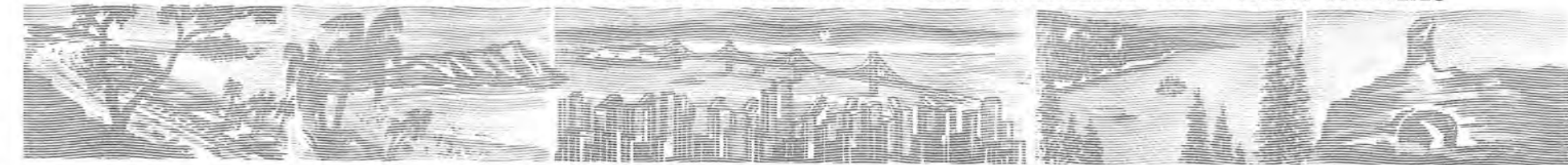


ENGINEERS NEWS



PUBLISHED TO PROMOTE THE GENERAL WELFARE OF ALL ENGINEERS AND THEIR FAMILIES



GUAM, WHERE AMERICA'S DAY BEGINS HAWAII, THE 50TH STATE

NORTHERN CALIFORNIA, THE GOLDEN STATE

NORTHERN NEVADA, SILVER STATE

UTAH, HEART OF THE ROCKIES

Vol. 26 — No. 1

SAN FRANCISCO, CALIFORNIA



January, 1967

MANAGER'S MEMO

Pension Plan Soars To \$200...



Figures designate wage, fringe and welfare increases since 1960 autonomy.

By AL CLEM

SAN FRANCISCO — Another milestone was reached Jan. 9 when your Pension Trustees met to review Pension activities and approved an increase in benefits to a maximum of \$200 a month, or \$8 a month for each year of pension credits.

The new rate becomes effective April 1.

... Insurance Policy Added

(In isolated instances where employer contributions are less than stipulated in construction agreements, maximum benefits will be proportionately adjusted.)

In just six years, benefits have increased almost 200 per cent.

Employers first made contributions to the plan January 1, 1958, with first benefits paid in January, 1960.

The maximum at that time was \$60 a month or \$2.40 for each year of pension credits.

Since then, more than 1,000 re-

tired Brothers have received \$5 million in benefits.

This is an outstanding achievement. Old timers receiving benefits truly deserve them. Through their efforts our Union has continued to grow and secure new gains at the bargaining table.

These gains will continue to benefit our members who will be

See PENSION on Page 2

Pension Plan Soars To \$200

Continued from Front Page
able to enjoy a leisure life with dignity.

Benefits are guaranteed for three years. Members with normal pensions and the beneficiaries will collect at least \$7,200.

Increased life span will mean increased over-all benefits. For instance, if a retiree has 25 years pension credits and he receives benefits for 10 years, his annuity will be \$24,000.

If he lives to age 85, the total will reach \$48,000.

Also approved at the Jan. 9 meeting was a pre-retirement insurance plan providing benefits to beneficiaries of members who have not reached retirement age prior to death.

For members who are vested (10 years' future service credits and 55 years of age) or members with 25 years, irrespective of age or who are active with 10 years' future credits irrespective of age, the plan will pay an amount equal to the pension drawn at age 65 times the 36-month guarantee.

For instance, a member in the top classification with 10 years' future credits would receive \$80 a month for 36 months, or \$2,880. The benefits would be paid in monthly payments to a designated beneficiary or spouse if living, or a person who is the object of natural bounty or to the estate.

If the member has 25 years' future service and has not retired, he would receive \$200 a month for the 36-month guarantee, or \$7,200.

However, the program is prorated according to the classification donation and the amount of future credits earned.

A booklet will be made available prior to April 1 explaining the program.

Retirees are assisted in keeping abreast of happenings through a monthly newsletter, and a booklet which deals with their specific problems. These advances have taken an all-out team effort by all Engineers, and each member can be proud of his efforts in achieving these gains.

PAUSE, REMEMBER

The New Year is upon us with all its promise for better things, but we should be thankful for what we have accomplished during the past five years.

On Dec. 25, 1960 when the Officers were installed, Local 3 stepped forth as an autonomous organization of 22,500 members with 19 officers, 1,100 contracts and 110 employees to serve the membership.

In order to render better service, a Grievance Committee was elected in each district and a seminar for training Business Agents was established.

LEARNED MUCH

The Agents learned many things about dealing with problems of the individual member, the employers, the government and the public as a whole.

Hiring procedures were modified at the request of many members, who ratified the final proposal.

In April, 1961, an intensive organizing campaign was launched in non-union plants and shops, seeking increased job opportunities for Union members. The drive is still continuing.

That same year membership in Hawaii reached 1,000. The officers visited the Islands to hold a special meeting in commemoration of the event.

In 1961 the Tech Engineers Apprenticeship Standards and Operating Engineers Apprenticeship Standards were undergoing rigid examinations, and after two and a half years, present Undersecretary of Labor John F. Henning gave his stamp of approval. In October the program was on its way (on a limited basis, of course).

More than 30,000 dispatches were signed and in excess of 1,000 contracts were signed and the membership reached 24,000.

The first year under local autonomy was indeed a busy one.

SAFETY FIRST

Then came 1962 and the word was "Safety." Local 3's officers gained the wholehearted support of the members in establishing the most ambitious safety program ever attempted by a local Union in northern California. The goal was to have a safety committeeman on every job, and needless to say, the program was an outstanding success.

But more than just safety on the job was accomplished.

Contracts with the Associated General Contractors and the Pile-driving and Steel Erectors were signed in northern California and northern Nevada, and there was good news when the pension maximum was raised to \$100 a month.

GROWING PAINS

But the Apprenticeship program was experiencing growing pains and we were confronted with many problems.

The Executive Board also made its mark by approving the sale of our property in Redding to the Highway Department and a new building on a new site.

Offices in Hawaii also moved to more spacious quarters with improved parking facilities, and two new Business Agents were hired to police the district and accelerate the organizing drive.

MORE RADIOS

Mobile radio units were expanded to include Sacramento and Marysville, and the Brothers in Utah voted in favor of the pension plan.

The "Sounds of the '60s" continued in 1963 as a master agreement with the Associated General Contractors in Utah was reached.

Members there received a substantial wage increase, but more than that, better working conditions and more fringe benefits.

NEW AGREEMENT

In Hawaii, the construction agreement terminated and negotiations were launched to secure a new one. Many hours were spent at the bargaining table, resulting in a four-year pact containing a breakthrough in the pension plan. The overwhelming ratification spoke for itself.

Dispatches again exceeded 30,000 and the membership grew to 27,000.

The infant Apprenticeship program had tripled in size and the groundwork was laid for creation of our Credit Union.

Research was being conducted for development of a Manpower Development and Training Act

program with the government.

Then came the election, the first since Local 3 had become an autonomous entity. The incumbent officers were returned to office by an overwhelming majority.

The job situation received a tremendous boost when the California Water Project sprung forth. Members have continued to work long and satisfying hours on this mammoth project.

It was a year when the benefits we had all worked so hard to obtain revealed their value. The Health and Welfare Administration Office reported it was processing several forms each working day.

NEW DAWN

Then 1963 faded and a new dawn burst forth—Local 3 celebrated its 25th anniversary.

But all was not well in 1964. Northern California suffered one of the most devastating floods in its history. Eureka and Crescent City were the only cities to survive, but Crescent City was rocked by a tidal wave after the Good Friday earthquake shattered Alaska.

Many of our Brothers lost their homes and belongings in the disaster, but in spite of the heartbreak and hardships, they held steadfast in determination to conquer their adversaries.

LOCAL 3 HONORED

The members elected delegates to the 27th International Convention of Operating Engineers, held in San Francisco. Fifty-eight delegates were named to attend the mid-April conclave, which paid tribute to Local 3.

Our Union, one of the State Branches, was proud to welcome its friends from throughout the United States and Canada, with whom we enjoyed good fellowship.

Shortly thereafter we signed a contract with Undersecretary of Labor Jack Henning to launch a pilot MDTA program designed to upgrade the skills of our members threatened with the rising tide of automation. The program consisted of two six-week sessions with 150 men in each.

SALUTE FRIENDS

We would like to salute our friends in the Marine Cooks and Stewards Union and particularly Ed Turner and Jerry Posner for their outstanding assistance, and Morris Skinner and Bruce Stark of the Bureau of Apprenticeship and Standards for their help.

On Guam, the contractors and employers continued to double talk when we were requested to come there by the workers.

Their attitude was "we are glad to see you here, but you are 99 years too soon." But we were well received by the people, desirous of upgrading their living and working standards, and by the government and the church and other fraternal circles. We established our first office there.

CREDIT UNION GROWS

Back on the mainland, our Credit Union continued to grow and we launched a Steward program with the intent of placing a Steward on every job.

Again, there were more than 30,000 dispatches, and the membership soared to 29,482.

Early in 1965 a second MDTA contract was signed which graduated 500 Operating Engineers

under jurisdictions of Locals 3 and 12 and the Union in Montana.

General President Hunter P. Wharton, General Secretary-Treasurer Newell J. Carman, Executive Vice President Richard H. Nolan and several Locals business managers honored Local 3 with a visit to the camp.

ADDRESSED TRAINEES

Brother Wharton addressed the trainees. Local 12's business manager, Joseph Seymour was undergoing surgery and was represented by Phil Judd, Bill Begley and Verne Dahnke.

Organizing continued in Guam and other areas and the Oroville Dam stopped a flood threat in northern California.

Large cities were being planned on the San Francisco Peninsula and an election was won with a major Caterpillar dealer in California.

Health and Welfare benefits were expanded offering more liberal payments and negotiations began with the Associated General Contractors in Northern California and Northern Nevada.

BETTER CONDITIONS

Negotiations for better working conditions and wages for steel erectors began with the Utah AGC.

One of the best contracts ever negotiated was reached in California and Nevada. It called for Journeymen Trainees, who since have upgraded skills, offering a better day's work.

Much credit must be given the membership for its support during the lengthy negotiations.

We were again honored with visits by Brothers Wharton, Carman and Nolan who attended a Business Agents' meeting. They passed on information valuable to all.

BART GUEST

Brother Wharton was a guest at BART groundbreaking ceremonies. The \$1 billion project is offering several jobs to our members.

Under the guidance of Brother Wharton and the National Pipeline Negotiating Committee, a national pipeline agreement was reached providing a pension plan, substantial wage increases and other benefits throughout the United States.

Benefits in Utah's health and welfare plan were liberalized and several mining agreements were renewed.

Meetings continued in safety and environmental health. Months later we saw the results of our labors.

2 SCHOLARSHIPS

Two \$500 scholarships were awarded members' children, aiding in their college expenses.

The Tech Engineers Agreement was ratified as was the Local 3-Local 12 Dredging Agreement.

Some 1,800 contracts were signed and Nevada Gov. Grant Sawyer signed the Apprenticeship Standards. A coordinator was hired to direct Nevada's activities.

California's health and welfare benefits were improved and the pension maximum paid \$175 a month.

In November, the Union installed an IBM 1440 computer to better serve its members, who now numbered 31,000.

In 1966 the safety program gained attention. Local 3, Local 12, the State Department of Industrial Safety and various employers, drafted an amendment to the State Safety Orders requiring roll bars on earth-movers.

Local 3 elections were again held with all incumbents winning by a whopping margin.

In Salt Lake City, Gov. Calvin L. Rampton was present at dedication ceremonies of our new offices there.

Additional organizing gains were made. The last major Caterpillar dealer in California joined our ranks and organizing was accelerated in Guam, Utah, Hawaii and Nevada.

FIRST AID

One of the most publicized and successful First Aid Training programs ever held was conducted in conjunction with the American Red Cross, who, through Liaison Director Ken Kraemer and Area Manager for the 11 western states Donald W. Stout, gave us invaluable assistance.

We are proud of this program, where nearly 2,000 members and wives participated. We hope to launch another program in the near future.

We anticipated an extremely active year in 1966, but the "tight money" situation caused a virtual halt in housing site preparation. The highway and Trans-Bay Tube programs took up some of the slack, however.

DENTAL PLAN

In California and Nevada a dental plan was added covering those working in the construction industry.

Brothers Wharton and Nolan attended Operating Engineers graduation exercises where President Wharton presented graduation certificates.

He was assisted by Ernie Webb, director, Department of Industrial Relations, who also presented Local 3 with a Certificate of Merit.

The Pension Trust was amended to provide 1½ future service credits to those over 60 years of age who worked 1,500 hours and the same to those under 60 who worked 1,750 hours.

UTAH APPRENTICES

In Utah an Apprenticeship program was secured in an agreement with the AGC.

Legislators on Guam passed an anti-labor right-to-work bill which was promptly vetoed by Gov. Guerrero, but the legislature again passed the bill. President Johnson then upheld the Governor's veto, paving the way for accelerated organizing.

The Steward program was rejuvenated and a coordinator appointed. State elections were held with disappointing results, but as Americans, we will continue to make progress with everyone working together. The membership exceeded 32,000.

In conclusion, we can say Local 3 has made remarkable progress during the past six years. I am confident that by working together we can secure future gains for ourselves and our families which will insure better living for all.

Happy New Year



OFFICERS

AL CLEM
PAUL EDGEcombe
DALE MARR
T. J. STAPLETON
A. J. (BUCK) HOPE
DON KINCHLOE

TRUSTEES

HAROLD LEWIS
I. JAY NEELEY
FRAN WALKER

AUDITORS

HAROLD HUSTON
BILL RANEY
WALTER TALBOT

CONDUCTOR

ERNIE NELSON

GUARD

JOE MILLER

TOMORROW'S LEADERS

By RUSS SWANSON
and ASTER WHITAKER

SANTA ROSA—A man once said that the youth of today are the leaders of tomorrow and anything a man can do to shape a youth's future is in reality, shaping the destiny of mankind.

Although a lot of people take this statement for granted, considering it just so much chatter, there are those who feel the future of youth lies in the hands of today's adults.

HE'S RESPONSIBLE

Take Brother Paul Garzot, for instance. He has a deep seeded sense of responsibility when it comes to this generation's boys, and he spends a considerable number of hours working for their development and well-being.

Brother Paul is a member of the Executive Board, Sonoma-Mendocino Council of the Boy Scouts of America and is Scout Master of Troop 27.

He has been employed as a foreman for Don Dowd for many years, which has taught him something about a rare commodity called leadership.

SEVERAL WEEKENDS

Brother Paul has spent many weekends over the years working on a Boy Scout campsite near Navarro, California. The work done will provide summer months of activity for some 700 Scouts



PAUL GARZOT
... investment in youth

in the Redwood country over the summer.

Others who have assisted in developing the camp are L. Muzzelman, Floyd Graham, Charles Cassarotti, Dean Garzot and Don Sanders.

At present the Navarro campsite is built on 42 acres, and is considered one of the outstanding campsites in Region 12. It has received an "A" rating over the past five years.

WEST STATES

Region 12 includes the five western states and Hawaii.

Facilities at the camp include a 200-seat mess hall, a hospital with a full-time doctor, a five-building administration center, a five-room house for a full-time caretaker, a maintenance building and three storage buildings.

The boys sleep in Addonacs, which are three-sided buildings with open fronts.

Sanitary facilities include four showers and toilets.

An earth-filled dam, built by Operating Engineers, provides some of the outstanding forms of recreation for the boys who spend the summer months at the camp.

SPORTS MECCA

Scouts participate in boating, swimming, canoeing, rowing, and other water sports. They are also instructed in hiking, camping and first aid techniques.

The most important phase of instruction given these youngsters, according to Brother Paul, is character building.

Don Dowd Company, among other firms, has donated time and much of the equipment which has made development of this area possible.

It is a project in which those Engineers and companies who have participated can be justly proud. It should set an outstanding example for other Engineers and companies to follow.

WHAT'S IMPORTANT?

After all, in what more important stock can today's generation invest than in today's youth?

Getting back to lucrative matters, the biggest conversation item remains the northern Mendocino freeway now under construction.

Much of the work on this job

has shut down due to wet weather, but the project holds considerable promise when the earth dries sufficiently to permit a resumption of work.

Many businesses will be affected when the new road is completed.

INVITE INDUSTRY

Because of the declining lumber industry, which has been a major source of income for this area's residents, the freeway will probably invite location of some industry in the area, in addition to eliminating the semi-isolation condition the area has suffered in the past.

Many residents are looking to recreation as being the next big booster to the economy. Major recreation sources will include steelhead fishing, deer hunting and boating.

Between Santa Rosa and Laytonville, the fill job, immense in its scope, is being done by Morrison-Knudsen Company. The fill involves some 2.5 million yards of dirt and rock.

Total estimated cost of this phase is about \$3 million a mile.

Fort Bragg will also become more accessible when Highway One is connected to Highway 101, bringing more vacationers to the area.

How To Buy

By SIDNEY MARGOLIUS

After being hit with a cost-of-living jump of almost four per cent in 1966—biggest since the Korean War—you can expect another lesser rise in prices in 1967.

We expect this year's increase will be near three per cent, if military expenses don't rise. You'll pay more for food, but the rise won't be as staggering as this year's five per cent which led to the housewives' boycotts and picket lines. You also can expect to pay more for hospital and medical care; shoes; men's clothing; furniture, bedding and housewares.

This past year's rise was bigger than expected or necessary, and brutal in its impact because workers' income in many cases failed to keep pace through most of the year.

One of several forces allowed unnecessarily to push up living costs was the rise in interest rates. This action, claimed needed to fight inflation, failed in that purpose. We got both inflation and higher interest rates on mortgages, car and other loans.

Food is the No. 1 problem because it takes the biggest cut of your budget. The 1966 increase in food prices boosted the average expenditure \$26 a year. Food now costs at least \$1.10 to \$1.25 per person a day, or a minimum of \$27 a week for a family of four with school-age children, not counting soaps, paper goods and other non-food supermarket purchases.

