Volume LVII

Pasadena, California, Thursday, February 9, 1956

ASCIT Drive next week; four charities to benefit

The ASCIT Consolidated Charities Drive will be held on the Caltech campus next week from February 13 to 17. This will be the only chance, excepting the YMCA drive, for undergraduates and graduates to contribute to charities. General chairman of the drive will be Howard Berg, ASCIT vice president.

The four charities included this year are World University Service, The American Cancer Society, The American Heart Association, and the Pasadena Community Chest.

The World University Service is supported entirely by students within university communities. It serves students throughout the world, especially in Asia.

The Pasadena Community Chest acts as a collecting agency for 37 different welfare organizations in this area. The prevention of cancer and heart disease are the respective functions of the American Cancer Society and the American Heart Association.

This year the drive will not be on a competitive interhouse basis. The faculty, who usually wait on the dining tables of the winning house, will probably provide this service during third term to all the houses. The reason for this change is the personal nature of contributions.

Representatives in the student houses will contact all undergraduates and graduates for donations. Mike Bleicher in Blacker; Alan Forsythe, Dabney; Herb Rauch, Fleming; Dick MacAnally, Ricketts; and Jim Lloyd in Throop Club will be House chairmen of the drive.

Bunche group picked Sunday

Students interested in serving on the YMCA "Leaders of America Committee" must be present at the Cabinet meeting, Sunday, February 12 at 4 p.m. in the YMCA lounge. This committee will schedule the program for the visit of Ralph Bunche of United Nations fame who will visit the Caltech campus during the spring term this

for student body president Nominations made at assembly today; Four student houses will vie elections scheduled for February 23

The annual Interhouse Sing, in which four student houses will vie for singing honors, will be held next Monday evening at 7:45 p.m. in the Scott Brown Gymnasium. The houses will be judged on their rendition of the contest song, "Oh Rock-a-My Soul." In addition, each house will sing a song of its own

in song contest next Monday

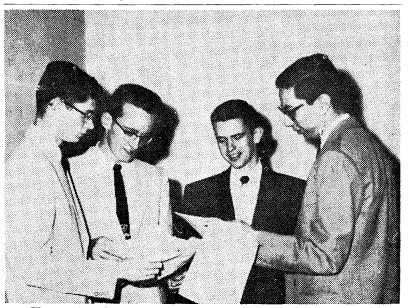
choice, and all the houses will sing the Caltech Alma Mater.

The special song chosen by Dabney House is George Gershwin's "Summer Time", with lyrics by DuBose Hayward and arranged by William Stickles. "Summer Time" is from the Gershwin play, "Porgy and Bess." Blacker has chosen the "Marching Song" from Sigmund Romberg's "Student Prince." "Cool Water," with words and music by Bob Nolan and arranged by Harry R. Wilson, has been picked by Fleming House. Ricketts' number is "The Holy City," with words by F. E. Weatherly, music by Stephen Adams and arranged by Roy Ringwald.

In each house a director has been chosen to coordinate efforts for the sing. Blacker is led by Bill Dietrich, Dabney by Alan Forsythe, Fleming by Louis Soux and Ricketts by Lyman Fretwell.

The sing was planned by the Caltech Glee Club. The judges for the contest are: Professor Fleury, head of the music department at Pasadena City College; Leland Green, supervisor of music for the Pasadena school system; and Shirley Nute, choral director at Glendale High School.

This is the third year that the Interhouse Sing has been held. Last year the contest song was, "Cindy." Year before last, the four houses competed in singing "Climbin' Up de Mountain."



House sing directors meet to discuss Interhouse Sing. Left to right: Dietrich (B), Forsythe (D), Fretwell (R), Soux (F).

AFROTC will stay on Caltech campus

The Air Force ROTC unit will be continued at Caltech. The Secretary of the Air Force has decided not to disestablish ROTC units at any schools which desire to keep them, and the Tech board of trustees decided at a meeting Monday night that Caltech wishes to remain in the AFROTC program.

Men who were registered for Air Science I or II and wish to continue their participation in the program should contact Col. Johnston by tomorrow afternoon at the very latest.

Foster Hewett will lecture in Bridge tonight

Workman, Elliott nominated

Dr. Foster Hewett will give "Uranium and Thorium in Southern California" at this week's Friday Evening Demonstration lecture at Caltech. The lecture will be given at 7:30 p.m. in room 201 Bridge.

