



PREP SCHOOL . . . Students attending the Red Cross Leadership Training Center at Cate School in Carpinteria study the schedule for their week's stay. Left to right are Sherry Stern of San Pedro High, Nancy Fieri of Torrance High, and Emily Ireland of North High.

# Probation Program Keeps State Commitments Down

Capitol News Service  
SACRAMENTO — Youth Authority Director Allen F. Breed has reported that expected commitments of youths and adults to state institutions were reduced by 2,481 in 1967-68 as a result of California's probation

subsidy program. It represented a reduction in the expected commitment of 25 per cent. In the second year of the program, Breed reported, 36 counties participated with all but two, Sacramento and Placer Counties, reducing

their expected commitment rates. The counties shared in maximum subsidy earnings of \$9,819,625.

THIS FIGURE compares with a 1,451 commitment reduction in the first year of operation for 31 counties with a \$5.7 million subsidy. Savings to state taxpayers, according to Breed, amounted to \$50 million about what it would have cost to build additional institutions to house the offenders not committed.

The subsidy program, administered by the Youth Authority for both adult and juvenile offenders, offers subsidies for placing offenders, those with promising prognosis for rehabilitation, on probation instead of sending them to state institutions.

THE FUNDS must be used to enrich the probation services by the county and reduce caseloads as well as provide special services such as foster homes, improved tutoring, psychological and psychiatric help and employment services. The subsidy generally amount to \$2,000 to \$4,000 per uncommitted case, with the higher figure going to those counties with the highest rate of reduction.

## Supervisors

# Board Observes Highway Week

National Highway Week will be observed Sept. 22 through 28 in Los Angeles County, Supervisor Burton W. Chace has announced. County Supervisors affirmed President Johnson's proclamation of the annual observance on the motion of Chace, who is chairman of the County Road Department.

"In addition, the Board emphasized its determination to continue its efforts to provide the most modern and efficient highway system in the world," Chace said.

Citing Los Angeles

County's progressive road-building program. Chace called attention to the current fiscal budget of \$80.7 million for highway projects.

"Nearly 57 per cent of the projects in this budget are earmarked for road construction within cities—paid for out of county gas tax revenues," Chace said.

"This is consistent with the county's policy of assisting cities with projects of countywide interest so that a fully efficient and well-coordinated road system is continued," Chace said.

# CHP Explains Driver And Pedestrian Laws

"Whether you are a driver or a walker, there are parts of the California Vehicle Code which apply to you," Capt. P. J. Ford, commander of South Los Angeles area of the California Highway Patrol, said this week.

"Pedestrians should know the law," Captain Ford said, "because they have rights and responsibilities under it, just as drivers do."

He said that 910 pedestrians were killed in traffic accidents in 1967 and 15,285 pedestrians were injured. Of those killed, 178 were nine years of age or younger, 91 were 10 to 19 years of age, 372 were from 20 to 64 years old, and 269 were over 65.

"The driver of a vehicle must yield the right-of-way to a pedestrian crossing the roadway within any marked crosswalk or within any unmarked crosswalk at an intersection; however, no pedestrian has a legal right to suddenly leave a curb or other place of safety and walk or run into the path of a vehicle which is so close as to be an immediate hazard, in a crosswalk or anywhere else," the Captain said.

Pedestrians also have the and drivers who are crossing sidewalks or driveways must yield to approaching pedestrians.

"A pedestrian on a roadway outside a business or residential district must walk facing traffic, close to the left-hand edge of the road," Captain Ford said. He also must yield the right-of-way to vehicles when crossing or walking on the roadway at places other than intersections or marked crosswalks. Finally, when adjacent intersections are controlled by traffic control devices or by police officers, pedestrians may not legally cross the roadway at any place except in a crosswalk.

# Mysterious Death Taps Male Nurse

A 34-year-old male nurse, Jay Hunt of 20907 Amie Ave., Apt. 16, was found dead on the livingroom floor Thursday by his roommate, Donlarry Hecker. No apparent cause could be found for the death.

Hecker, also a male nurse, told police he discovered the body at 10 a.m.

The victim had been employed at South Bay Hospital. Stone and Myers Mortuary will handle funeral arrangements.

## Without Light

# TRW Scientists Study Food Growing Methods

The first step toward changing the plant process to produce food and oxygen without the need of light has been achieved by a team of six scientists at the Physical Research Center of TRW Systems Group in Redondo Beach.

The report was made in two technical papers presented this week at the national meeting of the American Chemical Society in Atlantic City, N.J.

The research papers were authored by TRW scientists, Dr. Norman Weliky, who directed the program, Dr. Eddie T. Seo, Dr. Robert J. Day, Dr. Lord L. Gale, Edwin C. Dale, and Sally J. Kinsey.

IN THEIR reports they describe a method for substituting a different form of energy — exochemical energy—for light or photochemical energy to produce plant extracts.

In effect, it represents a step toward artificial plant synthesis, a means that eliminates the light requirements in photosynthesis, which is nature's way of making plants grow with sunlight.

The research, supported by the Air Force Aerospace Medical Research Laboratories, points the way for growing food to sustain life where it is undesirable to use light for plant growth, such as the many regions of outer space. In spacecraft, where weight, power and room is of major importance, this discovery has been regarded as an ineffi-

cient process of producing food and oxygen.