Continuing high prices will remain on meat, milk and bread. Pork won't be as expensive as last year, but beef will cost more in 1967. Lower prices are expected for eggs—a moderate-cost substitute for costly meat. Big supplies of poultry also will be available.

Medical costs went up seven and a half per cent last year and almost 33 per cent since 1957-59—the biggest jump of any item.

Medical costs are going to rise again for 1967. Hospital representatives are predicting increases ranging from 12 to 30 per cent.

These sharp increases may spur expansion of group medical care through non-profit co-op and union facilities.

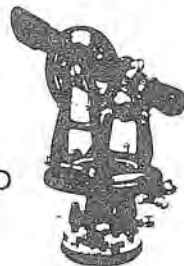
Car prices have gone up about \$55 per car this year. But cars are not selling as well as manufacturers expected—not surprising in view of higher costs of food and other basic necessities. Car inventories are high, and dealers are anxious to trim prices. Unfortunately, by keeping prices and operating costs high, car manufacturers have opened the way for an increase in sales of small imported cars.

Take advantage of the important January clearances to fill in family wardrobe needs, especially for shoes and men's suits. Shoes have gone up more than any other clothing item, as manufacturers took advantage of large military orders to boost civilian prices more than justified by increases in leather and labor costs. In fact, hide prices went down while shoe prices rose 7 per cent.

Surveyors Have A Proud Heritage

SURVEY NOTES

By
JACK
BULLARD



Throughout the history of our industry, wintertime has meant hardships for the surveyor.

Possibly no group had it harder than the Lewis and Clark Expedition, which set out to explore the Northwest.

The Expedition spent the winter of 1804-05 on the banks of the Missouri River with the Mandan Indians on a site across the river from what is now Bismark, North Dakota.

Figures compiled by the Bismark weather bureau disclose the mean temperature for January to be 10 degrees, with an average high of 20 degrees and an average low of zero. The coldest temperature recorded for January is -45, almost cold enough to call off a Pro football game.

The party constructed two rows of four huts, each hut being 14 feet square and seven feet high.

Notes kept by the party mem-

bers indicate Lewis and Clark occupied one hut, leaving 42 men, interpreters and wives to occupy the other seven. This must be considered the epitome of togetherness.

One of the members by the name of Ordway, recorded that on Feb. 11, 1805, the following account:

"An interesting occurrence of this day was the birth of a son to a Shoshone woman."

That woman was better known to the members of the expedition as Sacagawea, whose name translated means "Bird Woman."

Sacagawea had been stolen as a child by the Blackfeet and sold to the Mandans. She was a sister of a Shoshone chief.

The Mandans gave her to Charbonneau, a French-Canadian interpreter who was living with them, who raised her and then married her.

Sacagawea and her two-month old child left with the expedition when it broke camp on Sunday, April 7, 1805.

Two months after the party left camp, the perogue (canoe) in which she was traveling capsized. Clark wrote that Sacagawea saved some instruments, which was quite an accomplishment, considering she had her four-month old son with her.

Her knowledge of the country and her contact with the Shoshones proved to be of great value. Had it not been for her, the party might not have reached Oregon.

We as surveyors are spread rather thinly throughout the jurisdiction of Local 3. The 11 Bay Area counties in themselves constitute a large chunk of real estate.

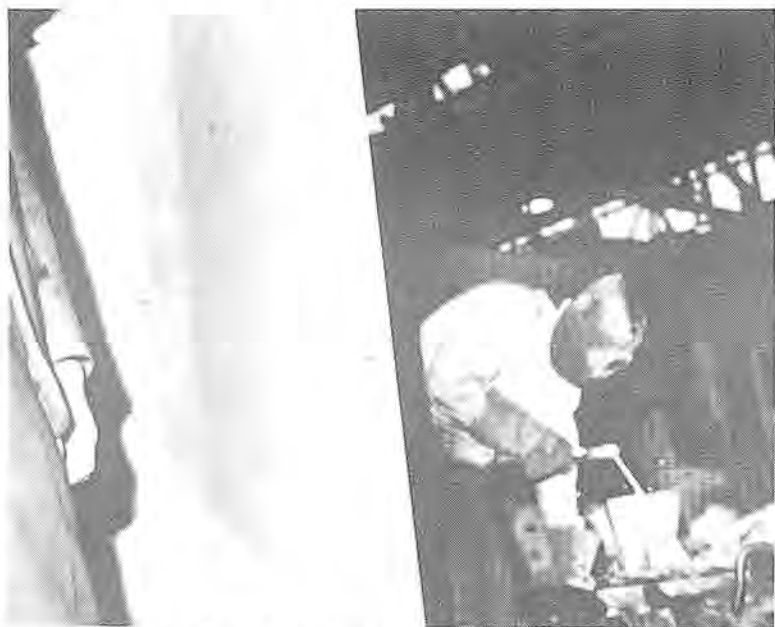
Contact with all of you will be done as rapidly as time will permit, but to speed up the process, your help is solicited.

Please write in care of the Oakland office, listing your current address and telephone number. A post card will do.

Personal contact will then be established, and your record kept in the personnel file.

Contact should be made whether or not you are working. My home phone is 532-3386.

'Halt Accident' Drive



Welding screens have been installed for protection of flashes and blinding light. Peterson Tractor has insisted on top safety moves.

equipment shop, welding shop, engine exchange shop and rebuild shop participate in a committee-directed drive to halt accidents.

Management in the program is represented by the foreman of each shop.

The committee works directly with and reports to the shop manager, concerning any safety irregularities. The reports are made in writing on forms supplied by the Operating Engineers Local No. 3.

To keep the employees informed of what has happened, and the new methods and practices established, "toolbox" meetings are held each week, preferably on Monday mornings. Safety deficiencies are discussed and ways of correcting them are investigated.

Company officials have made it a point to install safety equipment. They realize that it isn't just the big, readily noticeable hazards that contribute to accidents. The little, hardly noticed irregularity also causes accidents, often more devastating than does the obvious hazard.

Roll Bars, Seat Belts On Earth-Movers

It has finally happened — all earth-moving equipment in California must be equipped with roll-over bars and seat belts. The ruling, passed recently by the State Board, will go into effect early this year.

Cost estimates for equipping the more than 40,000 pieces of equipment will run upwards of \$50 million.

Under steady pressure and recommendations of the Operating Engineers and its Business Manager Al Clem, who has named Vice President Dale Marr and Fran Walker as full-time safety engineers, the proposal to better protect operators has been bandied around for nearly a year, with contractors, manufacturers, the Union and others constantly discussing the type roll-over protection which would best do the job.

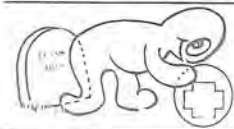
As originally proposed, the regulation would have required roll-over bars on all rigs, but with considerable study and research being performed by the Operating Engineers, the state, the contractors and manufacturers, it was

finally decided that reinforced cabs would provide adequate protection.

It has long been the opinion of Business Manager Clem and safety-men Dale Marr and Fran Walker that air conditioning be used on equipment which is constantly working where dust is a threat to an operator's health.

This move could very well be the next innovation on equipment coming into the construction industry.

Ernest B. Webb, director of the State Department of Industrial Relations, is chairman of the board, which includes George A. Sherman, chief of the Division of Industrial Safety, Virgil L. Collins, Richard K. Humphries, Jack L. Hatton and Hollis B. Roberts.



PLAY IT SAFE

By FRAN WALKER

SAN LEANDRO — No one knows when disaster will strike and halt a life or cripple a limb. But precautions have been

taken at Peterson Tractor Co. in San Leandro.

The company has set up a program whereby representatives from the Revenue shop, used



Workers performing gunking of machinery were subject to being pushed into pond by pressure. Wire fence stops such occurrences.



Steel braces between actuator and trunnion, and wood block under brackets prevent loader from falling during repairs to equipment.

Snow—But I-80 Work Continuing

By NORRIS CASEY, GAIL BISHOP, BUD MALLET and CECIL PRESTON

RENO—Industrial Construction Company is ignoring the snow and wet weather as it continues underground operations for installation of a culvert west of Reno.

Runoff and drainage of water from the Sierra has been a problem over the years, and with the new roadway going in, it is even more of a threat.

The new highway, part of the Interstate 80 system, is estimated to cost \$2.5 million for three and a half miles.

The company expects to move in some crushing equipment in the near future, which could provide some jobs for men now on the out-of-work list.

At present, the firm has most of its equipment at Winnemucca with plans of working most of the winter.

Most jobs now down because of the winter, will again begin operation with the breaking of spring, so our members will again find jobs available.

One pleasant note—the mines in and around the area are in full swing, with future production outlook bright.

In the Sierra Nevada, snow has hampered construction which got underway late in the season, although Robert Helms Construction Company is still progressing satisfactorily on the Cave Rock-Glenbrook Highway 50 project.

Approximately 18 Operating Engineers are finding steady employment on this job.

E. C. Braun Company is finding itself in a unique position in having one of the few subdivisions to be started since the interest rate on mortgage money became near impossible to gain.

The project is located near Truckee and is progressing whenever the weather cooperates.

At Incline Village, Dick Mandeville is keeping his crew going. H. M. Byars Construction Company gained a contract for a sewer extension in Carson City. The project, reportedly a fairly small one, is expected to get underway in the near future.

\$300 Million Hawaii Tab

By HAROLD LEWIS, BERT NAKANO, WILFRED BROWN, KENNETH KAHOONEI and WALLACE LEAN

HONOLULU—The state transportation director of the city and county of Honolulu has outlined a spending program totaling \$300 million over the next six years, but the matter is still under consideration by the state legislature. City councilmen will meet with administration leaders and observers from the legislature and businessmen's groups to present a proposed budget to the governor and the legislature.

Breakdown of funds includes more than \$10 million for airports, nearly \$24 million for major harbor projects and more than \$238 million for roads and highways.

One major project, Makai Boulevard, could become part of the controversial Makai freeway which has been under discussion for a long time in Honolulu. The controversial project would call for \$12 million in spending before the end of Fiscal Year 1972.

Other items on the agenda include work on the road around

Kaena Point, continued interstate highway construction and work on the Castle Junction Interchange. Financing of this project is planned for Fiscal 1968.

The airport budget will permit alterations and improvements to Honolulu International Airport, which should be underway during Fiscal 1968. The airport was completed in October, 1962 and is already inadequate for the amount of travel and service demanded by this rapidly growing

island. Consultants are now working on a master plan to upgrade and expand the airport.

In harbor division spending, more than \$13 million will be spent for a deep water port at Barber's Point.

This is the second time transportation department officials have met with city officials to outline the proposed capital improvement projects for the department of transportation. These meetings are held to allow planning and co-

ordination between the city and state.

A new twist has developed because of the tight money policy which has crippled the residential construction industry.

Retardation of the tourist trade may be affected if loans continue difficult to obtain.

Major concern has been voiced by officials of the island, because new motels may not be constructed to handle the major influx of visitors anticipated in the next few years. This potential situation could be disastrous to the economy of the Islands, because of the competition for the tourist dollar. Other vacation meccas are making strong bids for the tourist trade.

Three major projects are presently being hampered by the tight money situation, including the Sheraton's 810-room hotel in Waikiki, the Poipu Beach Hotel planned on Kauai and the 200-room hotel planned by the inter-island resorts of Kaanapali and Maui.

Construction lags are expected to continue for another two years.

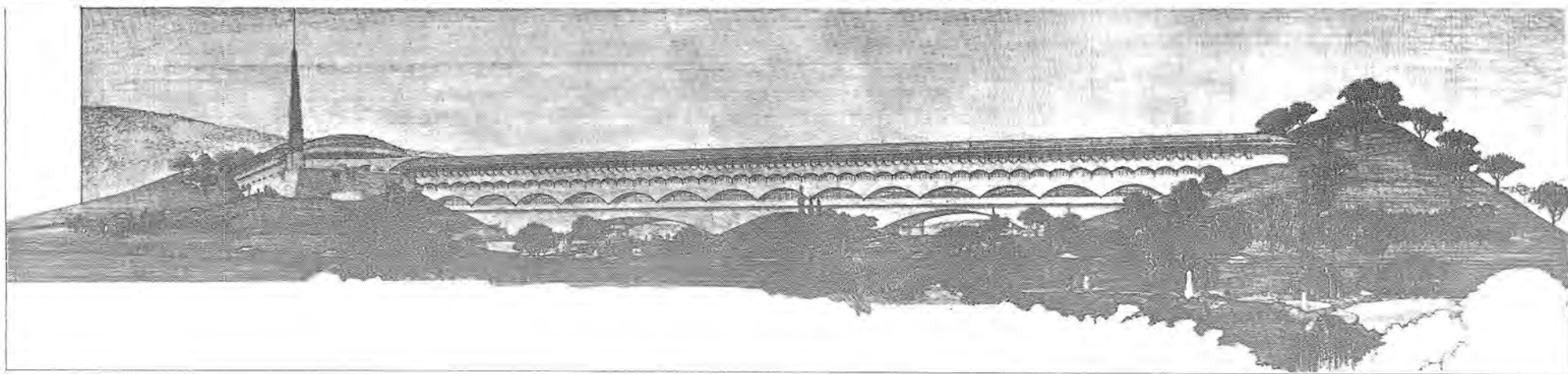
GATHERED WITH INTEREST

Robert Dennison, 17-year-old clerk at the base exchange at Wright-Patterson Air Force Base, Fairborn, Ohio, went to a bank to pick up \$600 in change.

Crossing a street on his way back, he was knocked down by a hit-and-run driver. He wasn't seriously hurt, but his money pouch broke and \$600 in coins scattered in every direction.

Sympathetic bystanders helped the young man retrieve his coins.

Final Count: \$603.50.



Marin County's Civic Center, a landmark with "personality," is receiving an added feature with construction of the new Hall of Justice. The flowing lines originally

created by the late world famed Frank Lloyd Wright are retained in the eleven million dollar addition. Plans exist for a cultural center to be added later.

'The Expansion Has Personality'

By WAYNE
(LUCKY) SPRINKLE

SAN RAFAEL—One of the most attractive and unique designs in civic structures anywhere in the United States is receiving an addition, which will be just as attractive and unique as the original structure.

The Marin County Civic Center, designed by world noted architect Frank Lloyd Wright, is receiving a Hall of Justice, a facility much needed to take care of the growing population across the Golden Gate Bridge.

The new addition will blend in readily with the Master Plan, laid out by Mr. Wright before his death. The same attractive and flowing lines will be incorporated for appearance and function.

COMPLETE FACILITY

The design of the new structure, according to the architects, Taliesin Associated Architects of the Frank Lloyd Wright Foundation, allows Marin County to build a complete facility, to be fully occupied initially, but capable of future expansion with no major modifications.

The original design connected four gently rolling hills with graceful horizontal buildings springing in great arches over entrance roadways.

The original scheme introduced a new ideal of plastic continuity and at the same time provided adaptability and flexibility in planning for efficient operation and economy.

CONTINUES CHARACTER

The Hall of Justice continues in these characteristics.

The features of inner courts covered with skylights extending

through one or more floors has carried through the original design of the Administration Building.

The new building bridges two hills and presents two additional arched drive-through entrances. The entrances are so arranged that the County offices and Courts will be separated from all traffic and access to the jail.

The jail is located on the upper level at the north end. Its function will not be readily identified on the exterior.

GUARD-CONTROLLED

A guard-controlled lobby and visitor elevator will serve the facility.

The design of the courts for many years has been based primarily upon tradition rather than on logical interpretation of functional relationships of various components comprising litigation activity. Varied judicial procedures must be accommodated within the courts.

Until this time, national planning of courts, regrettably, has been repetition of antiquated, illogical design, according to the architects.

Unnecessarily large courtrooms have been, and are being built for hypothetical and actually non-existent spectators. This concept wastes taxpayers' money.

DAILY ACTIVITY

Planning aims of the court facilities are to develop sufficient space to accommodate day-to-day activity and satisfy the occasional peak occupant loads without building each courtroom sufficiently large to handle peak loads.

Expansion of court facilities is planned for the ultimate needs of

1990, which is predicted at 16 courts and one hearing room on the main floor, and a traffic court adjacent to the Municipal Court on another floor.

FEWER SHELVES

It is the architects opinion that in future years the memory programming possible with data processing techniques will reduce shelf requirements for storage of voluminous legal data necessary to our judicial system.

Considering the potentiality of microfilm storage, it is foreseeable that space demands of the Law Library may be reduced. The Law Library is accessible from the public corridor and from the corridor restricted to members of the legal profession.

Jail facilities have been planned in close cooperation with the Marin County Sheriff and with the Department of Corrections.

PROBLEM SOLVED

The main problem, visual isolation and separation of visitor and official traffic, has been solved by provision of separate traffic entrances and controlled jail lobbies.

Although Mr. Wright was not in favor of detention facilities in a civic center complex, his master plan was skillfully arranged to overcome the disadvantages connected with the seemingly unsympathetic combination of a jail with civic, cultural and recreational facilities.

The jail is designed to handle a male-female population of 109,

and is considered to be a "holding jail."

\$11.28 MILLION

Cost of Phase II has been estimated at \$11.28 million.

The building reportedly will be ready for occupancy in 1968, but plans call for expansion which should be utilized by 1970.

Contractors on the job include McPhail Concrete, San Rafael; Pete King Corp., Phoenix, Ariz.; Case Foundation Company; Decatur Iron and Steel; Ben C. Gerwick; Bigge Crane and Rigging;

Maggiora-Chilotti, and several others who have smaller contracts for telephone, roofing, mail box, sliding doors, etc.

Johnny DeLuca, Robert E. McKee General Contractors, Inc., is project manager, with Billy P. Gay, Engineer; A. W. Irwin, superintendent; E. T. Britt, carpenter; Homer Winfield, party chief; M. S. Wesley, cement finish; F. L. Howard, labor, as foremen on the mammoth project. The project construction was launched in 1966.



One of the arches for traffic access takes form at the Marin County's Civic Auditorium, where the Hall of Justice is presently being built.