Dr. Hewett, a research associate in geology at Caltech from 1947 to 1955, is a member of the U.S. Geological Survey and during the war years was in charge of the Survey's strategic minerals section. He has been instrumental in the development of the world's greatest concentration of rare earths at Mountain Pass. California, and is noted for his study of natural resources of the Moiave desert. He will illustrate his lecture with slides and rock specimens.

After graduating from Lehigh University, Dr. Hewett went on to Yale University, where he heceived his Ph.d. in geology. He has been a member of the U.S. Geological Survey since 1911.

McClure elected to **Board of Control**

Bill McClure defeated Jim Cribbs in the second run-off election for frosh representative on the Board of Control. The other freshman board member. Doug Carmichael, won in a previous run-off election two weeks ago. The complete slate of freshman officers: Bob Ingram, president; Russ Pitzer, vice-president: Neal de Gaston, secretary; Frank Childs, treasurer; and Brent Banta, athletic manager.

Jim Workman and Craig Elliott were nominated for the office of ASCIT president at this morning's nomination assembly in Culbertson Hall. Rube Moulton was nominated for vicepresident. These men and those nominated for other ASCIT offices will seek election on Thursday, February 23, when the ASCIT elections are held. Those elected will take their respective offices at the end of this school term and will remain in office until the end of the winter term next year.

Herb Rauch, Gene Cordes, and Vince Taylor are nominees for secretary, and Don Nierlich and Russ Hunter have been nominated for treasurer. Doug Carmichael, Frank Cormia, Mike Talcott, Jim Coe, Keith Brown and Russ Pitzer are running for the office of second representative. Dick Kirk is the sole candidate for publicity manager and Dave Leeson was nominated for first representative. Seeking the office of athletic manager are Ed Krehbiel and Howard Bloomberg, while Chuck Bonwell and Robert Lange are candidates for rally commissioner. Two teams are competing for the position of editor of The California Tech: they are Frank Kofsky-Tom Dodge and Dick Van Kirk-Bob Walsh. Ed Park and the team of Karl Knapp-Kirk Polson were nominated for the job of business manager of the Tech. Stan Baker was nominated for Big T editor.

There were no nominees for head yell leader and business manager of the Big T as this paper went to press on Wednesday. Very likely, men were nominated for some or all of these offices this morning. Nominations for offices in which no or only one man was nominated will be held open for one week after the nomination assembly. For a man to be nominated late, the nominee or his nominator must see Phil Conley, present ASCIT President.

Starting Monday, Feb. 20, candidates will give campaign speeches in the student houses and Throop Club.

'Thunderbolt' set as main attraction Y tilm Sunday

A light, rollicking comedy is the feature of this week's Y Film Series program. The second of this term, the show will begin at 7:30 this Sunday evening, February 12, in Culbertson. In contrast to the other two shows for the term, both relatively serious drama, "The Titfield Thunderbolt" will provide a laugh or two. For a little relaxation, this show should fill the bill.

Two short features will also be shown. "Totems," a Canadian film, was chosen for its excellent color photography, and colorful scenery. "Brotherhood of Man" is a UPA feature which shows race prejudice in its true

The third and final show, two weeks from this Sunday, will feature Alfred Hitchcock's "Strangers on a Train."

AUFS representative Richard Robinson reveals features of modern Turkish life

by Barry Bass

"Because Turkey seemed to be doing such a good job of resisting the Russian attempt to spread Communism and Sovietism I became interested in the country," said Richard Robinson, a member of the American Universities Field Staff, when he was interviewed for the California Tech Tuesday. Turkey borders on the U.S.S.R., yet has not been at all influenced to adopt any of the communal notions of Marx and Engels. Robinson said that the rural traditions of Turkey make it almost impossible for the people to accept these notions.

The Turkish villages, which have populations from about 500 to 300 persons, are composed of inter-related families, a family consisting of a man and his wife, his sons and their wives and children. Most of the activities of these families are of an intensely competitive nature. Each family works its own fields, owns its own oxen and horses and works together, striving to outproduce its fellow families and the families from the other



Richard D. Robinson

clans. Decisions for the village as a whole are made by a council of elders made up of the older men of each clan. For a village (to say nothing of all Turkey) to work communally together in all things is unthinkable, even incomprehensible to the great majority of Turks.

