in Kernville, or mailed to P.O. Box 366, Kernville 93238. Each entry is required to be accompanied by a label on the back indicating category, name, address and—if a student entry—age and school.

Deadline Near For '71 Auto Registration

The annual crush of registration renewal applicants before the February 5 deadline will be pretty hectic, stated Robert C. Cozens, Director of the State Department of Motor Vehicles.

Jack Souders, manager of the Ridgecrest branch of the Department of Motor Vehicles, stated that it will be possible to get quick "early bird" renewal service at the local DMV office. "For 30 days after closing time on February 5, a penalty of 10 per cent of the 1971 fee is payable," he said. "Thereafter the fee is doubled."

Owners of commercial vehicles, including pickup trucks, face a 100 per cent weight fee hike immediately after February 5, plus 10 per cent on other portions of the registration.

"Our office will be open on the morning of Saturday, January 30 for the convenience of registrants," Souders said.

CNO Spells Out Appearance Expectations

(Continued from Page 1)

or length of hair interfere with the proper wearing of any military headgear. The exact maximum length of the hair is no longer specified.

"(2) If an individual chooses to wear sideburns, they will be neatly trimmed. Sideburns will not extend below the bottom of the earlobe, will be of even width (not flared), and will end with a clean-shaven horizontal line.

"(3) If a beard or moustache is worn, it shall be well groomed and neatly trimmed in order not to contribute to a ragged appearance. This policy authorizes and includes full and partial beards, Van Dykes, and goatees.

"B. Uniforms: In addition to the foregoing policies associated with grooming, I believe that some discussion of uniforms is needed.

"(1) I see nothing wrong with the wearing of the blue working jacket, raincoat, or peacoat with the dungaree working uniform. However, I want to emphasize that this uniform is only to be worn between work and the local residence.

"(2) Although the wearing of the working uniform to and from work and the local residence has been authorized, it is not intended that personnel be permitted to make other than very brief stops off base for personal necessities in this uniform. The working uniform remains a working uniform, not a liberty uniform.

"2. I wish to reemphasize that within the broad guidelines of the policies I have issued and amplified, it remains the responsibility of the officers in command to ensure that their personnel present a neat and well groomed appearance at all times, in all places.

"3. None of my recent directives have lowered our Navy Standards of grooming and dress; they have, however, represented changes in standards to reflect contemporary styles and trends. I ask for the continued support of all hands to demonstrate maturity and good judgement in shouldering the individual responsibility necessary to preserve the fine appearance of a man in uniform. I expect responsible officers and petty officers to take hand to those few individuals who are not willing to accept the spirit of these special privileges."

EM Club Dance

At Comm. Center

Although the Jolly Roger (local EM Club) is closed for remodeling, Bob Furey, manager, has announced a dance to be held at the Community Center Saturday, January 30 from 9 p.m. until 1:30 a.m. Furey has moved the club, including the bar, to the Community Center for the occasion.

The popular "Chain of Fools," led by Doug Spiers, will play their own special brand of music for the dance. Furey announced that all members and their guests are invited to attend.

Students Study Tools Used In Communication

At a time in our history when the term "communication gap" has almost become a cliché, Murray School has provided two very special ways to overcome the gap: a journalism class for written communication, and an electronics class for transmitted communication.

Calling WA6YBN

In a program which was begun more than 10 years ago by Lloyd Brubaker, an instructor at Murray School, Murray School students are trained in the building, and use, of ham radio equipment. Identified by the call letters WA6YBN, the program became a regular class six years ago upon the introduction of flexible scheduling at Murray.

In the class, the students progress through a series of classifications, from Novice, to General and in some cases, to the Advanced Class, where they are encouraged to build their own equipment.

In addition, the students receive training in FCC law and Federal Code, as well as some basic electronics, construction methods, and repair techniques.

In order to receive an operator's license, an applicant must be able to code from five to 15 words a minute. In addition, they receive practice in emergency communication through "civil disaster

games" and through a field day, which utilizes antennas and emergency power. Each year about 10 students receive their licenses from the FCC.

"Tumbleweed Tribune"

Communications through a different media is taught by Mrs. Carolyn Hockett, who guides 23 students through the maze of Murray school news, including sports, interviews, features, art, illustrations and cartoons, to produce a newspaper, the "Tumbleweed Tribune."

Completely staffed by Murray students, the group meets for two modules at a time, three times per week. In this class, students learn "newspaper" from the ground up. They are presently involved in correcting mistakes made in their first issue, as well as learning the multitilt process.