Original design by world renown Frank Lloyd Wright is shown in Administration building, Marin Civic

Center. Flowing lines as expressed by the famous architect continues in Hall of Justice, being built.

Marin Airport 'Grows Up'

SAN RAFAEL—Marin County Aviation Commission members are hoping to solicit bids for nearly \$500,000 in improvements to the County Airport in Novato in March.

The plans followed an announcement by the Federal Aviation Agency that it was allocating 54 per cent (\$242,729) toward improvements, which will include land acquisition, paving of taxiways, runways and apron construction, and for earth fill on an area for future expansion.

County Assistant Public Works Director Arthur J. Knutson said the FAA must approve plans and specifications for improvements before bids can be asked.

The news of improvements on the airport is welcome news for pilots in Marin County. Many aviators have traveled to Petaluma

to be able to use a surfaced runway. Many aviation-minded persons were discouraged with not having an airport sufficient to handle the high performance late model aircraft without the threat of inflicting damage to the complicated systems from rocks and debris prevalent on sod and dirt runways.

The improvements will provide further incentive for pilots from other areas to visit Marin County. A modern and adequate airport in Marin has been necessary for a long time.

Further economic benefits can only come from providing today's aviation element with adequate facilities.

The project is also welcome news for Operating Engineers, who will be called upon to perform much of the work.



Fresno Waits Drain Job

By CLAUDE ODOM, LAKE AUSTIN, KEN CLINE and JERRY BLAIR

FRESNO—State and federal officials have agreed on a plan paving the way for construction of the controversial \$108 million San Joaquin Master Drain.

Construction is expected to begin in 1967.

The agreement, 18 months in the making, is the outgrowth of a decision by state and federal officials that it would be unnecessarily costly for both to build parallel drainage canals.

The agreement calls for the Bureau of Reclamation to pay 60 per cent of the cost of the 188-mile first phase canal. The agreement is expected to permit the federal government to share in canal extension and expansion.

EXTEND 280 MILES

Plans are to extend the canal 280 miles. The initial canal will carry 400 cubic feet per second, expanding to three times that flow at the end of the century.

The drain will be designed to carry away used brackish irrigation water which could ruin rich valley soil and much of the cropland.

To date no serious opposition to the drain has come up, but controversy over where the drain should terminate has.

State and federal officials plan to dump the water into upper San Francisco Bay near the Antioch Bridge. Bay area residents and others, are strongly opposed to the idea, calling the drain a sewer which would further pollute the bay.

SOME DISAGREE

Some government officials disagree, including G. Donald Meixner, State Department of Water Resources, who said the drain is designed to carry only agricultural water.

"The drain could discharge for 10 years without further damaging the already polluted Bay water," he said.

Meixner said although it is possible the drain may later carry some municipal sewage, such usage may be economically unfeasible.

He said proposed contracts for dumping require water to be pure enough to be used as irrigation water. Sewage disposal agencies must also have a facility available for use if master drain operators turn down the agency's water on a particular day.

SAFETY DEVICES

Other safety devices, according to Meixner, include two reservoirs in Merced County where water can be held and checked. If it is impure, it will be held in the reservoirs.

Bay area residents want the water to be dumped directly into the ocean. Meixner said government officials selected the Antioch Bridge site as the least expensive place to dump the water.

Selection of the reservoir sites and route of drainage canal have also caused controversy.

"Here in the valley," Meixner said, "everyone wants the drain, but on the other fellow's property."

3,200 ACRES

The reservoir near Dos Palos in Merced County will cover not more than 3,200 acres and hold about 34,000 acre-feet of water. The other, east of Grasslands Water District, will be designed for off-season use as a wildlife

habitat. It will cover 6,000 acres and hold only 2,200 acre-feet.

More controversy is likely when taxing for payment of the project is decided. Every taxpayer in the valley may pay, based on the theory every taxpayer has a stake in maintaining a healthy farm economy.

A COMBINATION

Another possibility is that only those who use the drain will pay. Meixner believes a combination of the two possibilities will be utilized for payment.

The Department of Water Resources sought to get the decision-making process going in 1965. Meixner said legislation was introduced but no hearings were held. Carl O. Stetson, Fresno, the department's valley division director, said legislation will be proposed again by the department.

Meanwhile, the department is continuing to seek agreements with agencies for use of the drain. The department does not like to start construction of any water project until it has enough agreements signed to cover the costs. So far, the department has signed enough to cover approximately 75 per cent of the cost.

LAND OWNERS TABBED

Government employees have contacted landowners about necessary rights-of-way. As soon as money is appropriated by the legislature, Meixner said, right-of-way will be purchased.

Construction could then start late next summer, with completion of the portion between Kettleman City and Merced County in 1969. The portion between Merced County and the Antioch Bridge should be completed late in 1970.

Additional good news was received recently when it was announced by the State Division of Highways that a \$61 million freeway building and right-of-way buying program is planned in Fresno in the next 10 years.

MAJOR CARRIER

The program calls for construction of Freeway 41 as a major north-south traffic carrier through the heart of Metropolitan Fresno, and a portion of the proposed Freeway 180 between Highways 99 and 41. Freeway 41 will replace Blackstone Avenue as the major arterial, and will extend from Freeway 99 south to the San Joaquin River. Freeway 180 at this stage will angle southwesterly from the Freeway 41 intersection to intersect Freeway 99 two blocks south of Divisadero Street.

Costs of construction and right-of-way acquisition is estimated at \$48.8 million on Freeway 41, with \$12.2 million slated for Freeway 180.

INDEFINITE

Completion of Freeway 180 between North Brawley Avenue at Whites Bridge Avenue and Freeway 99 and the extension of 180 between 41 and the Sierra is in the indefinite future.

Freeway 41 will be designed to carry 100,000 cars a day. Blackstone Avenue now carries an average of 44,000 cars a day, far more than any other traffic route in the six counties area.

In other developments, an army of men and machines have been gouging a \$1 million-a-mile man made river on the west side of the San Joaquin Valley.

FOUR YEARS

Another four years will be required to complete the river, running from the San Luis Reservoir 223 miles to the Tehachapi Mountains.

The river will carry 13,000 second-feet of water at its upper end and will deliver four million acre-feet to Kern County and the Tehachapi pumping plant at its lower end.

The joint federal-state project, linking major irrigation projects, is being dug in hop scotch fashion because of problems of soil substance and the need for pre-flooding. The canal jigs and jogs, sticking to exacting contour levels.

PORTION CUT

The end of the Bureau of Reclamation portion has been cut to a 50-foot bottom width and a 34-foot depth.

While this canal work is going on, the Westlands Water District is gearing up to take the water that will serve 550,000 acres of Western Valley farmlands.

When the entire project is linked sometime in 1971, it will include several recreational areas, including Kettleman City, where boating, fishing and water sports will be developed, and a larger area at Buena Vista.

NEAR COMPLETION

On the San Luis project, many phases are nearing completion, with first water flow slated for about March 1.

At this time, the generating-pumping plant will be tested. Water will be pumped, however, from the forebay into the main reservoir for the first time on Feb. 15.

The Dos Amigos pumps will raise water from Reach one to Reach two for the first time March 1.

The BOR says water already in the forebay reservoir measures 7,278 acre-feet.

Local 3 Signs Firms on Guam

By TYKE WELLER, TOM SAPP, JUAN BABAUTA and JAIME VILLANUEVA

AGANA — Contracts with a number of firms on this South Pacific Island have been ratified with the Operating Engineers Local Union No. 3.

Ambros Incorporated, wholesalers of liquor and beer, signed a three-year contract, covering nine employees.

The contract provides for higher wages, paid vacations, health and welfare benefits, sick leave and arbitration clauses.

The agreement was the culmination of negotiations starting in May when employees voted in favor of Union representation.

Other companies which have joined the ranks of organized firms are Ace Auto Body and Fender Repair, U.S. Pest Control Company of Maite, Ricky's Auto Company, Guam Chrysler Motor Sales and Allen Sekt Motor Company.

The contract with Sekt was reached after a card count had been conducted. Company officials were convinced after the count that a majority of employed desired Union representation, and the agreement was reached without an election.

Sekt said, "The Union came in here by mutual consent. Both Labor and Management welcomed the Union and we are just very happy to be able to call a Union agreement without any disputes arising."

Al Clem, Local 3's Business Manager, met with company officials for the signing. He said the agreement was further evidence of industrial-labor harmony on Guam.

The pact with U.S. Pest Control was signed by A. S. Stovall, company official and Tom Sapp, Local 3 business agent.

According to Rolland Weller, sub-District representative, Stovall has been a union member since 1936. Stovall expressed the

opinion that more establishments should be unionized for the benefit of all employees. Such organization would improve the economic well-being of Guamanians.

Elsewhere, ground-breaking ceremonies were held recently to launch the beginning of construction of the island's newest Commercial Port.

Total cost of the mammoth facility will run some \$10.5 million.

"It's a beginning," said Guam Governor Manuel Guerrero, prior to the official ceremony, conducted by Assistant Secretary of the Interior Harry Anderson.

The port's first phase of construction, estimated at a cost of \$3.49 million is now underway, with D. R. Kincaid, Inc., Honolulu doing the work.

It will include installation of wharves and a fender system plus dredging to provide adequate depth for ships, and to fill submerged land.

Completion of the first phase is expected to take some 450 days.

The new facility will provide more than half a mile of wharf space, with large warehouses and open storage space.

Room will also be available for an industrial park.

Funds for the port were obtained under the Guam Rehabilitation Act.

Gov. Guerrero, in introducing Secretary Anderson, said, "If Guam is to be a part of the American Society we need direction, guidance and assistance—and understanding."

In his brief, but to-the-point remarks, Secretary Anderson said he was entranced by the great natural beauty of the island and the friendliness of the people. He said he could now see what the Rehabilitation Program was beginning to do for the island and its people.

Bids for the second phase have not yet been let, but that phase must be completed before the Commercial Port can move out of the inner harbor.



Al Clem, Local 3 Business Manager and Sekt Motor chief Allen Sekt, sign agreement after it was dis-

covered employees desired representation. Sekt said Union was welcome. There's harmony here.

ENGINEERS NEWS

Published monthly by Local Union No. 3 of the International Union of Operating Engineers, 474 Valencia St., San Francisco, Calif. 94101. Second class postage paid at San Francisco, Calif.

STEWARDS' SPOTLIGHT

by J.B. Jennings



NANCY FAWCETT

... we'll be flexible

When a Fawcett (Nancy) and a Sprinkle (Lucky) get together, things could expect to become a bit gushy and damp, but such was not the case in San Rafael recently when these two met at a Stewards meeting.

Mrs. Fawcett, California Employment Security supervisor, addressed the group at the invitation of Jim Jennings, steward coordinator.

Lucky was there as the business agent for the area.

Mrs. Fawcett told the group that a worker temporarily laid off because of weather or other unfavorable condition, and who has filed for unemployment insurance, will not lose those benefits if he is called back to work for a day.

She said if the worker does not exceed in earnings the amount authorized weekly as a benefit, he would still be eligible for partial payment.

"If a person is called back to work for a day when he is receiving unemployment insurance and his earnings do not exceed his weekly benefit, he will continue to be paid," she told the group.

She further stated that disqualification of from two to 10 weeks could result from a worker's refusal to report to the job.

Misunderstandings have also cropped up over rules stating a person must be available for and seeking work if he is to gain unemployment insurance.

"If an Operating Engineer appears on the Union's out-of-work list, he is considered to be seeking work."

"The Department should be informed of this fact. It could be the determining factor on whether or not a claim is authorized," Mrs. Fawcett explained.

What if a person quits or is fired?

"If a worker quits without good reason, and there aren't really many good reasons, he would have to get another job and earn at least \$325 (on a \$65 per week benefit) and then be laid off before he would be eligible for benefits," she said.

If a worker quits or is fired and he finds intervening employment elsewhere for a day or two before filing the claim, much of the problem is solved. The law clearly states that an applicant must list his LAST employer on the application.

Workers who come to California in the middle of a quarter or during the first part of the year may find the insurance plan rather inadequate, and limited in what it can pay.

"The best thing for a worker in the predicament to do would be to combine his work record from the state from which he came with his California record for combined benefits."

Of course, this is not always possible. The previous state would have to coincide in payment periods with those of California.

In order to receive the maximum benefits in the shortest possible time, applicants should make certain Social Security numbers and other information are correctly and accurately entered on the form, and that all forms are completely filled out.

More claims are delayed because of inaccurate information than from any other reason.

Local office scheduling practices sometimes tend to bewilder people. In San Rafael, hourly help is used to handle a large volume of claims. It therefore becomes necessary to schedule a claimant back to efficiently handle the workload.

"If a claimant is called to work on his reporting date and cannot come into the office, he should fill out both front and back of the forms, sign them and return them by mail, explaining the reason for not being able to come in."

"We are not trying to create a hardship on claimants, but rather to give the best to all, and we will be flexible in this respect," Mrs. Fawcett said.

"This is an insurance plan, paid for by the employers. A person must work before he is eligible for insurance, and he must be unemployed or earning less than his weekly benefit amount to be eligible for benefits."

"A person cannot collect on fire insurance unless there has been a fire," she explained.



Steward Coordinator Jim Jennings takes time to discuss unemployment pay with Stewards in San Rafael during a recent meeting.

OAKLAND HOPEFUL

'66 Problems Still Here

By ED HEARNE, TOM CARTER, BOB HUEBNER, FRED GONSALVES, NILES COX, GUY JONES and JACK BULLARD

OAKLAND—The old year has gone by the wayside, and with it, a serious economic slump.

But the hopes and problems borne on the shoulders of "Old Man 1966" remain in large part.

We are hopeful the new year will bring an abundance of job opportunities for our members, and a prosperous year for all.

It appears some opportunities will emerge. Various stages of the Rapid Transit System are now in progress with more to come.

Officials have been contemplating letting of several additional contracts, which should require the services of several Operating Engineers.

In Berkeley, with the voters approving an additional \$20 million bond to bury the tube, and getting rid of the existing above-surface tracks, additional work should be forthcoming.

When planners have agreed on a final route in Berkeley for the underground system, and what will be done with the already-constructed elevated track, things should begin opening up.

Several BART jobs are now at a peak, which has given relief to several workers.

In addition, a pair of excellent freeway jobs will be forthcoming. These two, the Grove-Shafter and the Altamont Pass, will create a lot of activity for Operating Engineers.

The Grove-Shafter project, which will call for a variety of elevated structures, will be approximately two miles in length, but the cost should be high because of the structures involved. Its new ribbon will run to Lake Temescal.

The Altamont Pass Freeway will involve a heavy volume of earth-moving. Several cuts and fills through the pass will be necessary before other types of construction can be accomplished.

There has been, and still remains, some skepticism concerning work on this project. The plans have been on an on-again, off-again basis for so long no one can be sure it will finally get underway this year, but hopes remain high that it will.

Presently, plans call for bids to be asked sometime in 1967, and in time for the upcoming construction season.

In the Livermore area, crews will be working on the earth embankment of the Del Valle Dam. The dam project should provide excellent job possibilities for several Engineers.

The dam will be of dual purpose function, to provide both storage water and recreation facilities for sports-minded residents and visitors.

With the relaxation of the interest rate, hopes are for an increase in subdivision construction, which took a severe beating during 1966.

Any boost in this activity would be an improvement from 1966.

Large Projects On Wane, But Stockton Still Has Jobs

By WALTER TALBOT, AL McNAMARA and JERRY ALLGOOD

STOCKTON—The California Aqueduct and West Side Freeway, large projects in any man's language, made it possible for this district to achieve above average placement of Operating Engineers during 1966. It is hoped such contracts will continue.

The aqueduct will soon be in the finishing stages, but our members can be proud of the job they have done. The West Side Freeway will continue to offer opportunities. It is expected that additional contracts will be let in the near future. The city of Stockton and the state have reached accord on the Cross Town Freeway and the channel bridge, an elevated structure, to be constructed in the vicinity of the Port of Stockton.

for word on construction starts.

The hassle over construction of the freeway and the bridge has been going on for a year and a half, affecting the letting of bids for proposed work. The Cross Town Freeway will be part of Interstate 5, and will come under the sanctions of the Division of Highways.

Colbergs and Stephen Brothers, who build and repair boats, claimed when proposals were made for the bridge, that placement across the channel would affect their business, as ships on which they make repairs could not clear the bridge, and the loss of business would result.

The company felt it would have to relocate west of the proposed bridge in order to continue in business.

Apparently the green light is now on, and the problems solved, as the Division states it is ready to proceed with bridge and highway construction.

At present, crews are waiting

Elsewhere, construction is at a virtual standoff as most sources of construction have shut down for the winter or have reduced forces appreciably.

However, Fredrickson and Watson Company continues to operate at peak output on its section of Interstate 580. Holt Brothers, who run a shop, have increased crew sizes to meet demands on government contracts.

Vinnell Corporation was low bidder on a 14.5 mile stretch of the Hetch Hetchy project. The company has begun excavation for the new pipeline, which was delayed because of pipe production and weather.

Owl Constructors and Fred J. Early Jr. Company, each have small contracts at the Spreckels Sugar Company Plant in Manteca.

Rubino and Gullickson, local contractor, was low bidder at \$3.5 million for the new School of Pharmacy at the University of Pacific.

ENGINEERS NEWS

PUBLISHED TO PROMOTE THE GENERAL WELFARE OF ALL ENGINEERS AND THEIR FAMILIES



Published each month by Local Union No. 3 of the International Union of Operating Engineers (No. California, No. Nevada, States of Utah and Hawaii.) — Subscription price \$2.50 per year. Office: 474 Valencia St., San Francisco 3, Calif.

AL CLEM..... Editor and Business Manager
PAUL EDGECOMBE..... President
DALE MARR..... Vice-President
T. J. STAPLETON..... Recording-Corresponding Secretary
A. J. HOPE..... Financial Secretary
DON KINCHLOE..... Treasurer

There are 18 million ex-smokers in the United States. According to the U.S. Surgeon General, nearly one in every four American adult men is now an ex-cigarette smoker. The American Cancer Society says the time to stop smoking is now.