"There is a great disparity between village and city life. Many Turks of foresight and ambition are moving from the villages to the cities," Robinson told. Twenty per cent of the population lives in the cities now, but they are expanding fantastically. Villagers, as well as city dwellers, are becoming more and more materialistic; they are becoming more and more interested in making money; bartering has practically vanished and even in the small villages the economy is primarily a cash one.

(Continued on page 8)

LITTLE MAN ON CAMPUS

by Dick Bibler



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Secretary's Report

Election Rules

Rules for the forthcoming election campaign, drawn up in the last ASCIT Board of Directors' meeting, generally follow the tradition of several years. The limit for each candidate's expenses is to be \$10. The number of posters will be limited to five for presidential candidates, and reduced to four for all other candidates. As in the past, posters wlil be limited to the area between Throop Hall and Throop Club. Each candidate will speak in the student houses during meals the week of elec-

Darkroom Club

Now that the student house darkroom has been renovated, a Darkroom Club, recently organized, has been officially recognized as the governing body. The club is open to all undergrads for the price of a key deposit and, for those not working on ASCIT publications, a \$3 annual fee.

Marty Tangora has resigned his position on the editorial baord of Farrago due to pressures from other activities. Thus Lyman Fretwell and Russ Hunter will manage the magazine this term as co-editors.

Interhouse Dance and Football

Last week the ASCIT Board was asked to represent student opinion on the question of scheduling a football game on the day of the Interhouse Dance next year. The Athletic Department is considering breaking tradition by lining up Cal Baptist for a game that Saturday afternoon, the week of mid-term exams, when the dance usually takes place. As many men

are needed in decorating that afternoon, the Board objected to a regularly scheduled game with organized ASCIT support. However, the athletic department's suggestion for a practice game in Tournament Park, with no admission charge and no ticket stub on the student body card was considered satisfactory. Mr. Musselman has indicated that this arrangement will probably

Budget Problems

As usual a number of requests for ASCIT funds have come up this year after the budget was set. Although a \$600 contingency fund is set aside each year to provide for these additions, much of this must be left intact at least through the first two terms in event that an emergency arises to turn the black ink red.

The Board is currently debating whether ASCIT funds should be used to send the next president to the Pacific Student Presidents' Association in Vancouver this Spring. The contingency fund, from which this money would come, has already

been reduced by several disbursements above the budget; the debate department was granted an additional \$100 to help provide funds for the regional tournament at Seattle; the social budget was exceeded in providing for a better-thanusual band for the Christmas Dance, in sponsoring a Homecoming Dance and a Scripps Open House, totaling \$180; the Model United Nations delegation will be granted \$50 to \$100 above the original budget of \$50; and other unexpected costs come to \$140. On the other side, increased enrollment resulted in an additional \$200 from student body dues, the Little T ad sales netted slightly more than \$100 for the ASCIT, and the athletic banquet was run for \$50 less than the budget. No doubt further adjustment will arise as the year progresses.

Thus, the problem of sending a delegate to the PSPA convention, a desirable public relatons measure, has been considerably complicated. Whether the new president will go to Vancouver will not be decided, therefore, until sufficient funds are definitely assured.

—Tom Bergeman

California Tech

Editors-in-Chief---Dick Hundley and Marty Tangora News Editor - Dick Kirk

....Barry Bass, Jim Coe, Bill Hecht, John Lango, Ed Park, Mike Peters, John Price, Mike Talcott, Jim Wilkinson Feature Editor - Frank Kofsky

Feature Staff..... .Tom Dodge, Craig Elliott, Karl Klutz, Stu Richert, John Lansingh, Al Farley Sports editor — Dick Van Kirk

Assistant Sports Editor --- Bob Walsh Sports Staff.... ..Brent Banta, Don Lewis Stu Bowen, Don Nierlich, Dennis Paull, Dave Groce Photo Staff..... Business Manager — Dan Chilton Circulation Manager — Dave Leeson

Entered as second-class matter November 22, 1947, at the Post Office in Pasadena, California, under the Act of March 3, 1879.