Seventh grade students participating in this class are: Michele Ballenger, Carolann Dancy, Daniel de Roulet, Wendy Day, Janet Gardner, Patty Petach, Sue Porter, Debbie Rich, Timmy Sichey, Cathy Smith and Ted Stump.

Other graders involved in the program include: Ricky Deskin, Carolyn Jauchler, Jan Jeanjaquet, Pat Lalor, Bill Lutjens, Pam O'Guin, Lisa Prentice, Lesli Reed, Elaine Ruff, Cathy Schafer, David Stowman, and Steve Vernon-Cole.



CREDIT UNION HONORS EMPLOYEE—Gene Boehme, left, manager of the Federal Credit Union at NWC, presents a 5-year service plaque to Flo Jordy, Head Cashier at the local financial institution, a title she has held since her first day on the job. Mrs. Jordy is the wife of Robert H. Jordy, and resides at 215-B Byrnes on the Center. Prior to coming to China Lake and joining the FCU, Mrs. Jordy was the bookkeeper for the Nevada Trucking Lines, Fallon, Nevada. —Photo by PH2 D. E. Hart

PROMOTIONAL OPPORTUNITIES

(Continued from Page 2)

clerk work, of which 6 months must have consisted of work which demonstrated possession of ability to perform secretarial work above the trainee level. In addition, for the GS-5; 6 months of secretarial work which involved responsibility for serving as the principal personal office assistant to a designated supervisor. Job Relevant Criteria: Must be an accurate typist and a qualified stenographer. Advancement Potential: GS-4 may advance to GS-5.

Mail and File Clerk, GS-3054, Code 2585—Responsible for the control and disposition of all incoming correspondence and documents for the Supply Department. Handles the care and operation of duplicating equipment. Minimum Qualification Requirements: Two years of progressively responsible experience in administrative, technical, clerical or other fields of work. Job Relevant Criteria: Familiarity with office machines is desirable. Clerk-Dictating Machine Transcriber, GS-3163, 4 or 5, 259—Performs as secretary to the Head, Material Division and the Material Division Officer. Minimum Qualification Requirements: One, two or three years of experience, depending on the grade level, of clerical work which included duties as a typist and included transcription from a dictating machine. Job Relevant Criteria: Must be a qualified typist and, at the 4 and 5 levels, must have experience in dictating machine transcription. Advancement Potential: GS-5

File applications for above with Naomi Campbell, Bldg. 34, Rm. 206, ext. 3118. Accounts Maintenance Clerk, GS-5904, PD No. 711702Am1, Code 1744—Provides off station reports relating to payroll and labor control operations of employee payroll records and control functions relating to labor distribution. Minimum Qualification Requirements: 1 year of general clerical experience and 1 year of specialized experience.

File applications for above with Mary Morrison, Bldg. 34, Rm. 210, Phone 2032. Heavy Duty Equipment Serviceman WG-58004-06, JD No. 3031, Code 7076—Performs semi-skilled work on all types of Heavy Duty Equipment. Utilizes technical instructions, manuals and other publications which are applicable to the heavy duty equipment to be serviced, repaired and maintained in order to keep this equipment in good operating condition. Qualification Requirements: Rating will be on the basis of the appropriate J-Element Standard in accordance with the CSC Handbook X.118C.

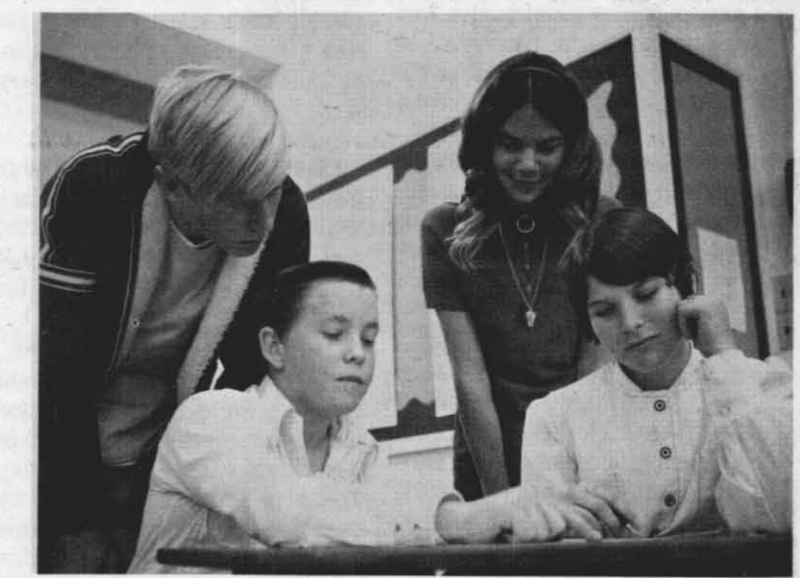
File applications for above with Dora Childers, Code 657, Room 210, Phone 2393. General Engineer, GS-801-11-12, PD No. 703012, Code 30102—This position is in the Aircraft Gun Systems and Survivability Office. The incumbent is responsible for planning, implementing and monitoring the testing requirements for the GPU-2A Gun Pod Program. Included in the duties of the incumbent are the technical supervision operational evaluation and all associated engineering tests. Technical evaluation of all guns and ammunition sub-systems performance, including recommendations for design fixes and improvements also preparation of test reports, correspondence