Shutdown? Not On Highway 5

By TOM ECK, ED DUBOS
and LOU BARNES

REDDING — The winter weather generally has a habit of shutting down much of the work in the Jurisdiction of Local 3, but it has not caused any serious delay of construction of Interstate Highway 5 north of Yreka, where crews are working two 10-hour shifts.

The project, under contract to Roy L. Houck, has not lost time due to weather.

The major segment of the project lies in a so-called "Banana Belt" and in an area where rock eliminates compaction problems caused by moisture.

FINISH LANES

Houck must complete the south-bound lanes before work can begin on north-bound lanes. The company is hopeful of getting the job done with the least possible delay, and in time to provide ample improved highway for springtime and summer tourists.

Houck has tried to begin work at Grenada, but rains halted immediate plans. Some sunny and windy weather will have to appear before work can get underway here.

Power City Construction and Equipment Company, Inc., is still progressing on the \$9 million inter-tie transmission line, strung out over 97 miles of trail.

RIGS MOVED

Ray Kizer and Bob Heintz Companies have moved in equipment with hopes of beginning construction of the \$1.5 million road job at Coffee Creek.

Wet weather hit just when it appeared things would get underway, and operations were halted. When this job does begin, it will provide excellent work for Operating Engineers.

Crews working for Kizer and Heintz will have to return to Canby for finishing and cleanup.

K. S. Mittry Construction Company will construct the structures for Kizer and Heintz. Mittry also has structures of its own to build at Haypress Creek, Middle Tie Creek and Irving Creek.

CHANGE BASE

The W. H. O'Hair Company is moving its base of operations from Mt. Shasta to the reservoir area of Box Canyon where it will be involved in construction work.

Southward, The Dravo Corporation is trying to lay pipe in spite of wet conditions. Fredrickson and Watson has all but shut down on the \$7.5 million Interstate Highway north of Redding. Inclement weather again took its toll there where crews were operating on two shifts.

The company also has contracted to build an \$8 million canal near Corning.

Bids reportedly will be opened Feb. 15 for the next segment of Interstate Highway 5 near O'Brien.

The Engineers Estimate is \$8.5 million.

Bids on the Box Canyon Dam are expected to be called for either April or May 1, with completion scheduled for 1970.

By HAROLD HUSTON, W. R. WEEKS, WM. E. METTZ and BOB WAGNON

MARYSVILLE—Gov. Edmund G. Brown slogged over the construction site of the new Oroville Dam recently for a final inspection of "the greatest material exhibit of what we've done in the past eight years."

Brown, who left office recently, spent almost an entire day looking at the project from the top of the embankment to the depths of the tunnel where the power plant will be built.

Brown said it was his closest look at the dam which was begun under his administration, after years of sectional bickering between northern and southern California over division of the water.

TOOK CONTROLS

The governor took the controls of a diesel engine for an eight-mile ride to the pit where gravel is obtained for use in the huge earth-fill dam. "This is the most fun I've had since I've been governor," Brown told Operating Engineer Sam Everett.

"Do they pay you for doing this or do you do it for fun?" the governor asked.

Everett stood behind Brown and operated the brake when necessary.

The party, which included Water Resources Director William E. Warne, watched the equipment which dumps gravel from the train, two cars at a time, onto a conveyor belt. The governor rode on the back of a truck into the 550 foot-long man made cave where the electricity generating turbines will be installed.

APPROVED BOND

In 1960, the voters approved a \$1.75 billion bond issue to pay for the project. Brown said he had once considered putting the matter before the voters on a piecemeal basis, beginning with a \$500 million issue, but he said he was now "absolutely convinced that if he hadn't gone for

the whole thing, we wouldn't have gotten the bond issue passed."

At the conclusion of the tour, Brown unveiled a plaque noting that the first concrete placed in the core block contained sand and gravel from each of the state's 58 counties. A few hours earlier, rock from Brown's back yard was added to the dam structure.

A stone from the mansion was also added to the steady stream of gravel being piled onto the dam.

HATCHERY PROGRESS

In other news, work on the mammoth fish hatchery, a \$3.2 million project, is ahead of schedule. The hatchery is located on the Feather River across from Oroville.

Limited operations are slated to get underway in July with the full operations scheduled for October.

The hatchery is regarded by state officials to be the most modern and one of the largest in the United States. Its half mile of spawning channels and mile of rearing ponds are expected to be the birthplace for 16 million salmon and steelhead annually.

It will feature visitor facilities, including an underground viewing chamber designed to handle 5,000 visitors daily.

250,000 EXPECTED

During the first year of operation, almost 250,000 persons are expected to visit the facility.

Placement forms for the concrete which will house the underground chamber are now being erected. From the chamber, visitors will be able to view salmon and steelhead as they leap up the 2,000-foot ladder to spawn.

Also under construction is the one-mile pipeline, 54 inches in

diameter that will carry water at the rate of 100 cubic feet per second from the Thermalito diversion dam to the hatchery. That water and the water being circulated through the hatchery, will be pumped through a large aerator where it will be processed for greater quality.

The operation center, where fish will be sorted and sized and where artificial spawning and hatching will take place, is also presently under construction.

EGGS "MILKED"

Salmon only will be allowed to spawn naturally in the spawning channels. Steelhead will be sorted, "milked" of their eggs and released back into the river channel. Eggs will be hatched in special incubators and the fry will be released into the rearing ponds with salmon fry.

Some portions of the salmon will also be spawned in this manner.

When the salmon die after spawning, they will be pulverized and the meal frozen for use as food in the hatchery.

While the hatchery is being constructed fish are being taken out of the river at the interim fish ladder and released back into the stream above Oroville Dam. More than 600 salmon were counted in the ladder during September. Use of the holding tank will be halted this month.

TRANSPORT STEELHEAD

In the spring, the steelhead will be taken out of the fish ladder and transported to Nimbus for hatching. The fry will then be returned to Oroville in July when operation of the hatchery gets underway.

In west side news, recent wet weather has caused a near-halt in the industry. Highwaters at Sutter Bypass has caused a shutdown of a bridge to be constructed there, but operations should begin in full swing in the spring. C. K. Moseman is prime contractor on the bridge with Merrill Dubach scheduled to construct the approaches. To date, only one 16-blade has been brought in.

DIRT MOVED

Most of the dirt has been moved on Gordon Ball's freeway job at Arbuckle, is down for the winter, but work is to run through 1967.

One project still underway is the housing project at Beale Air Force Base. Prime contractor F. D. Rich expects to complete the facility in the spring.

NEW PACTS

Business representatives in the Marysville District have kept themselves busy during December negotiating new contracts. Many contracts have been ratified and it is hoped others will be within 30 days.

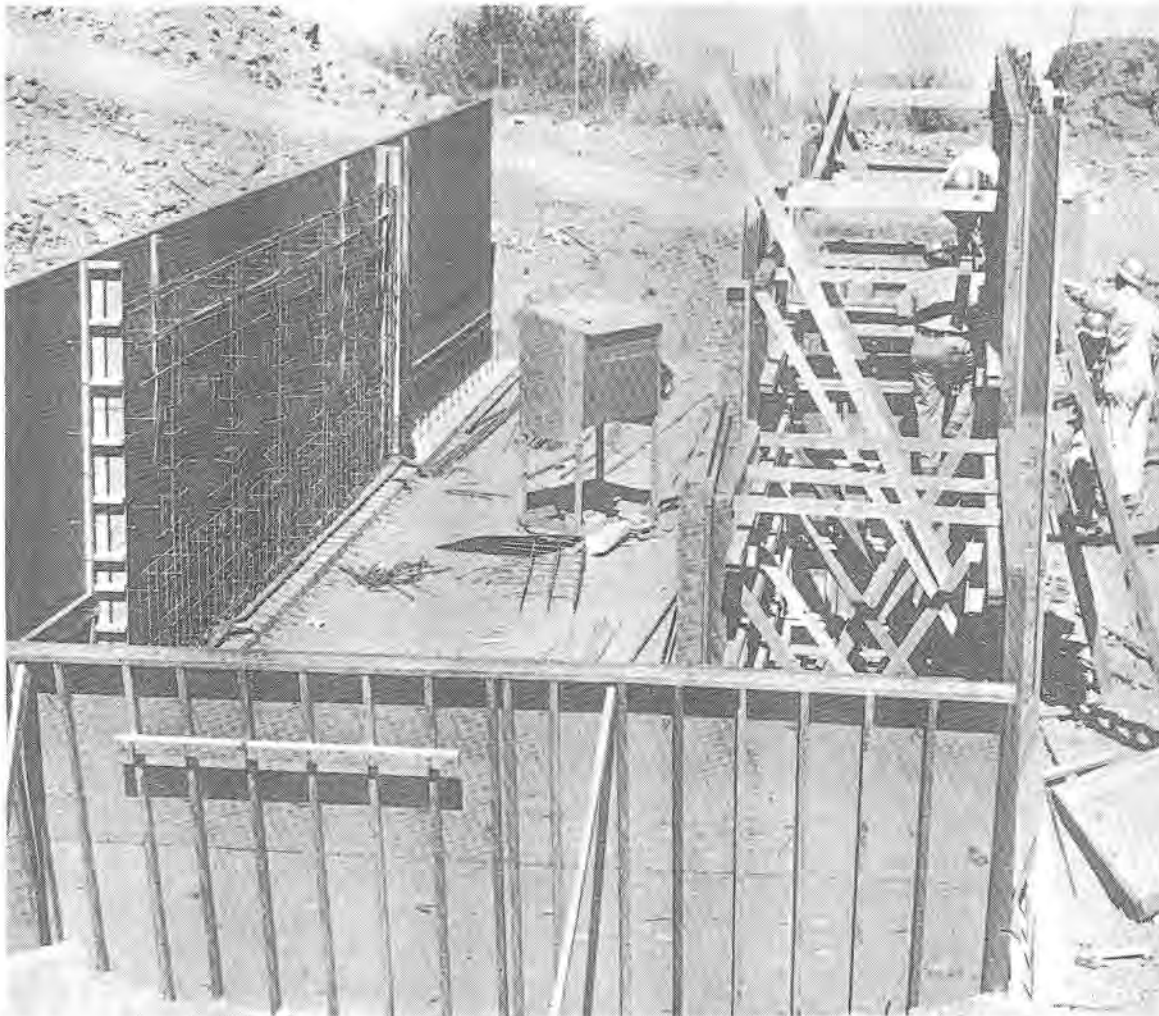
The Job Stewards and Safety Committeemen have done an outstanding job in reporting contract violations and unsafe conditions that exist from time to time. Full support of these activities by the Business Representatives will continue during 1967 as it was during 1966.

Recently your Local Union installed a telephone line to Oroville for the convenience of the Brothers in that area. Brothers can reach the Marysville office by dialing 534-1858.

Brown Visits Oro Dam



Power shovel and Cat excavate path of the 2,000-foot fish ladder. Officials say 16 million fish will be hatched annually at this site.



Visitors to underground chamber at the Feather River Hatchery will get a fish-eye view of the

salmon and steelhead leaping up to the hatchery. Six windows will provide the view for visitors.

'67-\$300 Million For BART?

By A. J. (BUCK) HOPE
and WARREN LEMOINE

SAN FRANCISCO—Plans for increased activity on the Bay Area Rapid Transit system have been revealed by BART officials, who say the construction pace will be doubled during 1967.

New contracts totaling \$300 million are expected to be awarded during the year, with \$250 million of the total to be let in the first six months.

Employment on the project, which was approved by the voters should reach 7,000, not including some 800 persons involved in designing the system and its facilities.

Still to be approved in a station design on the waterfront, which has come under study by the San Francisco Port Authority and the mayor's office.

An area has been singled out for development as a park. It is atop the BART bay tube platform off the ferry building.

It is possible this project could tie in with the over-all plan of the BART system, but with separate funding.

The space in question would be used for both a park and commercial office space.

Contracts now underway amount to more than \$250 million, providing for construction of 34 miles of the 75-mile rail network. Another 24 miles will be started in 1967.

Some \$50 million in equipment contracts are due to be awarded in the near future, including contracts for development and installation of the network's new electronic train control and communications system, an automatic fare collection system and the first order of an estimated 450 transit vehicles.

"We estimate that as many as a thousand firms, including contractors and suppliers will be involved in the BART project before the end of 1967," said B. R. Stokes, BART general manager.



Financial Secretary A. J. Hope and National Steel superintendent Art Severson chat as crew prepares

to lift gun mount from grounded destroyer near Sharps Park. Ship went aground during a storm.

He said such involvement would have a significant effect on the area's economy.

Most complex of the BART project is the underwater segment, a four-mile trans-bay tube. This part of the \$1.2 billion project is presently underway with dredging now taking place, digging the trench for the tube sections.

Another difficult phase calls for boring a three-mile long twin-bore tunnel through the Berkeley Hills east of Oakland.

Among other individual segments underway are five subway sections in Oakland, and a mile-long tunnel project in downtown San Francisco. Further and heavier subway construction in San Francisco is slated to begin during this year, officials say.

Over-all design of the system and its equipment is now 60 per cent complete, with nearly 2,500 of the proposed 3,500 property parcels for rights-of-way already acquired in Alameda, Contra Costa and San Francisco Counties.

In San Francisco, three miles of additional subway on Market Street and the Mission District, plus another three miles of extended lines to Daly City are under way.

The system is expected to transport traffic across the Bay in 1970.

Among the unusual problems facing workmen installing the system concerns floating the 57 sections of the trans-bay tube.

The tubes are bought to the trench site on top of the water,

but a freakish phenomenon occurs when a sudden surge of fresh water makes its way into the bay stream. When this happens, the tube will sink, and then reappear when salt water replaces the fresh water.

The concentrated density of the salt water has been established as the responsible agent in floating tube sections.

Meanwhile, National Metal and Steel Corporation, a ship salvage company based at Terminal Island, California, is fighting battering waves in an attempt to salvage a destroyer which went aground near Sharps Park in San Francisco October 12.

STORM HIT

Art Severson, supervisor for the company, said the ship was being

towed to Terminal Island to be dismantled when a severe storm struck, severing the towlines.

At the time, the ship was taking 13 feet, but the waves were 16 feet, and when the lines broke, the ship was washed ashore.

When the ship went aground, two local youngsters, (names unavailable) went aboard claiming salvage rights.

But because the ship was on the beach rather than at sea, International Maritime law prevented them from making their claim stick. National Metal had purchased the ship at Mare Island.

LET 'EM STAY

National Metal let them stay aboard until they got tired, then took over and began dismantling operations.

"This is all the company has done since 1946, and this is the first ship we've lost," Severson said.

He said the company isn't sure what it will do with the scrap, but it will probably sell it locally.

Certain items, such as guns, engines, etc., will be returned to the Navy, the remainder will be salvaged and sold.

A LITTLE CONCERNED

"We are a little concerned about the ship breaking up. We would like to get the engines and motors, generators, condensers and other electrical equipment out before they are corroded, but are a little reluctant to pull the weight out of the middle of the ship because the waves might break the ship in two," he said.

He said operations usually take 35 days, but that's when a ship is docked at the salvage yard in Terminal Island.

"With this job, we have no idea how long it will take us to get her out of the water," Severson explained.

Kelly Brothers Company is furnishing the crane which is being used in the dismantling. It is operated by Jerry Lovelady, with Al Boyack as oiler.

APPRENTICESHIP CORNER

'Pass On That Knowledge'

By DANNY O. DEES

There is no substitute for experience, and those men who have reached journeyman status have an obligation to pass on their experience to those just starting in the industry.

All journeymen have a stake in the Apprenticeship program. The industry is depending on those with experience to train those who have none. Every man, no matter what his background, is continually learning on the way up, both through observation and instruction. Journeymen can shape their leadership abilities by properly instructing the Apprentice assigned him.

In practice, the Apprenticeship training is in two parts. Related instruction in the classroom plays its part in providing the trainee with the necessary knowledge to become a skilled operator, but the training on the job, provided by the employer, involves the journeyman, and is most important in the Apprentices' over-all training. The Apprentice can only learn the skills if the journeyman is willing to train him. It has been proven that a good Apprentice is the product of a good journeyman instructor.

Classes of related experience are constantly being improved both in the material being taught and in the instructors who give it.

Instructors and journeymen must cooperate in order to teach, build and guide the Apprentice to become a skilled, safe-working individual.

Since the rains have come, I have had an opportunity to talk with most Apprentices in northern California and have come to know many of them much better, especially those who have been working in remote areas and on night shifts.

The Operating Engineers can be proud of the attendance record established by these young men, a great group of individuals.

Their progress has been inspiring to those in charge of the program.

In Stockton, much talk continues to circulate concerning construction of Don Pedro Dam, with contracts rumored pending shortly. If our information is correct, the job opportunities will open up, and our people will have a chance to work on a fairly long-term project.

In Nevada, construction has slowed to a crawl. We hope to have some Apprentices working on the new snow-making machine at Incline Village at Lake Tahoe soon. The operators there are just waiting for temperatures to stabilize at 36 degrees or lower in order to achieve guaranteed results.

This operation will assure good skiing for a longer period of time.

The correspondence course started late in 1966 has proved to be of invaluable help to Apprentices in our areas, especially those in remote areas.

At this time, our sincere wishes to the members of the Operating Engineers for a Happy and Prosperous New Year.

Construction Equipment
NEW AND REBUILT
for Sale and for Rent!