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-Tony Howell

She thought he was Diseased Mono strikes again! This time Blackerman Jerry Klaz was the lucky patient in the infirmary. (Cute nurse over there now.) Well, there came all the way from Beverly Hills, just to see "poor Jerry," a young damsel. (touching scene). Having told said female that he didn't expect to be released for another two weeks, Jerry suddenly found that he was free to leave. This was Saturday, and quickly he rushed to the phone to ask for a date; but much to his chagrin she had accepted another. But this isn't all. As we go to press, Jerry can be found punching T-S cards, for SHE has broken another date.

Promiscuous birthday suit

The probability of birthdays falling in February in Fleming

House has increased tremendously since the Beak has gotten his probiscis into things. Last Sunday BOB Norton decided that the accepted custom of throwing one in the showers on the anniversary of one's birth was a custom which would go down the tubes in his case. From sunup to sundown, just like Sadie Hawkins Day-he was nowhere to be seen-nowhere that is unless you happened to visit the home of a certain "enticing young thing" who even baked him a cake. ("It looked good until I sat on it on the way home").

Sin & Silly

Olde "Hooks" Converse has that dreamy dreary look in his eyes again. No, it isn't midterms, and it isn't basketball; it's Sin—that's her name now—who is spending a few days at home between finals. When he went up for his favorite shot on his

Big T picture, we heard "This one's for sin."

Bones for Bowser

Ed Krehbiel and Clint Frasier have been given the Most Holy Order of the Bone. Ed, it seems, spent the evening in Rickett's dark dining room playing hide and seek with his date. We don't know how intimate the situation became but we hear that Ed has developed some new twists for the game.

Just what Clint did we are not sure. We do know that he sent a certain senior, who specializes in corruptions for our youth, to the drug store to make a four bit purchase. Was your purchase in vain, Clint?

Ku Klux Can

Well, Gordee has done it again. When last seen he was wandering around various parts of the courtyard clad only in a white hood. (Somebody should clue this boy in.) This time he had an escort of friends who tied his hands behind him and led him around. They also threatened him with an operation on his lower abdominal region. Still got 'em, Gordee?

Exchange planned by Newman Club

The Newman Club will hold an exchange with the Kappa Gamma Delta Sorority at Immaculwate Heart College February 17. All those planning to attend contact Bernie Lopez. EGAD!!

Confucius says:

Woman who nags man all day gets nowhere at night!

EGAD!!

Philco: If I knew you better, I'd kiss you.

She: Yeah, and if you kiss me, you'd know me better.

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The World and Tangora

by Horace Tangora

Our campus magazine, Farrago, suffers from one of the strangest paradoxes of American college life—a problem which is not peculiar to Caltech but quite widespread. Anyone who can explain it to me is welcome to do so.

A year ago we had two magazines here—Pendulum, which was more or less a serious literary effort, and the purely humor magazine which bequeathed its name to the present mag. (The merger took place last fall.)

Well, while this was the case, the literary magazine was constantly under threat of extinction—nobody would buy it. On the other hand, the humor magazine was very much in demand; and, even if they did not particularly like the magazine, the students were always eager to see it when it came out.

So a merger was accomplished in order to sort of process-serve the serious material to the students.

What happens now? Every term, when the editors collect the contributions, they find that nobody at all has written any humor; while everybody and his brother has attempted to write the serious literary stuff that no-

body is willing is read.

In other words, nobody wants to write humor, but everybody wants to read it; everybody wants to write serious literature, but nobody wants to read it.

Probably the thing that makes the serious literature so unpopular is its quality. (That may be a pretty vicious cut, but I write the junk too—I don't exclude my own.) All the stories are the same, all the "poems" are the same.

The same short short, written by four different guys, ran four times in the fall Farrago. And the same poems were run—almost—as have been appearing in Pendulum for five years.

When is someone going to write good poetry and good short stories that show a little-originality?

And—more urgent—when is someone going to write something funny?