A KEY aspect of the research rested in discovering a different way of converting an organic substance inherent in plants, referred to as TPN+, to a different chemical state. In its active state, the substance is referred to as TPNH, and is one of the substances that causes the assimilation of carbon dioxide by the plant and the subsequent production of food. The conversion of the substance from one state to another takes place through the transfer of electrons, and is accomplished through the use of light energy in photosynthetic processes.

TRW scientists discovered that this natural phenomenon can be duplicated by introducing methyl viologen, a chemical with the right characteristics as an electron-transfer agent for this system. It acts as an intermediate to transfer electrons from an electrode, connected to an external power supply, to TPN+, making use of plant enzymes or plant catalysts.

THEY demonstrated that with the use of this agent in a chemical solution containing extract of spinach chloroplast, TPN+ can be reduced electrochemically to TPNH. The electrochemical process takes place if electrodes placed in the chemical solution are connected to a power supply adjusted to the proper voltage. By monitoring the incorpora-

tion of carbon dioxide into plant matter it was demonstrated that the plant extract produced amino acids and sugars, such as would have been produced by biosynthesis under normal photosynthetic conditions.

The production of food by green plants, however, requires a second substance, ATP, also provided by the action of light during photosynthesis. TRW scientists are now investigating the possibility of producing ATP within the electrochemical cell.

THE PROGRAM has been in progress for almost three years at TRW's Biosciences and Electrochemistry Department. Dr. Herbert P. Silverman, department manager, described the results of the research as one of man's first attempts to do electrochemically, what nature does photochemically.

Stating it was premature at this point to predict the long range results of the research, he added that today society is dependent on the sun and weather conditions for the production of food; perhaps some day factories, instead of farms, that produce food may be possible. It may also furnish a solution to feeding a larger world population.

## Small Pox Clinic Set Next Month

A smallpox immunization program will be held in Torrance schools beginning Oct. 1, according to Dr. J. H. Hull, superintendent of schools.

Vaccinations will be given to students in kindergarten, first, eleventh, and twelfth grades by representatives of the Los Angeles County Health Department. This will make the first time that smallpox immunizations have been offered to high school students here.

Permission slips will be brought home by students in the eligible grades for parent signatures later this month.



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- TORRANCE MEMORIAL HOSPITAL**
- McGOWAN — Mr. and Mrs. Michael E. 2906 Carnegie In. Redondo Beach, a daughter, Via Luc, Aug. 5.
  - HILL — Mr. and Mrs. Ronald, 2633 Alta Vista, Harbor City, a daughter, Lisa Michelle, Aug. 7.
  - ARAGON — Mr. and Mrs. Joe D., 107 W. 204th St., a son, Barty Joe, Aug. 10.
  - BEARSTO — Mr. and Mrs. James F., 1850 Plaza Del Amo, Apt. 1, a daughter, Tammy Anna, Aug. 10.
  - LANG — Mr. and Mrs. John John W., 2423 Ocean Ave., a son, William Scott, Aug. 10.
  - ELGERSSA — Mr. and Mrs. Larry, 15421 Elgar St., a son, Jay Manson, Aug. 16.
  - MILLSTEAD — Mr. and Mrs. Thomas K., 2504 Andrea Ave., a son, Strickland Lee, Aug. 16.
  - ZIMMERMAN — Mr. and Mrs. Harry, 2129 Perry St., a son, Joel Lawrence, Aug. 16.
  - FAYES — Mr. and Mrs. Toby, 100 W. 204th St., a son, Troy, Aug. 17.
  - FERRIGUEZ — Mr. and Mrs. Rolando C., 24201 President Ave., Harbor City, a son, Rolando Jr., Aug. 18.
  - MOORE — Mr. and Mrs. Thomas O., 2084 W. 25th St., Lomita, a son, David Eric, Aug. 21.
  - ELLEFSSEN — Mr. and Mrs. Ernest, 26131 Narbonne Ave., Lo-

- mita, a son Erik Donovan, Aug. 22.
- MARTINEZ — Mr. and Mrs. Thomas, 24717 Oak St., Lomita, a son, Thomas Lawrence Jr., Aug. 22.
- COLLINS — Mr. and Mrs. Douglas, 2629 Cabrillo Ave., a daughter, Monica, Aug. 26.
- ESPINOZA — Mr. and Mrs. Victor M., 118 E. 24 234th Pl., Wilmington, a son, Mark Anthony, Aug. 26.
- NIELSON — Mr. and Mrs. Donald E., 5616 W. 171st St., a daughter, Penny Kathleen, Aug. 26.
- OSER — Mr. and Mrs. James, 1067 E. 70th St., a son Mark, Aug. 27.
- JULIEN — Mr. and Mrs. Joseph H., 3422 W. 172nd St., a daughter, Debra Alice, Aug. 30.
- MITCHELL — Mr. and Mrs. W. M., 3317 Danah St., a son, David Scott, Aug. 30.
- SHEGAS — Mr. and Mrs. John, 716 Portola Ave., a daughter, Stephanie, Aug. 30.
- STURTY — Mr. and Mrs. Donald, Costa Mesa, a son, David Barrett Sturty, Aug. 30.
- HUDAK — Mr. and Mrs. George, 2813 W. 186th St., a daughter, Marianne Elizabeth, Sept. 1.
- McGEACHY — Mr. and Mrs. Douglas Kent, 15 Square Peak Lane, Wilmington, a son, Douglas, Sept. 2.
- HOLLAND — Mr. and Mrs. Ralph, 15328 Avis Av., Lawndale, a daughter, Deborah Michelle, Sept. 4.

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