EVERYTHING FOR CONSTRUCTION

Asphalt Plants	Draglines	Saws
Air Tools	Finishers	Scales
Backhoes	Graders	Screens
Barrows	Heaters	Shovels
Batchers	Hoists	Snow Plows
Buckets	Hoppers	Sprayers
Carts	Hose	Spreaders
Chutes	Kettles	Surfactors
Compactors	Light Plants	Sweepers
Compressors	Loaders	Torches
Conveyors	Mixers	Trailers
Cranes	Motors	Trenchers
Crushers	Pavers	Vibrators
Derricks	Pile Hammers	Wheelbarrows
Distributors	Pumps	Winches
Ditchers	Rollers	Wire Rope

get it from

EDWARD R. BACON COMPANY
CONSTRUCTION EQUIPMENT

FOLSOM AT 17th STREET, SAN FRANCISCO, CALIF. 94110 - PHONE 415 431-3700
SACRAMENTO - OAKLAND - FRESNO

2 Tunnels Later—Water



North segment of the Crystal Springs Bypass tunnel is progressing smoothly. Alignment is being controlled by means of a laser beam. The two segments will be joined late this year or early 1968.

By **BILL RANEY,**
MIKE KRAYNICK and
GEORGE BAKER

SAN MATEO—San Franciscans will not have to worry about water shortages in the winter months when the new Crystal Springs Bypass Tunnel is completed and in operation in 1969.

The system, now under construction, will direct water flow from the Sierra and Yosemite to San Francisco without a storage interval, as has been the case since the water program was initiated.

Much concern has been voiced during recent years when water levels in the three reservoirs became low during winter months, when runoff in the Sierra and Yosemite was low.

TOO MUCH WATER

During the spring, the three reservoirs could not handle the amount of runoff generated in these areas, and the Districts were forced to give water to agriculture users to prevent flooding of the reservoirs.

The system now under construction will send water directly to the city when the runoff is low, keeping the reservoirs at peak levels at all times.

At present, crews are digging the tunnel in two directions, with the two segments scheduled to meet late in 1967 or early in 1968. Completion of the project is scheduled for 1969.

CONCRETE LINED

The tunnel will be 17,551 feet long when complete, and will be entirely concrete lined, providing a finished diameter of nine feet.

Support will be provided by six-inch horseshoe steel placed on three-foot centers.

At the south end, two shafts, 80 and 100 feet deep have been dug. When the two segments are joined, gates will be installed to control the water flow.

The Crystal Springs Bypass Tunnel will tie in with the now existing tunnel completed earlier by A. Teichert and Son.

The new bypass tunnel is being

constructed by Gates and Fox-Ball-Granite.

Alignment of the two segments is assured by use of a laser beam. Both segments are presently at the 700-foot stage, with work going smoothly.

Only one problem has been evident during the construction time.

When the Scott wheel (mole) was first used, a guard was installed around the wheel. During the night, the material being drilled would harden much the same as concrete, and the mole was jammed in place. The guard has since been removed, according to Don Dieffenbach, company purchasing agent, and the problem solved.

Don explained that no safety hazard has been created by removing the shield.

In other news, the huge two-

mile linear nuclear accelerator at Stanford is all but complete and under operation.

All of us are looking forward to a prosperous 1967. We were disappointed in 1966 when the "tight money" problems caused a slowdown in the housing construction phase of our industry.

With the new year upon us, it appears things will open up. Plans have been approved for further developments at Redwood Shores and on Foster City, which will relieve the problems somewhat. Also under consideration is further operations on the Junipero Serra Freeway, the San Mateo Creek Bridge and the new Hayward bridge, both presently under construction.

The State Division of Highways are expecting bids on several projects early in 1967, so things look considerably brighter.



The Water Temple in San Mateo County was erected to remind its visitors of the priceless nature of water, which is essential for life.

MEETINGS

All Meetings at 8 P.M. except
Honolulu, 7 P.M.

1967—Schedule of Meetings Dates

SEMI-ANNUAL

Saturday, January 14, 1967
Saturday, July 8, 1967

JANUARY

Honolulu—Wednesday, January 18

FEBRUARY

San Jose—Wednesday, February 1
Sacramento—Thurs., February 2
Stockton—Tuesday, February 7
Oakland—Thursday, February 9

MARCH

Fresno—Tuesday, March 7
Santa Rosa (meeting at Ukiah)—
Thursday, March 9
Salt Lake City—Friday, March 10
Reno—Saturday, March 11

APRIL

Eureka—Tuesday, April 4
Redding—Wednesday, April 5
Marysville—Thursday, April 6
San Francisco—Wed., April 12
Honolulu—Wednesday, April 19

MAY

Sacramento—Tuesday, May 2
San Jose (meeting at Watsonville)
Thursday, May 4
Stockton—Tuesday, May 9
Oakland—Thursday, May 11
Fresno—Tuesday, May 23

JUNE

Santa Rosa—Thursday, June 1
Provo—Friday, June 9
Reno—Saturday, June 10

JULY

San Francisco—Wed., July 5
Eureka—Tuesday, July 11
Redding—Wednesday, July 12
Oroville—Thursday, July 13
Honolulu—Wednesday, July 19

AUGUST

Sacramento—Tuesday, August 1
San Jose—Wednesday, August 2
Stockton—Tuesday, August 8
Oakland—Thursday, August 10

SEPTEMBER

Fresno—Tuesday, September 5
Ukiah—Thursday, September 7
Salt Lake City—Friday, Sept. 8
Reno—Saturday, September 9

OCTOBER

San Francisco—Wed., October 4
Eureka—Tuesday, October 17
Redding—Wednesday, October 18
Honolulu—Wednesday, October 18
Marysville—Thursday, October 19

NOVEMBER

Watsonville—Thurs., November 2
Sacramento—Tues., November 7
Oakland—Thursday, November 9
Stockton—Tuesday, November 14

DECEMBER

Fresno—Tuesday, December 5
Santa Rosa—Thurs., December 7
Ogden—Friday, December 8
Reno—Saturday, December 9

SAN FRANCISCO

474 Valencia St.431-1568

SAN MATEO

1527 South B St.345-8237

SAN RAFAEL

76 Belvedere454-3565

VALLEJO

404 Nebraska St.644-2667

OAKLAND

1444 Webster St.893-2120

STOCKTON

2626 N. California464-7687

MODESTO

1521 K Street522-0833

EUREKA

2806 Broadway443-7328

FRESNO

3121 East Olive233-3148

MARYSVILLE

1010 Eye St.743-7321

REDDING

100 Lake Blvd.241-0158

SACRAMENTO

2525 Stockton Blvd. . . .457-5795

SAN JOSE

760 Emory295-8788

SANTA ROSA

3913 Mayette546-2487

RENO, Nevada

185 Martin Ave.329-0236

SALT LAKE CITY, Utah

1958 W. North Temple 328-4946

PROVO, Utah

165 West 1st No.373-8237

OGDEN, Utah

2538 Washington Bl. . . .394-1011

HONOLULU, Hawaii

2305 S. Beretania St. . .99-0084

Wet Weather No Threat To Building

By **BOB SKIDGEL, LYNN
MOORE, ROBERT LONG,
HARLEY DAVIDSON** and
RALPH WILSON

SAN JOSE—Commercial building in the area lost very little time because of the recent wet weather as projects such as the Philco Building in Mountain View being done by Henry C. Beck; a bank building under construction by Carl Holvick; construction on various buildings, including additions to the Hoover Library at Stanford with construction being done by Howard J. White; Lockheed's addition under construction by Carl Swenson. These jobs are in Palo Alto.

Guy F. Atkinson is making progress on a tract at Moffett Field and Charlie Pankow is continuing operations on the office towers in San Jose.

Paving and grading jobs have been rejuvenated since the sun has again made its appearance, with L. C. Smith again working on the Capital Expressway, Highway 17 and the Philco Building. Crews are excavating on a building site, and streets at Stanford, Page Mill Road, Junipero Serra and other smaller jobs.

Eichler Homes has made a comeback, and one that is most welcome to the construction industry.

Work has begun on a \$1.6 million subdivision consisting of 46 homes on Cumberland Drive near Hollenbeck Avenue in Sunnyvale.

Eichler expects to have the major portion of the work done by mid-1967.

A new contract has been awarded Bahr and Ledoyen for construction of the Middlefield Road extension, at a cost of \$280,016.

Monte Vista High School work is well underway with W. D. Smith doing most of the dirt work.

In the San Jose area, Bateman, Piazza, Bigge and A. J. Raich have jobs going, and most of the crane companies are busy. Bigge has projects going at Lockheed and Ford.

In a basic job rundown:

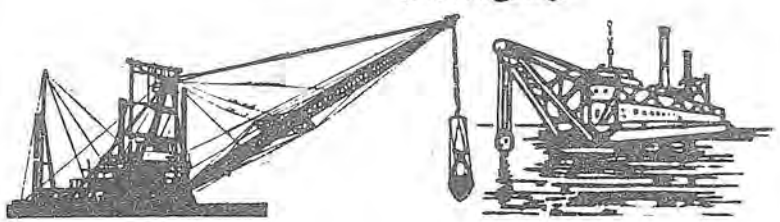
Atkinson-McKay is doing well on the 1,200 acre Village project; Huber, Hunt, Nickols and Corey water treatment plant has 20 Engineers on payrolls; Hood Construction is completing a 4,000-foot pipeline while the weather is good; Kaiser is involved in remodeling, Earl Heple and West Valley Construction have several jobs underway; William Ebert is completed on the Hicks and Coleman Road; Hillsdale Rock and Kaiser are busy at Coyote.

Lavelle, Jack Farnham and Knapp Excavators are demolishing the Hall of Records in Downtown San Jose; Sanco Pipe has some underground work in the Evergreen district; Wattis Construction also has several jobs underway.

In the bidding arena, Dillingham Construction Company was low bidder on the Monterey Tunnel at about \$3 million; Young-Connelly and Nappier-Vickery, joint venturers, bid successfully on the King City Bypass, estimated at \$3.9 million, and expected to run two years.

Hathaway bid and received the \$3 million Monterey County courthouse, and has begun work.

Dredging



A Resolution—Prosperous '67

By AL HANSEN

The old year has gathered dust and faded into the shadows. We should now look ahead with optimism and with the feeling the new year, 1967, will bring bounteous rewards and satisfaction in our endeavors.

It is the wish of the officers and employees of Local 3 that all Dredgemen had a pleasant and gratifying Christmas. We would also like to thank the members for the help and co-operation given during 1966, and wish every member health and success during 1967.

In the industrial phase of the news, Shellmaker, which has been working three shifts at Avon is all but complete. Dutra Dredging has the "Alameda" involved on a job at Alviso for the Santa Clara County Flood Control. The dredge should be there a few more days. Another dredge, the "California," is at Rodeo backfilling a trench which was previously clammed out. It is rumored it will return to Redwood City, where it should remain for a fairly long time.

The "Liberty," another Dutra dredge, is still engaged on the San Joaquin River just off the Twitchell Island. When the job is complete, the dredge will return to the Rio Vista yard for repairs.

Utah Dredging Company continues to progress on the Trans-Bay job in San Francisco Bay. The "San Mateo" is the mainstay on this job.

The "Franciscan" is also making satisfactory headway on the Bay Farm Island project. A good sized crew is finding plenty of work to keep it busy. More of this type work would be welcome news.

Trans Bay Constructors Co., in San Francisco Bay, is making excellent progress with two large clam shell dredges working three shifts.

Charlie Hover will probably move his dredge from Days Island in the near future, where it has been undergoing repairs.

United Sand and Gravel is presently idle, for all practical purposes, with repairs continuing on its dredge. It should be working again soon, hauling sand in the Bay.

Olympian Dredging is still at San Leandro Harbor with the "Neptune." The company's "Golden Gate" is tied up at Rio Vista for repairs, with the "Holland" expected to dock shortly for a boom change.

At Foster City, Hydraulic Dredging continues in its effort to get the area ready for further development. This has been an outstanding contract to date, with more of the same evident for the future.

It is hoped Hydraulic will soon receive contracts so the "Rogue" and "Papoose" now docked at Pittsburg can again join the active lists.

The San Francisco Port Authority has dredge work going on all along the waterfront, with promising outlooks for continued activity the year round.

Two applications for commercial dredging north of Angel Island in San Pablo Bay, southwest of Mare Island have drawn no protests, according to the U.S. Corps of Engineers. The applications by the State Land Division were for extension of existing permits under United Sand and Gravel Division of A. G. Schoonmaker Co., Sausalito, for operations off Angel Island, and by a Watsonville firm for work on San Pablo Bay.

Notice of bids have been received for maintenance dredging of Suisun Bay Channel, Fisherman's Channel and Suisun Bay and for mobilization and demobilization of equipment, maintenance dredging of specified areas, including about 140,000 cubic yards and disposal of dredged material.

It is hoped a local dredging company will receive the award. The work would be welcome.

State Loses Juicy Plum—AEC 'Prefers' Illinois Town

By DAVE REA, AL DALTON, ART GAROFALO, JIM GENTRY and DAN CARPENTER

SACRAMENTO—The state lost a juicy and expensive plum when the Atomic Energy Commission decided to build a huge atom smasher in Illinois rather than here, but the government guardians of the Golden State aren't sitting back and weeping (on the outside).

Despite a federal cutback in highway subsidies, which will pare some \$70 million from California's asphalt trackways, modernization of U.S. Highway 50 east of Sacramento to full freeway capacity is moving ahead without hesitation.

Assurances that construction would continue were given by Robert B. Bradford, state transportation director, in a recent meeting of the state highway commission.

MORAL COMMITMENT

He said the commission "has made a moral commitment to make Highway 50 priority number one."

Right-of-way acquisition is in progress now. Some \$3.57 million for the current fiscal year has been budgeted for acquisition, and another \$3.14 million for fiscal 1967-68.

\$7.3 MILLION

Bradford said \$7.3 million is programmed during fiscal year 1968-69 for the freeway between 65th Street and Sunrise Boulevard. The following fiscal year has a programmed construction outlay of \$8.02 million for work between 65th Street and Sunrise Street and \$9.14 million for work between 65th Street and Sunrise Boulevard.

The original schedule called for seven years to complete the highway, but the schedule was moved up when news was received by the state that the Sierra site was a finalist in the running for the huge atom smasher.

PAYROLL PLUS

State officials were obviously stunned and disappointed at losing the smasher. It would have been more than just a big payroll. It would have been an outstanding public project which would have made a great contribution to science and peace.

Illinois will now receive the benefits derived from the gigantic project.

In Pollock Pines, Vinnell Corporation, Phoenix, Arizona, was low bidder at \$7.35 million on Highway 50 between Shingle Springs and Missouri Flat Road.

CLEARING SLATED

The freeway will be built on a new alignment north of the existing two-lane highway. Clearing will begin shortly with construction scheduled as soon as weather permits. Completion is slated for the end of 1968.

Walsh Construction Co. at the Loon Lake tunnel has reached the 600-foot mark. Gerald Herd, project manager and Jack Johnson, under-superintendent, said 32 Engineers are on the job, at an elevation of 5,276 feet.

Many men on this job have established quarters in trailer houses, which eliminates the commuting from Pollock Pines and Placerville.

Travel on frosty roads at night

has presented extremely hazardous conditions, which are pyramided after a day's hard work.

Snow and cold (not to mention wind) have caused a general work freeze, although several jobs are muddling along in the high country.

STILL WORKING

Gates and Fox is maintaining operations at its Loomis shop building a large Jumbo. The machine will be able to cut a 27-foot tunnel. The firm has plans for two additional machines if expected contracts are awarded.

Granite Construction Company and Thomas Construction Company are working when weather permits on the Nevada City freeway job. The Broad Street bridge is open for traffic, as are the Sacramento Street and Banner Mountain bridges.

Richards and Van Gorter at Magnolia Dam, has a problem with weather, but are working two shifts whenever possible. Sutherland Construction Company has moved in equipment to assist in an effort to beat the next big storm.

Brother Frank Fowler has been awarded a contract on the Auburn Dam. He will be cutting roads for the government, who will do some exploratory drilling. The job has begun, and during

the year, hopes are high for a start on the actual dam.

The state will call for bids on the Auburn Ravine Road overcrossing and another complex in Meadow Vista some time this month. The estimate is near \$6 million. A tentative amount is earmarked for U. S. 40 near Roseville for widening and realignment.

HOLDING STEADY

In central Sacramento, outside construction is slow, but building construction is holding steady.

Campbell Construction Company was awarded a contract by Safeway Stores for a \$4.6 million warehouse on Florin-Perkins Road. The structure will be built on an 97-acre site.

The warehouse will serve the western part of the United States.

BETTER PRODUCTS

The single story 250,000 square-foot building will make available better products for this part of the country.

Campbell will also be building a \$2.4 million Sears store in Florin Center. It will be a multi-floor building facing Florin Road.

Other work on the immediate horizon consists of the Highway 50 Interchange at the 29th and 30th Streets freeway. Acquisition of rights-of way on the proposed route are now underway.

Ceremony Opens Napa Overpass

By AARON SMITH

VALLEJO—Some 150 persons turned out in the middle of December to watch the dedication rites of the \$6.8 million overpass on the Napa River.

Senator Luther Gibson, Vallejo, one of the first to cross the new span, delivered the dedication address. He said the new bridge has finally become a reality after many years of hard work by interested parties.

The old span had been considered an extreme hazard to motorists because of its narrow lanes.

Sen. Gibson also stated he was happy to report that a new road would be built, and sooner than many had expected.

He said details have not yet been worked out, but the new road to be built will parallel the current roadway, providing additional lanes for heavy traffic. Conversion to freeway status will take place at a later date.

Immediate plans for the Sears Point Freeway call for designing and constructing four lanes at an estimated cost of \$19.6 million, beginning in 1971.

As Sen. Gibson indicated in his address, the next project to be awarded will be the Napa River Bridge. The contract is slated to be let in 1967.

The present span, now taking the hazard out of traveling between Vallejo and Marin County is near Mare Island.

In other Vallejo news, a new first aid training program is scheduled to be launched later this month. Classes will be held in Napa and Vallejo. Safety Com-

mitteeman Ted Mertz, an employee of Syar and Harms, will testify to the importance of gaining some first aid background. He took the course offered earlier.