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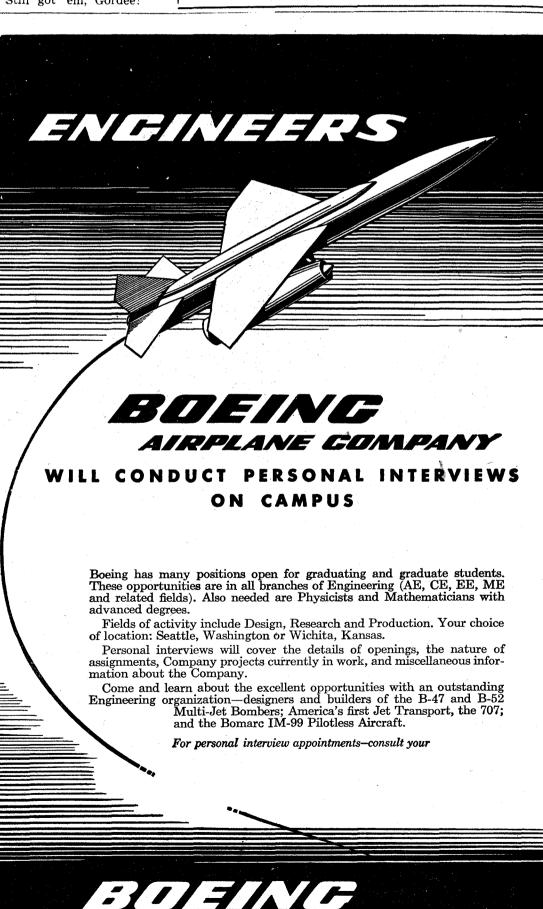
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row 6, number 13

by Al Farley

The Los Angeles Philharmonic Orchestra's concert last Thursday in Philharmonic Auditorium was one of the most satisfying that the orchestra has given under Mr. Wallenstein's direction. Rudolf Serkin, the evening's soloist, contributed enthusiastic performances of his two selec-

The opening work on the program was the first American performance of "Turandot: Four Episodes for Orchestra" by the Swiss composer Gottfried von Eiinem. The work was raucously violent in the true modern idiom. It was at times punctuated with blasts from the solo timpani and at other times subsided into delicate pianissimo passages. The orchestra and Mr. Wallenstein deserve a great deal of credit for their endeavor, although it did not make a lasting impression.

Second on the program was Mozart's C major Piano Concerto, K. 467. The orchestra provided solid support for Mr. Serkin in this number and his seemingly effortless technique conveyed a pleasing performance. The acoustics of the hall tended to mute the brilliance of the strings.

The major accomplishment of the evening was the orchestra's powerful exposition of Richard Strauss' "Death and Transfiguration." This very complex work was played brilliantly by the orchestra. They were coordinated and precise from the soft opening passages in the woodwinds to the thunderous climaxes in the brass. First trombone player, Robert Marsteller, and his solid tone lead the lower brasses in a forceful display of the rich qualities of their instruments.

Mr. Serkin closed the program with a performance of Strauss' "Burlesque" for Piano and Orchestra. It was evident why this work is so seldom heard. Mr. Serkin threw himself bodily into this number and displayed an ebullient nature which was not a little reminiscent of a grinning TV star. Such a demonstration did not increase my respect for Mr. Serkin.

This week William Steinberg. conductor of the Pittsburgh Symphony Orchestra, is guest conductor of the Philharmonic. See audience for the program.

Prado

Last Saturday this writer and two of his associates had the pleasure of digging Perez Prado and his orchestra at the Pasadena Civic Auditorium. Mr. Prado's orchestra featured the typical mambo orchestration of four trumpets, one trombone, four saxes and a rhythm section consisting of bass, drums, and a congo drummer. At times Mr. Prado joined the rhythm section to interject both vocally and instrumentally.

The first number was an unknown composition featuring a simple unison sax melody with the phrases introduced and completed by a trombone fill-in. The bone man played the pedal tones in his part, to say the least, with a gutty tone, which was quite a refreshing change from the subtle nuances of the LA Philharmonic. Unfortunately, as any brass man will tell you, the continuous playing of loud pedal tones is very detrimental to the playing of the upper register of the instrument. On the later passages of this piece the bone player clearly demonstrated this hazard of accomplished bone playing. The trumpets added a number of high, loudly played interjections to close this piece with a burst of power.

Later in the evening the band was heard in Mr. Prado's own composition, "Mambo Jambo" featuring a brilliant pryotechnic display of modern day, screech trumpet playing. This display, in conjunction with the excitement created by the rhythm section, left the audience in a state of exhaustion.

A not unshapely chanteuse sent a shiver of animal emotion through one of this writer's companions. That her talent does not lie wholly in the vocal field became evident as she undulated through "P. S. - I Love You" and a few unidentifiable Spanish ballads.