and other administrative functions. Job Relevant Criteria: The incumbent must be experienced in methods and techniques of testing, defining instrumentation and evaluating test results. He must be capable of operating both independently and in the capacity of coordinating the efforts of others. He must be familiar with the operations of the Systems Development Department and the Naval Air Systems Command. Since the incumbent interfaces with various branches of the Naval Air System Command and other military organizations, he must be capable of exercising mature technical judgment and communicating his ideas effectively. Minimum Qualifications: one year at the GS-9 level for GS-11, and one year at the GS-11 level for GS-12. Advancement Potential: To the GS-12 based on ability to fulfill position requirements.

File above applications with Beverly Saiger, Bldg. 34, Room 212, Ext. 2314. The Naval Weapons Center, China Lake, California announces competitive promotion examinations for the following: GENERAL FOREMAN II (MAINTENANCE), WS-47040-14 LEADER, STOCKMAN, WL-69007-06. Applicants must file Card Form NAVEXOS-4155AB, Standard Form 172 and Employee Information Supplemental Sheet with the Evaluation Division of the Project Department, Naval Air Facility, Incumbent will align, maintain and test electronic equipment used in drone aircraft operations. C and X-Band radar transponders, command destruct receivers, airborne television systems and UHF telemetry transmitters are typical equipment. Installs and tests equipment in aerial targets and assists with new installations to meet project requirements. Assists to resolve technical problems encountered in drone operations. Minimum Qualification Requirement: For Electronics Technician, 2 years of general experience (technical or craft) plus 4 years of specialized experience which shows progression in theoretical and practical knowledge of electronic theory and of characteristics, function, operation and capabilities of a variety of types of electronic equipment. Applicants for Electronic Mechanic will be rated on the basis of J-element standards in accordance with the X.118C.

File applications for above with Naomi Campbell, Bldg. 34, Rm. 206, ext. 3118.

AMERICAN CANCER SOCIETY



SCRIBES PORE OVER EDITION—Members of the journalism class at Murray School check mistakes in the first edition of the "Tumbleweed Tribune," a paper about Murray School, which is written by members of the class, taught by Mrs. Carolyn Hockett. The youthful journalists are, seated, l-r: Pat Lalor, editor, and Cathy Schafer, assistant editor. Standing, l-r: Rick Deskin, sports editor, and Carolyn Jauchler, feature editor.—Murray School photo

New Monday Holiday Law

The new Monday Holiday Law went into effect on January 1, 1971.

Federal holidays will be observed on the following dates:

New Year's Day, January 1; Washington's Birthday, third Monday in February; Memorial Day, last Monday in May; Independence Day, July 4; Labor Day, first Monday in September.

A new holiday, Columbus Day, will be observed the second Monday in October; Veterans Day, fourth Monday in October; Thanksgiving Day, fourth Thursday in November; Christmas Day, December 25; and Inauguration Day (Washington, D. C. area only), January 20, observed every fourth year after 1965.

The new holiday observances are covered under Public Law 90-363. If those holidays not necessarily

falling on Monday fall on Saturday, the preceding Friday is considered a holiday. This includes such holidays as New Year's Day and Christmas Day. If the holiday falls on Sunday, the following Monday is considered a holiday.

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ROA OFFICERS OBLIGATED—Capt. R. E. McCall, left, Commanding Officer of NAF, obligated the new slate of officers elected to head the local chapter of the Retired Officers Association January 20. The new 1971 officers are, l-r: Stephen H. Herzog, Immediate Past President, who stood in for President Jack Patterson; LeRoy Miller, 1st Vice President; George Schneider, who stood in for 2nd Vice President Jack Lyons; Kenneth Johns, 3rd Vice President; and W. H. Routledge, Secretary-Treasurer. —Photo by PH2 D. E. Hart