First Aid instructors have stated that methods of administering aid have been changed and replaced by newer and more effective methods.

Anyone wishing to participate should contact the Vallejo office.

On the work scene, a Seattle firm recently purchased 400 acres near Fairfield for an industrial development. A large package of Dixon land has also been rezoned for industrial use.

In Napa, the Army Corps of Engineers is pushing for straightening the Napa River for flood control.

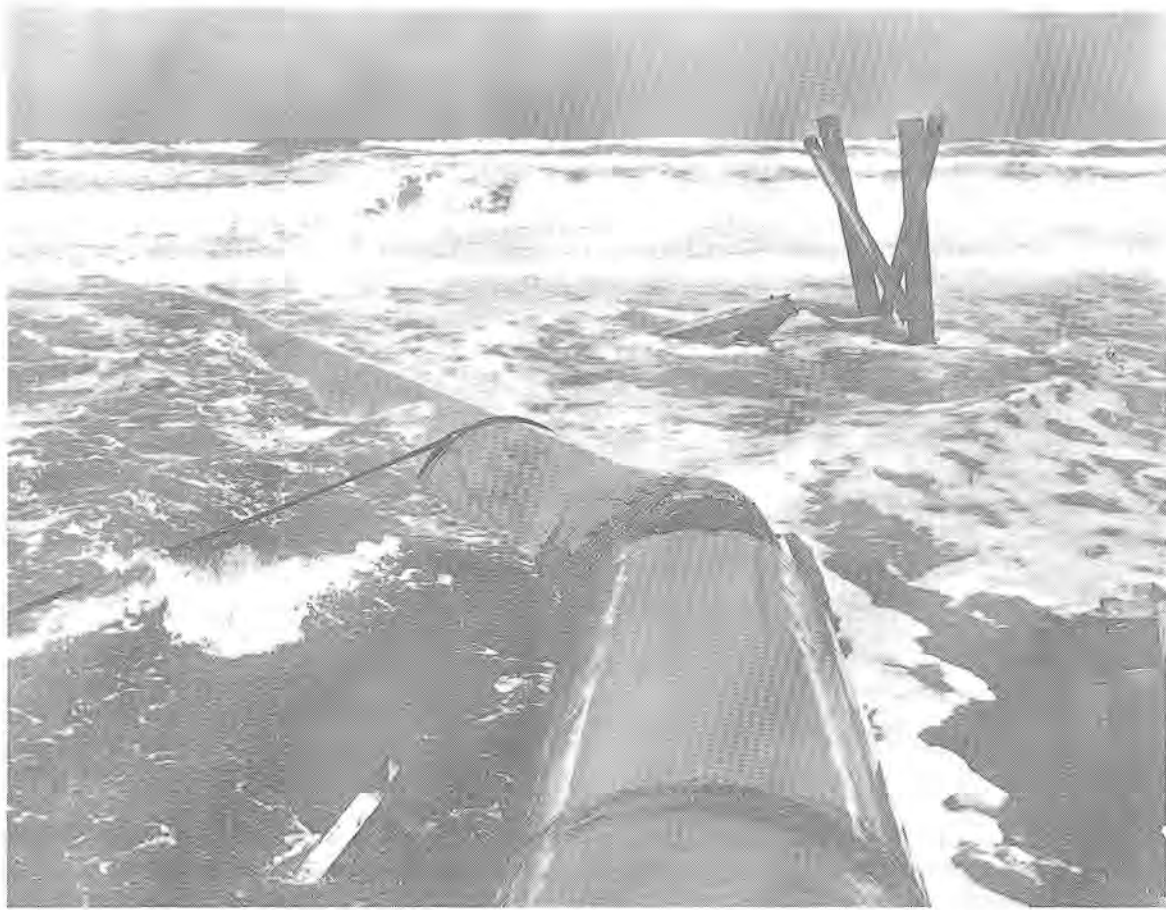
If these and other potential projects materialize, a great deal of work will develop for our members.

Recent contracts awarded include \$700,000 to Huntington Brothers for the Vallejo Reservoir; \$186,000 to Syar and Harms for Kennedy Park in Napa; \$520,000 to Page Construction Company for remodeling a building at Mare Island; \$233,125 to Lentz Construction Company for sewer and water in Fairfield; \$2.8 million to Aberthaw Construction for construction of a new general hospital in Vallejo.

At the Humble Oil Refinery, Winton and Jones Company is working whenever rains and weather will permit. At present, 65 Engineers are on the job, with erection of the refinery to begin in March. Contractor for this phase of construction has not been announced.

NO TAFFY PULL

'Stubborn' 2,500 Foot Pipeline Awaits Touchy Trip To Sea



First try at welding part of the line and pulling it to sea was unsuccessful. Heavy seas broke the line. Dike was constructed to permit repairs, but because of conditions, repairs were fruitless.

By RAY COOPER and
LEONARD YORK

EUREKA—The problems of pulling a 2,500-foot pipe to sea has caused considerable headaches for Healey Tibbets Construction Company.

The pipeline, constructed for Crown Simpson Pulp Mill, weighs about 700 pounds to the foot.

The metal pipe is lined with concrete, and the inside lined with coal tar. Outside diameter is 36 inches.

In first attempts to put the pipe at sea, crews lined up sections in four lines. The sections of 600 to 800 feet were welded together, and pulled out to sea. Each time a section was pulled out, it would be welded, then the pull started again.

At the time, currents were strong, resulting in a broken pipe, which cost the contractor considerable lost time and money. It was necessary to build a pier to where the break in the pipe occurred, but attempts to reweld the pipe were fruitless.

The current pipeline is shorter by one foot than the first, and will be completely assembled before the pull is made.

The length runs from the beach to the railroad tracks and rests on rubber tired rollers.

The contractor will now wait until the north and side currents are calm before an attempt to pull the pipe into the ocean will be made.

Estimates are that when the pipeline is in operation it will dispense approximately 3 million gallons of water daily.

The Salvage Chief, a tug from Portland, Oregon, will be used to make the pull. This tug, when anchored, can pull up to 200 tons with its stern winch.

Engineers have expressed confidence that the pull will be successful. The final placement will be 2,500 feet from the beach.

In the forecast for 1967, things at this time are encouraging.

Robert L. Meyers, associate highway engineer, informs us that several unadvertised projects will probably start early this year.

He said such things as sign improvements on U.S. 101 near Fortuna, estimated at \$20,000 will be bid by January, realignment of 101 near Klamath, estimated at \$1.95 million will come up for bid this month.

Also on the docket are the Collier Tunnel and adjacent roadside rest areas to cost \$36,000 which will come up for bids in March. The tunnel is located north of Crescent City.

In Rio Dell, a \$35,000 channelization project will likely be bid in April, as will a slide removal job seven miles south of Myers Flat. This job will cost some \$100,000.

In May bids will be called for grading, surfacing and construction of structures between Gabeville and Benbow, estimated at \$6.3 million.

In addition, the Forest Service has informed us that several roads have been let, with work to begin as soon as weather permits. Much work is expected in campgrounds and parks in Humboldt and Del Norte Counties.

Grassy Flat campgrounds will have improved roads. A new campground will be constructed near Orick. It will be called Redwood Beach Park.

Other parks will be improved so our leisure hours can be spent in more pleasant surroundings.



New pipeline being constructed near Samoa for water outlet for pulp mill will be completely built and pulled to sea where it will be laid.

Personal Notes

EUREKA

With sorrow we report the death of Joseph Matulas. Our sympathy is extended to his family and friends.

STOCKTON

Under doctors' care during the past month were Brothers Bob Madewell, Carl Keller, Jr., and O. J. "Jack" Skinner.

We extend our condolences to Brother Ken Williams who recently lost his wife.

Brother A. R. Milton left for Topec, Mexico recently planning to enter the sport fishing business.

SAN JOSE

Congratulations to Brother and Mrs. Al Mollings who recently gained a new daughter.

Our get well quickly wishes to Brothers Fred Noble, Howard Hutton, Jerry Austin who is recuperating from surgery, Ed Stubblefield who is recovering from a heart attack, Eugene Larkin and Charles S. Taylor reportedly in the Salinas Memorial Hospital.

Brother Alfred Burger is enjoying his retirement. He just returned from a trip to New York.

OAKLAND

To Ernie Miller, executive board member from the Oakland District, a speedy recovery. His absence from the executive board meetings and from grievance committee meetings has been sorely felt by all who serve with him.

To Brother Bill Kay, who has been hospitalized as the result of an auto accident, our regards for a rapid recovery.

FRESNO

Our sympathy is extended to the families of Jake Avery, James Hilliard and James Wood.

Thomas Adams' son is in the Travis Air Force Base hospital, Fairfield, Calif. Cards would be appreciated.

SACRAMENTO

The entire staff of the Sacramento office would like to extend its best wishes to all for a happy and prosperous new year.

SAN RAFAEL

Our appreciation to the Brothers for sending Christmas greetings. Such thoughtfulness is always appreciated.

Our thanks to Brother Henry Hahne for donating blood. For your information, the blood bank is located at 506 Fourth Street, San Rafael.

Our sympathies to the families of late Brothers John Dobbins, Robert Anhorn and Frank Zachary. Brothers Dobbins and Zachary were killed in auto accidents.

VALLEJO

Vern Petersen and R. E. Cain are in hospitals as the result of accidents. Vern tipped a rig; Brother Cain broke his neck swimming.

Frank Enright and Dick Wertz are both in the hospital because of illness. Our best to all these Brothers.

REDDING

Our heartfelt sympathy to the family and many friends of late Brother Tharron "Slim" Johnson.

Bill Ralston, Russell Montgomery, Victor Woodard, Blackie Grove, Marvin Irwin, Luther Prawl and Dan Morgan are on the sick list. Our best to them for quick recoveries.

Happy to learn that Glen Hardwick is home from the hospital. He would be happy to hear from the Brothers.

SANTA ROSA

Congratulations to Brother Ralph Bowman, whose wife recently presented him with a new son.

Flea Market

70 M Woodland Ave.
San Rafael, California

Inside, heated
Space available

See

FRED MARONI, Pres.

or

BARTLETT C. TUCKER,
V. Pres.

STANFORD'S 'PEASHOOTER'

The 2-Mile Tube's Strictly For Research

By KEITH BURRIS

STANFORD — For centuries man has been fascinated with and challenged by the powers of nature, and in exploring the makeup of matter.

Many years passed in which man was convinced that the atom was the smallest possible entity of matter.

Not so.

Man, through his ingenious experimenting has discovered that in "peeling the onion" even smaller particles exist, some so small they have not been discovered yet.

ATOM SPLITTING

Research into the effects of splitting atoms and parts of atoms is being perpetuated at Stanford University, where one of the longest "peashooters" in the world has been built.

As you drive along Sandy Hill Road in Palo Alto, you will see a long, long strip of concrete which houses a most expensive copper tube.

That two-mile long tube cost the government \$114 million. But what you see as you drive by is the above-ground structure which houses the support equipment. The actual accelerator lies 25 feet underground.

EXACT ALIGNMENT

In the underground housing, containing the pipe through which electrons are "shot," is a most exacting means of keeping alignment. The pipe is kept within .03937ths of an inch the entire two miles.

Alignment is done by means of a laser beam.

Electrons zip down the tube at approximately the speed of light, coming out the end like buckshot and into a "switchyard" where they are "persuaded" into various buildings by powerful electromagnets.

PLATE SERIES

Inside the four-inch diameter tube is a series of plates containing 7/8th-inch diameter apertures, through which the electrons travel.

Electrical power for propelling the electrons is provided through 240 klystron tubes, set every 10 feet. These klystrons are housed in the structure visible from Sandy Hill Road.

Every 10 feet, six million watts of power are bolted into the accelerator tube, driving the electrons, produced at the head end by a tungsten filament the size of a flashlight bulb. The electrons are fired at targets the size of paper coffee cups for study. The facility can generate 20 billion electron volts.

TOO SMALL

Since the particles are too small to be seen, and have a life span of one billionth of a second, their "tracks" are studied, and as they strike other particles secondary effect are produced, providing more meat for study.

Obviously with the size and life span of the electron, no one is going to see one with his physical eye.

Scientists at Stanford say they are not sure what practical applications will be made of their find-



Two miles of linear nuclear accelerator stretch out near Stanford University. The \$114 million "machine" will be used in searching

out mysteries of the atom. Scientists say they do not know what they will learn, only that in the sciences, they expect surprises.

ings, because they do not know what their findings will be, but to be sure, they do expect to be surprised.

EARLY SURPRISES

But surprises and unknown quantities existed before the tube was built.

Scientists knew what they needed when the structure was designed, but the problem of how to build it remained.

Critical alignment and strength over two miles had to be considered.

It was apparent it would be impossible to build a rigid structure this long with stringent linearity requirements so the accelerator was built in 40-foot-long modules.

FLEX COUPLING

In each of the modules, the copper tube would be connected with flexible couplings adjustable with worm-screw jacks, permitting alignment both laterally and vertically.

To keep these jacks from being adjusted too often, it would be necessary to build an extremely straight housing strong enough to retain its straightness.

Contractors were given initial alignment specifications which permitted no point of the floor to be more than four inches above or two inches below a theoretical reference line, and one which would not sag during or after completion.

25 FEET

The concrete housing would also be strong enough to withstand 25 feet of earth compacted above it. Then construction began.

When a portion of the floor passed over the valley floor, over-

excavation was necessary, creating a man-made hill of select fill material, which was allowed to settle under its own weight.

The final fill brought the ground level back to the top of the man-made hill for construction of the klystron gallery.

In many places ground level was high requiring a deep cut to be made. The housing was built

in the bottom of the cut and covered with 25 feet of earth.

CONCRETE BOX

The accelerator housing is a 10,000-foot-long concrete box with one- and a-half-foot thick walls and two-foot thick floor and ceiling slabs.

Imbedded in the concrete is 4,000 tons of reinforcing steel. The

housing contains no expansion joints.

The first big problem in construction was shrinkage cracking inherent in curing concrete. It was necessary to reduce the shrinkage factor by using high quality limestone aggregates. Poured concrete was maintained at between 40 and 60 degrees. Often on hot days, ice was added to the mix. A 20-ton ice plant was installed for that purpose.

SPRAY NOZZLES

After the forms were stripped away, spray nozzles were placed on the sides, and for 14 days, they fog-sprayed the curing concrete.

After curing, a porous backfill of pea gravel was laid along both sides to insure proper drainage. Then began the job of placing layer after layer of earth around the sides, each layer compacted to bedrock density.

When the 25-foot fill was completed, cracks in the concrete were filled with epoxy grouting.

WITHSTAND 90°

The grouting will withstand the 90 degree temperatures dissipated by the machine, thus enhancing the structural integrity of the housing.

In all, some 20 permanent buildings have been constructed for administration and service to the Stanford Linear Accelerator Center, with additional construction planned for the future.

So keep your eyes peeled as you view this \$114 million peashooter nestled in the hills behind Stanford University. It continues to grow.

Construction was done by Aetron-Blume and Atkinson, joint ventures.

A Shocker For Cancer

CHICAGO—Researchers at the University of Chicago say experiments with radioactive chromium wire have been successful in treating cancer.

Six years ago a patient with a life expectancy of six months was treated with the radioactive wire, according to Dr. Melvin Griem, who led the experiments at the Argonne Cancer Research Hospital at the university.

"Today, that patient is leading

a normal life," Dr. Griem said.

As he explained, the wire was cut into short lengths and inserted in cancerous tissue to retard or destroy the growth by radiation.

The wire was produced by the U.S. Bureau of Mines at its research center in Albany, Oregon.

Griem said his staff cut the wires into 3/16-inch lengths and irradiated the pieces in an atomic pile to convert some of the chromium atoms into an isotope called chromium-51.

THANKS FOR THE KINDNESS

Dear Friends:

I wish to extend my heartfelt thanks to all of you associated with the Operating Engineers for your thoughtfulness and kind consideration to myself and my family during the recent misfortune which fell upon our house.

The death of my husband, Jake Avery, was a shock to all those who knew him and I am sure that he would have been pleased to know that his loyalty did not go unrewarded.

I sincerely appreciate the Bible which was given me in memory of Jake's association with the Union and its fellow workers.

This is something that I will be able to cherish for years to come. Thank you one and all.

Most sincerely,
MRS. JAKE AVERY

Personal Notes

Continued from Page 12

HAWAII

Brother Donald DeSoto received first and second degree burns in an explosion recently. He is out of the hospital and doing well. Our best to him.

MARYSVILLE

Jack Roberts, Robert Miller, Phillip Fesler, William H. Hayes, Bill Strickland, Al Sweitzer and Eldon Baston have all been in hospitals recently. Our best wishes to all for a quick and complete recovery.

SAN MATEO

Congratulations to Brother Howard Curry, consulting Engineer from Redwood City who recently passed his California Land Surveyor examination.

It is with sadness we report the deaths of Old-Timers Ed Kopp, John Terra, Charles Day, Lloyd Vanover, Hugh Maera and Augustine Perales. They will be long remembered.

SAN FRANCISCO

The *Engineers News* learned Jan. 9 of the death of Jack Valov, Supervising Construction Safety Engineer, California Department of Safety. Cause of death was attributed to a heart attack.

Mr. Valov had been instrumental in pushing advanced safety procedures in California, working closely with Local 3 and the area's contractors.