The climax was reached in the orchestra's conception of the French ballad "Cherry Pink and Apple Blossom White." Prado's fourth trumpet man played with the aggressiveness that has made Prado's recording of this number a best-seller.

The evening's performance was marred only by the rude Pasadena audience's insistance in ejaculating "uuh" at seemingly appropriate opportunities.

CIT Band

Earlier in the evening this reviewer caught the performance of the Caltech Band at the Redlands basketball game. The relentless playing of Bruce Blackie on bass drum forced the band to conform to an unflagging meter. During the half-time activities Larry Whitlow heard to dubious advantage on the bass horn. The mellow tones of the Harfophone (of which the only existing specimen west of the Mississippi is the coveted possession of our own Jon Harford) were heard in frequent solos throughout the game.

All the numbers were played in a festive manner under the direction of the band's associate conductor Bob (Hot Lips) Johns-

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Sanitary Engineering does important service at Tech

by Stu Richert

One phase of engineering which assumes great importance today, but which is not very well known, is the field of Sanitary Engineering. At Caltech the Sanitary Engineering section is a "one man department." It is a section of the Civil Engineering department, and consists of just one faculty member, Dr. J. E. McKee. Dr. McKee is a graduate of Carnegie Tech with a Doctor's degree from Harvard. During the war he served

as a Lieutenant Colonel in the Engineers Corps, after which he held a partnership in a Boston consulting firm until he came to Caltech in 1949.

The field of Sanitary Engineering covers a wide range of subjects. Some of the principal problems a sanitary engineer deals with are: water supply and treatment, sewerage and storm drainage, sewer treatment, refuse and garbage disposal, and water pollution. Also included in the field are the engineering control of insects and vermin, and the problem of air pollution.

Although Sanitary Engineering is traditionally classed under Civil Engineering, it is closely related to many other fields. "Sanitary Engineering draws heavily on most of the sciences," emphasized Dr. Mc-Kee. Chemistry and biology are particularly important in the field, because it deals a great deal with chemical treatments, and with problems concerning bacterial pollution. As an example of the diversity of the sciences employed, a current research project on disinfection of sewage has involved research on the chemistry of halogens, ultrasonics, radiation, and effects of heat. All experiments are done in the section's lab in es west end of T2.

The Sanitary Engineering section has the responsibility for checking the purity of the

water in the Caltech swimming pool. Each week a bacterial check is made on the water by Duncan MacDuffie, a senior chemist who works for the section. "These tests show a very high purity for the pool water," stated Dr. McKee. "Our water is better than the Public Health Service requires for drinking water." Dr. McKee attributed this purity to the extraordinary cleaness of Caltech students.

The Sanitary Engineering section offers just one course at the undergraduate level, Introduction to Sanitary Engineering, which all Civil Engineers take. There are at present four students doing graduate work in this section.

Most civil engineers don't consider ging into sanitary engineering until they start investigating jobs, said Dr. McKee. They then find that sanitary engineering jobs offer higher salaries, and this attracts them into the field. About forty percent of the civil engineers graduating recently from Caltech have gone into sanitary engineering work.

Dr. McKee emphasized the opportunities in sanitary engineering. In Los Angeles in the last two years 140 million dollars has been voted for flood control and storm drainage and water supplies. "This creates many well paying jobs for sanitary engineers," said Dr. McKee.

audience

music

THE BALLET RUSSE DE MONTE CARLO opens tomorrow night in Phil Aud, LA: Feb 10 (Eve) Swan Lake, Licorne, Scheherazade; Feb 11 (Mat) Swan Lake, Nutcracker, Gaite Parisienne; Feb 11 (Eve) Les Sylphides, Don Quixote, Licorne, Gaite Parisienne; Feb 13 (Eve) Mikado, Black Swan, Harold in Italy, Scheherazade; Feb 15 (Eve) Pas de Quatre, Nutcracker, Gaite Parisienne; Feb 16 (Eve) Swan Lake, Licorne, Capriccio Espagnol; Feb 17 (Eve) Giselle, Pas de Trois, Le Beau Danube; Feb 18 (Mat) Les Sylphides, The Blue Bird, Mikado, Le Beau Danube; Reb 18 (Eve) Raymonda, The Mute Wife, Pas de Deux, Scheherazade. Eves 8:30, \$1.50-\$4. Mats 2:15, \$1.50-\$3.50.

WILLIAM STEINBERG will conduct the LA Phil this week

in Phil Aud. Brahms' "Tragic Overture," Schubert's Symphony No. 8, Mahler's Symphony No. 1. Tonight 8:30, tomorrow afternoon 2:15. \$1-\$3.75.

JOSEPH SCHUSTER will be cello soloist with the LA Phil conducted by John Barnett when they play in Pasadena Civic Aud on Wed, Feb 15, 8:20. \$1.25-\$3.50.

THE BALLET RUSSE appears in Pasadena Civic Aud, Feb 14, 8:20. \$1.25-\$4.

THE VIRTUOSI DI ROMA play an all Vivaldi concert in the Pasadena Playhouse this Sunday, Feb 12, at 3:30. \$2-\$3.

—Al Farley

theatre

JENNY KISSED ME is still going strong. Starring Rudy Vallee, the play provides a light evening full of laughs. Pasadena Playhouse, 39 S El Molino,

Pasa. Eves Sun thru Thurs 8:30 90c-\$2.40; Fri & Sat eves 8:30. \$1.20-\$2.40; Sat matinee 2:30 90c-\$1.80.

JOY RIDE, altho no joy at the time of the review published in audience, has probably been revised. It is scheduled for departure to Broadway soon. Huntington Hartford Theatre, 1615 N Vine, Hollywood. Nightly 8:30 & Sat matinee 2:30. Fri & Sat eves \$2.20-\$4.95; other perf \$2.20-\$4.40

HELLZAPOPPIN OF '56. Olsen and Johnson let loose with new sketches, new acts, stooges, glamorous girls, singing chorus and new gags. Music Box Theatre, Hollywood Blvd at La Brea. Tues thru Thurs 8:30. \$2.20-\$3.85; Fri eve 8.30, \$2.75-\$4.40; 2 perf Sat 7:30 & 10. \$2.75-\$4.40; 2 perf Sun 2 & 5:30. \$2.20-\$3.85.

-Dick Kirk

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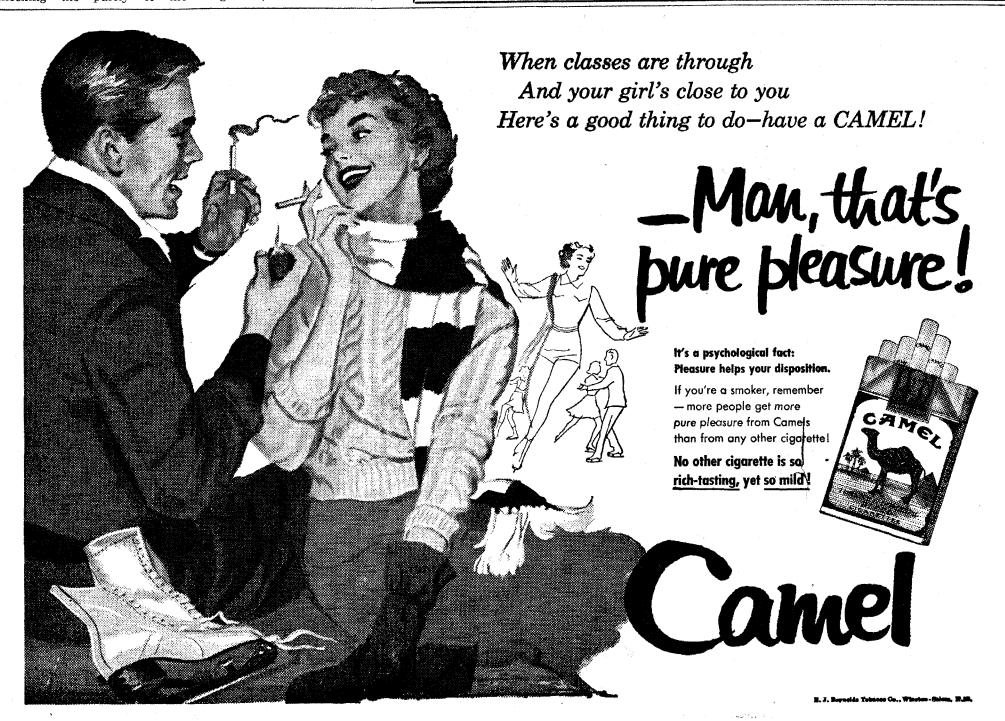
THE CARTER OIL COMPANY

Tulsa, Oklahoma

A SUBSIDIARY OF STANDARD OIL COMPANY (N.J.)