Obituaries

Name — City	Local Social Security No.	Register	Deceased
Avery, Jacob (Jake)	3	566407	12/14/66
Clovis, Calif.	SS # 491-18-4864		
Carver, Harry	3	372992	12/6/66
El Sobrante, Calif.	SS # 548-16-2557		
Clark, Harvey	3	360552	12/3/66
Marysville, Calif.	SS # 557-09-0951		
Cortez, Joseph	3	242058	11/28/66
Pleasanton, Calif.	SS # 546-10-4638		
Dobbins, John	3C	772807	12/18/66
San Rafael	SS # 567-01-8832		
Fernandes, Albert	3	868707	12/8/66
Reno, Nevada	SS # 530-07-8637		
Gritton, Vincent J.	3	538179	12/16/66
San Francisco, Calif.	SS # 447-07-4267		
Hilliard, James	3	454219	12/14/66
Fresno, Calif.	SS # 545-12-3817		
Kopp, Ed., Sr.	3A	912120	12/10/66
San Mateo, Calif.	SS # 529-01-4789		
Lefurgey, J. J.	3	287945	12/12/66
Marysville, Calif.	SS # 555-03-6429		
Montayne, Frank	3	604466	10/31/66
Thermal, Calif.	SS # 547-28-9688		
Moore, Charles	3	772877	12/12/66
W. Sacramento, Calif.	SS # 510-03-7313		
Perales, Augustine	3	1148376	12/14/66
So. San Francisco	SS # 517-01-7954		
Schuman, Daniel	3	529278	12/6/66
Hawthorne, Nevada	SS # 049-10-4401		
Stefani, Pete	3	321365	12/11/66
Los Molinas, Calif.	SS # 547-07-2021		
Taylor, Charles	3	341325	12/16/66
Sacramento, Calif.			
Terra, John	3A	994111	12/11/66
Pescadero, Calif.	SS # 560-24-1682		
Vanover, Lloyd	3	732127	12/1/66
Sunnyvale, Calif.	SS # 441-20-7219		
Webb, Leonard	3	1125705	12/6/66
Monticello, Utah	SS # 509-05-8316		
Wood, James*	3	946553	12/13/66
Mariposa, Calif.	SS # 564-32-2266		
Zachary, Frank	3	454251	12/10/66
Novato, Calif.	SS # 514-10-5144		

* Death as a result of an industrial accident.
79 Deceased Members October thru December, 1966.
5 Deaths due to Industrial Accidents.

Day and Half Job—18 Years

C. D. "Slim" Aldredge dropped into the Parr-Richmond Terminal Co. yard to see his old friend Homer Moore. His purpose of the visit was to seek advice concerning a good fishing hole on Clear Lake. That was in 1948.

Slim had been laid off his job and was prone to taking a few days off.

The late Brother Moore, then foreman, asked Slim if he wanted a job. The company needed a crane operator familiar with running a clam.

Slim decided that since he had just been laid off, and really had nothing to do, he would take the day and a half job.

John Cox called the Oakland Office seeking a dispatch for Slim.

Al Clem, Local 3's present business manager, was district representative in Oakland, and signed the dispatch assigning Slim to operate the whirley with a clam.

"I'm still here. That day and



"SLIM" ALDREDGE
... lengthy dispatch

a half job turned out to be the longest day and a half I've ever seen," Slim smiled.

Since he went to work in 1948, he has moved steadily up the ladder, and today, is foreman of the Parr-Richmond operation.

"This has been an interesting job. Since I've been here I've learned to weld, rig and a lot of other things. The company has never made an attempt to lay me off, and I've enjoyed every minute of the work," he said.

Since the early phase of Slim's association with Parr-Richmond, the company has moved into scrap iron. Initially, the company was working with petroleum coke, rock salt, iron ore, bauxite, etc., and shipped a lot of equipment.

"The work just kept piling up, and I just stayed. That dispatch Al Clem signed for me is the only one I've had in 18 years, and I still have it among my possessions," he said.

'BUILD IT YOURSELF' RIG

D. W. McKinney, Paradise, California and Brother King Walters, a disabled and retired Operating Engineer, have become inventors.

Their product—a Junior Shovel, which is just the thing for the growing family, is one of the most fascinating and educational toys to come along in many months.

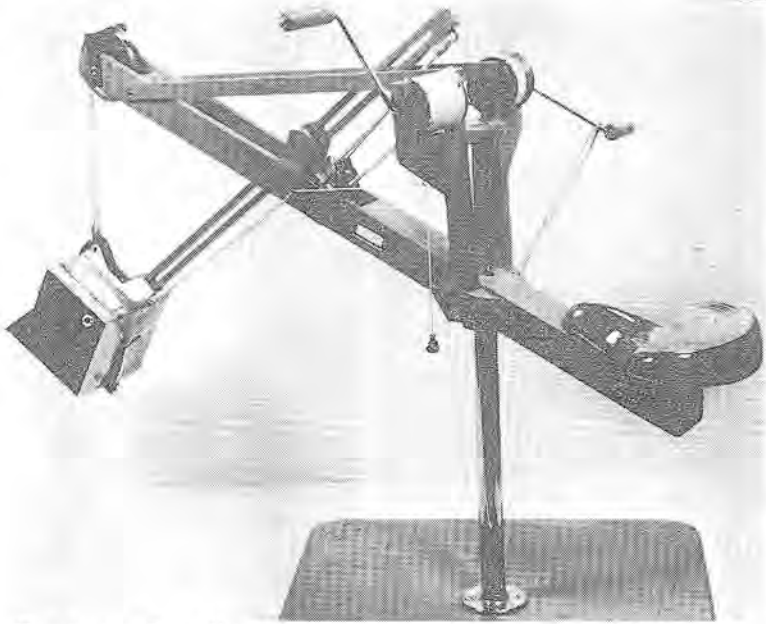
The toy is a "build it yourself" project. It is operated on the same principle as the big rigs, but is for children.

As the child sits on it, he uses his hands and feet to operate the shovel. It rotates 360 degrees and the dipper is tripped by hand.

The shovel is an excellent coordination-builder, and at the same time, teaches the youngster a little about the romance of becoming an Operating Engineer.

The shovel will be featured in the February issue of *House Beautiful* Magazine under U.S. Patent 3176862.

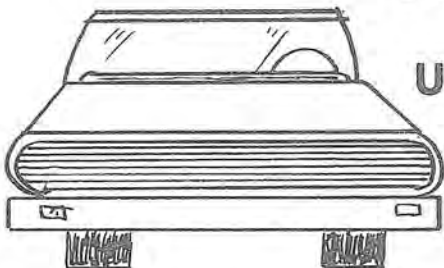
For further information, contact D. W. McKinney, 456 Castle Dr., Paradise, Calif.



The young Operating Engineer can now become proficient in the operation of big shovels. This toy is an excellent body-builder.

You Can Get One
through your

CREDIT
UNION



Rites Launch BART Station In Oakland

OAKLAND — Groundbreaking ceremonies were held Jan. 6 for the first subway station in the \$1 billion Bay Area Rapid Transit System.

The station will be built between 19th and 20th Streets on Oakland's Broadway.

BART President Adrien J. Falk, San Francisco, who has had several arguments with that city's officials concerning the high priced project, said the start of the station "Is proof of the understanding and cooperation we have received from the City of Oakland."

The station will be constructed during the next two years, and "on time since some of our friends help us instead of throwing up obstacles to try to delay us."

None of the San Francisco officials who have expressed differences of opinion concerning BART designs were present at the groundbreaking.

Former U.S. Senator William F. Knowland conducted the ceremony.

An added attraction was tall and pretty Miss Oakland, Barbara Jean Harris, a Sophomore drama student at Chabot College, who kneeled to place her palm print in a square of chilly, wet concrete.

Senator Knowland said the hand print will be placed in "Our subway museum."

Mayor John Reading cut a string that released about 300 red, white and blue balloons which floated into the sky.

Miss Oakland, BART Vice President George Silliaman and other special guests at the ceremony then took turns at breaking up Broadway to begin the \$14 million station.

Mayor Reading was optimistic about the costly system which has caused a great deal of consternation and squabbling during the past few months.

He said his city held differing views about the project than those who feel "BART is going to be a calamity. I think we are fortunate that most of us feel otherwise."

The new station will be one of two to be built on Broadway where more than \$45 million will be invested.

SWAP SHOP CORNER: Free Want Ads for Engineers

FOR SALE

CORN OR BEAN DRILL, one small deep well pump, one 5 kw AC Generator set Gas, G. M. Cooley, Box 161, San Carlos, Calif., Reg. 538707. 11-1

FIVE ROOM HOME, Garage, newly painted, new floors, fenced front and back, 60x140 lot, John VanDorn, Box 857, Grass Valley, Calif. Phone: 273-3450, Reg. No. 262119. 11-1

TRAVEL TRAILER, 1964, 14 ft., excellent condition, \$975.00. R. M. Escott, 3 Murray Avenue, Larkspur, Calif. Phone: 461-9286. Reg. 1037458. 11-1

CASE 430 BACKHOE-LOADER, Rubber Tired, Diesel, less than 700 hrs., like new, \$4500. Gene Whited, 79 La Prenda, Millbrae, Calif. Phone: 697-8619. Reg. 1036941. 11-1

1965 CHEVROLET PICKUP, 1/2-ton, radio, heater, barden bumper, good condition, \$1600. Robert A. Crow, 6421 Lupine Court, Newark, Calif. Phone: 793-3239. Reg. 811868. 11-1

1961 CHEVROLET PICKUP, 1/2-ton, 4 speed, long wheel base, barden bumper, Hi-way Cruiser Sleeping Cab. One owner, \$1200. J. V. McCaleb, General Delivery, San Joaquin, Calif. Phone: 693-4441. Reg. 888855. 11-1

10 ACRES IN FRESNO, near State College, 3 bedroom older home and 1 bedroom apartment. Presently in cotton, \$25,500 with \$2,500 down and \$125 per month at 6 1/2% interest. O. D. Hardy, 810 N. Pershing Ave., Stockton, Calif. Reg. 509762. 11-1

WELDER, HOBART 300 AMP DC, Chrysler—6 powered, \$295. Charles Gebhart, P.O. Box 395, Santa Cruz, Calif. Phone: 423-3800. Reg. 1229814. 11-1

CATERPILLAR D8 TRACTOR, No. 2u20589, with No. 25 cable control unit and Cat S Dozer, \$7000 or best offer. LeTourneau—Westinghouse Sheepfoot Tamper, 5x5 \$4000 or best offer. Ralph Plake, Sunnyvale, Calif. Phone: 736-7721. Reg. 877126. 11-1

HOUSETRAILER, TRAVELEZE, 26 ft., one bedroom, full bath, John Price, 1082 Simmons Lane, Novato, Calif. Phone: 897-1851. Reg. 826877. 11-1

RUSTIC 4 BEDROOM CABIN, Garage, outbuildings, fruit trees, electricity, and water on 79 1/2 acres, in Calhoun, California. Accessible by car. James W. McLaughlin, Box 34, Fort Jones, Calif. Reg. 1225523. 11-1

TRADE EQUITY in 2 bedroom home. Nice neighborhood. Close to schools and stores. 66x145 lot, for house trailer. J. T. Brumley, 2621 Norwood Ave., Sacramento, Calif. Phone: 927-1081. Reg. 1130280. 11-1

FOR SALE OR TRADE, 3 bedroom home, 1 1/2 baths, built-ins, near school, located at Ironwood. Dr., San Ramon Village, Dublin, Calif., for truck with transfer dumps. Gary Mathews, Rt. 1, Box 1063, Gridley, Calif. Phone: 3746. Reg. 1159484. 11-1

3 BEDROOM BLOCK home, attached garage, hobby room, 2 years old, 120 acres, 8 miles to town, modern kitchen, \$75,000.00. John Chandler, Rt. 2, Box 7A, Yerington, Nevada. Reg. 108700. 11-1

CHOICE VIEW LOT, slight upslope on paved cul-de-sac, water and electricity to lot, boating, fishing, swimming and riding for owners and guests. Above Sonora at edge of snow area, close to Highway 103. Oliver Atkinson, 77 San Miguel Rd., Concord, Calif. Phone: 686-0874. Reg. 386417. 11-1

1952 DODGE TRUCK, Utility Body, Dual Wheels. Boom, just overhauled. \$400.00. Harold McKillip, 16 Porteous Ave., Fairfax, Calif. Phone: 454-5169. Reg. 1067385. 11-1

LARGE MALSBERY OSE steam cleaner. A-1 condition. serial No. 3343. \$500.00. **CHEVROLET FLATBED TRUCK**, 6 1/2 ton, good condition, \$500.00. Ray Woody, 1031 E. Monte Vista, Vacaville, Calif. Phone: DI 678-5454. Reg. 347177. 11-1

THOMAS ORGAN, 25 pedals, built-in Leslie Speakers, Walnut finish, excellent condition. Vernon Voss, 1080 N. Fair Oaks Ave., Sunnyvale, Calif. Reg. 625912. 11-1

MARQUETTE GAS WELDER, Heavy Duty complete with gauges, two cutting tips, four welding tips, 15 ft. hose, goggles, almost new, \$100. D. R. Gage, Box 184, Camino, Calif. Reg. 1128374. 11-1

REGISTERED ENGLISH POINTER pups, 12 weeks old, high blood lines, champion pheasant and quail stock, will show Pedigree Papers also Stud Service Virgil M. Moore, 1685 Elverta Road, Elverta, Calif. Reg. 752821. 11-1

37 FOOT TRAILER, has everything, movable, old but sturdy, \$495.00. Craig E. Lighty, 421 North I Street, Livermore, Calif. Phone: 447-1931. Reg. 94550. 11-1

CEMETERY LOTS, Family Plot—4 lots, Garden of Inspiration Skyline Memorial Park, San Mateo. Selling price: \$1965.00; will sell for \$1600.00. D. Rosecrans, 1425 So. Mary, Sunnyvale, Calif. Reg. 346594. 11-1

1961 FORD tractor 851 diesel with Ford loader, McGee scraper and wheel weights. Licensed, low hours. \$2,150. Guy B. Sparks, 675 Longbar Rd., Oroville, Calif. Reg. 107981. 11-1

FOR SALE—12-rm. house, 3 baths, gas kitchen, 3 fireplaces, partly carpeted, 1/2 basement, fenced, landscaped. At 20th and Noe, \$28,500. "Pop" Claude Scanlin, 20th and Noe, Phone: VA 4-3744. Reg. 702303. 11-1

HOME AND INCOME, duplex, each unit two bedrooms, wall-to-wall carpeting, drapes, garage, four blocks to University of New Mexico. H. M. Forrester, 416 1/2 Harvard, SE Albuquerque, New Mexico. Reg. 238285. 11-1

2 MESSENGER II 2 way radios, 1964 models, \$100 each, includes antennas, lead-in wires, everything complete. Wesley R. Hightower, Box 824, Weaverville, Calif. Phone: 623-6650. Reg. 12196096. 11-1

1965 DORSETT HULL, 1965 65 h.p. motor, very good condition, 12 hours on motor, \$1600 obtain bank financing. Wesley R. Hightower, Box 824, Weaverville, Calif. Phone: 623-6650. Reg. 12196096. 11-1

IHC AUTOMATIC TRANSMISSION, complete, 40,000 miles, free for taking. Warren McElroy, 19071 Barnhart Ave., Cupertino, Calif. Phone: 257-4375. Reg. 1082358. 11-1

2 BEDROOM HOME, Oroville, California, electric range, oven, rotary antenna, water cooler, 90x184 lot, \$8,000. J. L. French, 373 Bruno Ave., Pittsburg, Calif. Phone: 439-1491. Reg. 904653. 11-1

18 FT. BOAT cabin motor and trailer, \$800.00 J. L. French, 373 Bruno Ave., Pittsburg, Calif. Phone: 439-1491. Reg. 904653. 11-1

HEAVY DUTY and automotive mechanic tools, over 650 pieces, excellent condition, many complete sets, estimated value \$1,000, sold completely ONLY. \$375.00 cash. Mrs. Fred Klein, 1440 Darlene Avenue, San Jose, Calif. Phone: 269-1823. Reg. 754156. 11-1

71 STAR DRILLING RIG mounted on 6x6 3 axle drive, derrick raises by power, 3 bailers, 5 bits, \$5,000. Charles Criswell, 240 N. "A" Street, Tulare, Calif. Phone: 686-5520. Reg. 918845. 11-1

45 ARMSTRONG on Dodge Semi, \$2,000. Charles Criswell, 240 N. "A" Street, Tulare, Calif. Phone: 686-5520. Reg. 918845. 11-1

1962 FERRARI, 250 GTE 2 plus 2, Silver gray w/red interior, Cirielli Cincinatre high-speed tires, Alternator, 33,000 miles, \$5,000. Stan Krantz, 9 Bungalow Ave., San Rafael, Calif. 453-7283. Reg. 484618. 11-1

CONVERTIBLE DUPLEX, Single House, Zoned for two family, 3 patios, 2 baths, wall-to-wall nylon, distinguished neighborhood, \$25,000. Stan Krantz, 9 Bungalow Ave., San Rafael, Calif. Phone: 453-7283. Reg. 484618. 11-1

FOR SALE OR TRADE, 1965 Chev. Pickup 1/2 ton with 8' full cab Dreamer Camper 12,000, \$2,850.00 Roy R. Dunnam Sr., Box 722 Hayward, Calif. Phone: 581-7980 after 6:30 p.m. Reg. 48970. 12-1

5' x 12'—2 axle Utility Trailer, All New, \$250.00 Roy R. Dunnam Sr., Box 722 Hayward, Calif. Phone: 581-7980 after 6:30 p.m. Reg. 48970. 12-1

1958 CADILLAC FLEETWOOD, 4 door HT, all power, Clean, \$565.00. 1954 FORD F-500 5 yd. dump truck, O.H. V-8, Garwood Hoist & Box, \$675.00. 1954 CHEV. Wg. 4 dr., needs work, \$50.00. 1954 METROPOLITAN Conv., \$75.00. Pete Thompson, 141 Crescent Rd., Corte Madera, Calif. Phone: 454-7318 or 924-2261. Reg. 1137625. 12-1

SELF CONTAINED MOBILE CAFE, 1961 Chev. Truck, ONAN Generating Unit for Electricity, Tanks for Hot, Cold and Waste Water, two ice-cream freezers, charcoal grill, coffee urn, soft drinks. John Chandler, Rt. 2, Box 15, Yerington, Nev. Phone: 463-2516. Reg. 1087800. 12-1

CASE 530 CONSTRUCTION, King backhoe-loader, diesel, digs 14 1/2 ft. deep, 1200 hours, like new. Don Sare, 2237 Hurley Way, Sacramento, Calif. Phone: 925-7600. Reg. 1040538. 12-1

CHEVROLET DUMP TRUCK, 6 yds., A-1 condition, new recaps, new brakes, good body and paint, low mileage, \$3,000. **INTERNATIONAL** 6 wheel trailer, all electric brakes, drop ramp gate, \$1,100.00. Al Pilkington, 17668 Parker Rd., Castro Valley, Calif. Phone: 582-3535. Reg. 1216211. 12-1

BELGIUM BROWNING 12 gauge automatic shotgun, sn 82639. A perfect gift, \$75.00. **QUAD COMPETITION** Carter AFB-New Extra Large Carburetor, \$10.00. Philip Schrag, 230 A Mayo Ave., Vallejo, Calif. 12-1

IMPACT WRENCH AIR Chicago No. 750 R.S. 1 1/2" Drive Heavy Duty, \$75.00. 3492897. Joseph Tubb, 1835 Beach Park Blvd., Foster City, Calif. Reg. 1199336. 12-1

2 BEDROOM HOME, Electricity, Water, Butane, close to shopping center, lot 60 x 120, \$8,000.00, Pollock Pines. Retire in Tall Pines. Roads open year around. E. Bachtell, 2115 Clay St., Sacramento, Calif. Phone: 925-4472. Reg. 422743. 12-1

CAT DW 20 with 456 Scraper, good condition, \$5,000 or best offer. Robert A. Crow, 6421 Lupine Ct., Newark, Calif. Phone: 793-3239. Reg. 811868. 12-1

1 Single Head Rex-Arc Rail Machine, good condition, make offer. Robert S. Duntion, 7659 Manorside Dr., Sacramento, Calif. Reg. 708240. 12-1

HOUSE TRAILER, 1957 Flamingo, 2 bedroom, 8 x 40 ft., good condition, T. W. Duran, 128 Natidad Rd., Salinas, Calif. Phone: 449-4477. Reg. 1166451. 12-1

27' MOBILE HOME, \$1,100.00, living room, bedroom, kitchen, bath, fully furnished including stove and large refrigerator. Gifford T. Jones, 7599 Ave. 288, Visalia, Calif. Phone: 209-734-4037. Reg. 1251043. 12-1

BUCKEYE DITCHER, Model 12, Round buckets, \$2,500.00, John Bolls, 4035 Cherryland, Stockton, Calif. Phone: 931-1807. Reg. 0625842. 12-1

1966 D100 DODGE Pickup; Socket Wrenches 1/2 to 1 1/2; Box End Set 1/2 to 1 1/2; Torque Wrench to 100 lbs. Micro-set; 18" Crescent; Battery Powered Grease Gun; 20 x 60 Mobile Home. 1 yr. old or trade equity for 25 to 30 ft. self contained trailer. Clyde H. Dunsing, 5835 Cherokee Rd., #56, Stockton, Calif. Reg. 707198. 12-1

TANDEM WHEEL EQUIPMENT Trailer, 4 wheel electric brakes, never used, \$1,295.00 or trade for pickup of equal value. Ford V-8, 4 speed or automatic, long box. Q. E. Cargile, Rt. 1 Box 452, Manteca, Calif. Phone: TA 3-6584. Reg. 1128269. 12-1

SAW MILL, Model IM24 (Bell Brand) 48" insert toothsaw, all hardware, cost \$1,020, will sell for \$750.00, new still in crate. James Sutton, Box 108, Penryn, Calif. Phone: 663-3939. Reg. 822705. 12-1

SELL OR TRADE Equity in 5 bedroom, 2 bath home, many deluxe features, nice residential area, near everything. \$29,500.00. Thomas Kinard, 7535 Soquel Dr., Aptos, Calif. Phone: 688-2830. Reg. 904370. 12-1

15 FT. WIZARD Boat, canvas top, electric start, trailer, 50 h.p. Johnson, skis and equipment, \$850.00. Clifford Harrsch, 1763 Montecito Circle, Livermore, Calif. Phone: 443-4509. Reg. 777466. 12-1

TRUCK CRANE, LORAIN 20 ton, 115 ft. boom, WAU upper, International lower S#11381 Bay City 25 ton, 93 ft. boom, WAU upper, Continental lower, hyd. outrigger S#2557, both 11:20 rubber and boom trailers. Don Lambert, P.O. Box 401, Woodland, Calif. Phone: 662-2093. Reg. 313329. 11-1

CANOE 16 1/2' LONG, wt. 80 lbs., canvas and wood (traditional 3/4" keel, paddles included \$180.00. H. L. Moretti, 561 Garden Street, N. Sacramento, Calif. Reg. 265332. 11-1

LARGE LOT IN Cameron Park, low down, owner will carry or discount for cash. Fred L. Sarginer, 1424 Pine Avenue, San Pablo, Calif. Phone: 233-0471. Reg. 1027866. 11-1

530 CASE BACKHOE, low hours, bought October 1964, selling due to illness, top shape, make offer. Delbert Armer, 2261 Cole Road, Aromas, Calif. Phone: 722-1645. Reg. 307993. 11-1

1962 HY HOE Ford Diesel mounted on Truck, excellent condition, \$5,000. M. McMackin, 772 Marin Ave., Hayward, Calif. Phone: 783-9011. 11-1

AKC REGISTERED 1 1/2 year old male English Springer spaniel, \$75 or trade for unrelated male. Ernest J. Wood, P.O. Box 544, Fallon, Nevada. Ph. 423-3685. Reg. 1152809. 1-1

OIL HEATER for mobile home International 1060—ther-controlled. Max. output 55,000 to 60,000 BTU. Chimney pipe also. \$75. Don Morlan, Rt. 2, Box 2060 Sp.21, Auburn, Calif. Ph. 885-9257. Reg. 0879757. 1-1

25-FOOT CAPTAINS gig decked over, Chrysler Crown 115 HP eng. 2-1 reduction gear stainless 11/8 shaft 17"x20" prop. Engine out of boat, needs some repair, \$500. George H. Wilson, Box 86, Korbel, Calif. Ph. 669-5063. Reg. 1011211. 1-1

1962 COMET, pale green, very good looking, needs engine tune-up. \$395. J. Risch, Risch Station, Fort Bragg, Calif. 95437. Reg. 395381. 1-1

LOADER 5 1/2 yd. oc 46, street pads, scarifier, hydraulic perfect throughout. Engine could use some repair. \$2,250 or trade for equal value. J. Risch, Risch Station, Fort Bragg, Calif. Reg. 395381. 1-1

SOCKET SET, 3/4-inch drive, 18-inch Crescent wrench, Mossbert 20 ga. shotgun, 1901 model 38 spec. Colt. Reliant 8 mm movie camera and projector. John A. Wooton, 2800 S. 1st #28, San Jose, Calif. Ph. 225-3220. Reg. 314508. 1-1

530 CASE Construction King tractor-loader backhoe, low hours, excell. cond. Sacrifice \$4,950. Harold Woody, 2609 Learned Ave., Stockton, Calif. Ph. 464-3030. Reg. 1265305. 1-1

INDUSTRIAL STEEL barge suitable for house barge. 20 feet long, 8 feet wide, 2 feet deep. \$500. Industrial barge, 30 feet by 15 feet by 4 feet. \$1,000. Ed Harryman, Box 45, Browns Valley, Calif. Ph. 743-6921. Reg. 632645. 1-1

TRUCK CRANE Loraine 15 ton MC4 Ser. No. 11360. 50-ft. boom, 15-ft. jib. Wau.6 MZR-upper. 145 GK-lower. Aluminum floats for outrigger. 3/4 yd backhoe attachment. Carl Reynen, Daly City, Calif. Ph. 756-4687. Reg. 459155. 1-1

LOT, 130'X89', ideal for trailer house, Small cabin on it. \$5,500 terms or \$5,000 cash. Frantz oil cleaner distributor for Marysville area, Bill Parks, 3531 Frakes Way, Yuba City, Calif. Ph. 673-2637. Reg. 987253. 1-1

TD 15 with 4 in 1 Drett 2 1/2-yd bucket and Ateco Ripper setup. Contact Stevensons Equipment Company, Santa Rosa, Calif. A. J. Toorinjan 0994824. 1-1

17-FT. Crooks Cruiser, 50 Johnson motor, Gator Trailer \$1,250 or take over payments. Bartlett C. Tucker, 3633 Christensen Ln. Castro Valley, Calif. Ph. 537-3606. Reg. 736418. 1-1

56 CHEV, sta wag, good condition, new tires, battery. 285 V8 engine, pwr brks, steering, R-H. Riding lawn mower. Carl V. Haley, 1207 Tieggen Dr., Hayward Calif. Ph. 582-0805. Reg. 235797. 1-1

WANTED TO BUY

BUCKETS WANTED, concrete buckets, drag and clam buckets, want 1/2 yard. Might consider 3/4 yard, double blocks, rigging lifting beams, etc. Carlos Lindley, 1504 Chittenden Ave., Corcoran, Calif. Phone: 992-3492. Reg. 1133481. 11-1

WANTED: One working head with or without pump for 2" line. G. M. Cooley, Box 161, San Carlos, Calif. Reg. 538707.

WANTED 8 PLACE Curta Calculator. Have cash for good one. Needed right now. Craig E. Lighty, 421 North I Street, Livermore, Calif. Phone collect: 447-1931. Reg. 94550. 11-1

WANTED TO BUY, Electroplating power supply, tanks, chemicals, etc. Roy J. Rosin, 869 1/2 Woodside, San Mateo, Calif. Phone: 343-3161. Reg. 1107346. 11-1

WANTED TO BUY good bobtail dump-truck or flatbed dump and low boy tilt trailer. John E. Brown, 4798 Minas Dr., San Jose, Calif. Ph. 266-5910 or 225-3048. Reg. 434969. 1-1

WANTED TO BUY—Used Budger, no later than 1964, 17X53, two bedroom, must be in good condition. Terrence Waddell, 9630 Highway 41, Lemoore, Calif. Ph. 924-3067. Reg. 809234. 1-1

TRAILER WANTED in trade for '65 Chevy Station Wagon, must be clean, self-contained—about 20 feet. Fred Hornor, Box 73, Woodacre, Calif. Ph. 453-8464. Reg. 515925. 1-1

RULES FOR SUBMITTING ADS

• Any Operating Engineer may advertise in these columns without charge any PERSONAL PROPERTY he wishes to sell, swap or purchase. Ads will not be accepted for rentals, personal services or side-lines.

• PRINT OR TYPE the wording you want in your advertising on a separate sheet of paper, limiting yourself to 30 words or less, including your NAME, complete ADDRESS and REGISTER NUMBER.

• Allow for a time lapse of several weeks between the posting of letters and receipt of your ad by our readers.

• Please notify Engineers Swap Shop as soon as the property you have advertised is sold.

• Because the purpose should be served within the period, ads henceforth will be dropped from the newspaper after three months.

• Address all ads to: Engineers Swap Shop, AL CLEM, Editor, 474 Valencia Street, San Francisco 3, California. Be sure to include your register number. No ad will be published without this information.

Tourism By Airplane Gets Big Utah Push

SALT LAKE CITY—The Utah Aeronautics Commission, under the direction of Bobby V. Walker, director, has begun moving ahead to improve aviation facilities in many of Utah's recreational areas.

Mr. Walker said that in 1966, more than \$1 million was spent to improve several airports, and that \$940,000 would be spent in 1967 on improvements and new airports.

Of prime interest are new airports at Manila near Flaming Gorge and at Bullfrog Basin, gateway to scenic Canyonlands National Park.

"We have long felt that tourism by air is a major consideration in Utah, because of the tremendous stretches of scenery and recreation available in the state," Mr. Walker said.

He said the installation at Manila will be just one mile from the reservoir, which boasts of some of the best fishing in the entire country.

He said local planners have toyed with the idea of building condominiums there, and it appears they will be built this year.

Other projects for 1967 include Tooele, Escalante, Bryce Canyon, Heber Valley (where a new park is being built, including an 18-hole golf course), Tremonton, Carbon County, Hurricane, Delta, Logan, Oljato, Cedar City and Ogden.

Most of these projects are for extensions and lighting improvements.

Mr. Walker said for those who wish to fly into the state, he has purchased six 1960 four-door sedans which will be placed at some of the airports as courtesy cars. All that will be asked from visiting pilots is a donation to maintain the cars and perform required maintenance on them.

This system will eliminate the problem of transportation for pi-

lots visiting many of Utah's areas.

During 1966, the Utah Owners and Pilots Association placed courtesy cars at Bryce Canyon and Panguitch for use by visiting pilots. Now, adequate transportation will be available at several locations, creating a much more enticing invitation for pilots to visit the scenic areas in Utah.

Utah will also have a state-owned navigational aid system including a weather observation station at Provo. The system will provide greater safety for pilots flying across many of Utah's remote areas.

Charged Air Can Increase Growth

BERKELEY—Dr. Sadao Kotaka and Paul C. Andriese, research scientists at the University of California's Air Ion Laboratory here, have discovered that air electronically charged from 100 to 500 times normal levels has significantly increased the growth rate of plants and insects.

They also reported at a recent meeting of the International Society of Biometeorology at Rutgers University that mice and rats exposed to air with a high positive charge suffered marked lung damage.

FOR SALE MOBILE HOME

1966 Model

Budger Expando 15' x 46'

Original Cost — \$9,323.00

Small down and take over
Credit Union payments

FOR ADDITIONAL INFORMATION

CALL: Mr. Ivy — 415-431-5885 or
Mrs. Helen Brannan—916-534-0110

ARE YOU FLAT? NEED TIRES?

WE CAN FINANCE YOUR
NEW AND RECAP TIRES
FOR TRUCK OR AUTO

ROAD SERVICE

CALL

RALPH DeLANCEY

In Oakland - 532-6323

(DAYS)

San Francisco - 731-0499

(NIGHTS)

</

Leisure Life Calls San Mateo Employee

Raymond R. Hail, a 33-year member of Labor, retired from the San Mateo County Roads Department in September.



RAYMOND R. HAIL
... leaves county

He was originally a member of Local 1414, but came into Local 3, Operating Engineers when the apparent advantages in wages and fringe benefits were shown.

He has been a member of the Operating Engineers Local No. 3 for 20 years.

"I've seen a lot of changes in my time. I saw the advent of the diesel and many other advances. I remember the old 60 gas Cats, and the surplus heavy equipment being used after the depression. We didn't have new equipment as Engineers have today," Brother Hail said.

He said he began as a civil service employee. "In our outfit, we didn't know if we had a job past quitting time."

Brother Hail plans to go to work as a heavy duty mechanic in private industry so he can be eligible to collect his pension into which he has been paying.

Stewards Meetings

ALL MEETINGS AT 8:00 P.M.

- Dist. 3—Stockton, Tues., Jan. 17, Engineers Hall, Stockton.
- Dist. 9—San Jose, Tues., Jan. 24, 117 Pajaro St., Salinas.
- Dist. 6—Oroville, Tues., Jan. 31, Prospector's Village.
- Dist. 2—Oakland, Thurs., Feb. 2, 1444 Webster St., Oakland.
- Dist. 1B—San Mateo, Wed., Feb. 8, Carpenters Hall, 50 N. B St., San Mateo.
- Dist. 1A—San Rafael, Thurs., Feb. 9, 701 Mission St., San Rafael.
- Dist. 5—Fresno, Tues., Feb. 14, Oper. Eng. Hall, 3121 E. Olive St.
- Dist. 7—Redding, Fri., Feb. 17, Oper. Eng. Hall, 100 Lake Blvd.

OLD-TIMERS' CORNER In Canada, Built Roads



First so-called "bulldozer" in Canada was more of a "Muledozer." A slab was pulled by the mule and when it was loaded, the operator lifted it and dumped the load. Crews built roads, not highways.

Old timer Don E. Malhiot, now residing in San Jose, came to California from Canada, where he began his career as an Operating Engineer.

"We didn't build highways in Canada in the early days, just roads, and we didn't have the equipment Engineers have today, either.

"The first so-called bulldozer was more of a mule or horse-drawn slab used as a blade, and when we got loaded up, we just lifted the blade and dumped the load," he said.

Brother Malhiot came into California in 1926, where he became

a member of Local 45. He became a machinist. The company he worked for had no machinery as we know it today, so Brother Don was pushed into the service of putting together the first rig.

"There was no one to operate the rig once it was completed, so I operated it. That was a long ago," he said.



DON C. MALHIOT
... just roads

Before he came to California, he spent three years in Mexico operating a Russon-Hornsby, the first machine in Mexico. The company has since become Russon Bucyrus.

In 1939, Brother Don came into Local 3 when the Locals amalgamated. He has been a member since.

He said during the early days, there were very few Operating Engineers outside San Francisco. During those years, organizing was done in small meeting, and not on company time.

Gains came through patient bargaining and waiting, but they came.

He said he recalls being sent to a job for half a day under the assumption he would get paid for a full day, but he only got \$4. It took him three months to get the rest.

He said there was a lot of dispute about which locals would run which kind of equipment. The Operating Engineers won over the others and still have control of the cranes on the waterfront.



BURRIS

CREDIT UNION

478 Valencia St.
San Francisco, Calif.
Phone: 431-5885

HEALTH AND WELFARE- PENSION ADMINISTRATION OFFICE

209 Golden Gate Avenue,
San Francisco 2, Calif.
Phone: 863-3235

MOVING?

So you will not miss one issue of Engineers News BE SURE to advise us of your change of address.

REG. NO. _____
LOCAL UNION NO. _____
SOC. SECURITY NO. _____
NAME _____
OLD ADDRESS _____
CITY _____
NEW ADDRESS _____
CITY _____

Clip and mail to Engineers News, 474 Valencia St., S. F. 3, Calif.