Physiciists, Chemists, Mathematicians, Geologists, and Geophysicists. Electrical, Mechanical, Chemical, and Petroleum Engineers.

Make an appointment through your placement office for an interview on February 17, 1956



Interview Schedule

Thurs. 9—BS/ACh, ME, EE, Ph; MS/Ph, ChE; PhD/Ch, ChE Columbia - Southern Chemical Corporation.

Thurs. 9, Fri. 10—BS, MS, PhD/EE, ME, Ph, Ch, Ma Bell Laboratories.

Thurs. 9, Fri. 10—BS/ME, EE, CE Pacific Telephone & Telegraph Company.

Thurs. 9, Fri. 10—BS, MS, PhD/ME, EE, Ae, Ph, Ma Sandia Corporation. Summer job possibilities for Jrs., Srs., and Graduate Students/ME, EE, Ae, Ph Grad. Students/Ma.

Thurs. 9, Fri. 10—BS, MS/Ae, EE, ME Hughes Tool Company, Aircraft Division. Opportunity for work in practically every specialty within the aircraft industry Research, Design, Development.

Mon. 13—BS, MS/ME; Soph, Jr/ME for Summer. Peerless Pumps, Los Angeles, Calif.

Mon. 13—BS, MS, PhD/Ae, ME. University of Southern California Engineering Center.

Mon. 13—BS/ACh, CE, EE, ME United States Gypsum Company, Plaster City, Calif.

Mon. 13—BS, MS/CE, EE, ME, ACh Bechtel Corporation.

Mon. 13, Tues. 14—BS/ME, CE, EE; BS, MS/Ge, Geoph; BS, MS, PhD/ChE Tide Water Associated Oil Company. Soph, Jr./

ME, Ge; Jr/ACh, CE, Ch for Summer employment primarily at Avon Refinery.

Tues. 14—BS, MS/Ch, ChE, ME Carbide & Carbon Chemicals Company.

Tues. 14—BS, MS, PhD/Ae, ME, EE, CE; MS, PhD/Ma, Ph Convair-San Diego.

Wed. 15—MS, PhD/Ch, ChE; PhD/Ph; MS, ME The Texas Company - Beacon Laboratory Division.

Wed. 15—BS/ME; BS, MS/Ch, ChE American Potash & Chemical Corporation.

Wed. 15, Thurs. 16, Fri. 17—BS, MS, PhD/EE, ME Hewlett-Packard Company, Palo Alto, Calif.

Wed. 15, Thurs. 16—BS, MS, PhD/Ae, ME, EE, CE; MS, PhD/Ma, Ph Lockheed Aircraft Corporation' - California Division and Georgia Division.

Wed. 15, Thurs. 16—BS, MS, PhD/Ae, ME, EE, Ph, Ma Lockheed Aircraft Corporation - Missile Systems Div.

Thurs. 16—BS, MS, PhD/ChE, Ch; BS/ME, EE Titanium Metals Corporation of America, Henderson, Nevada.

Thurs. 16, Fri. 17—BS, MS, PhD/Ae, EE, ME, Ph, Ma Hughes Research & Development Laboratories.

The Sports Corner

by Dick Van Kirk

There's an old story which tells of a basketball player who was so superstitious that he wouldn't change his socks if his team was on a winning streak. As the story goes, once his team won 25 straight games and the poor guy died of athlete's foot. The way things are going now, it looks as if our players are going to have the cleanest socks in town.

One person, however, who doesn't believe in superstition, is Sonny Nelson. In fact Sonny says that if he begins to have a superstititous feeling about some action or object he deliberately tries to prove that his feeling is unfounded by reversing his actions. Other members of the team are more superstitious. One person in particular, who shall remain anonymous, is extremely superstitious about certain things, among which are his way of dressing and the pre-game warmups he goes through. If you watch number 29 closely tomorrow night, you will notice that he never zips up his warmup jacket, and that after every free throw attempt by a teammate he claps his hands just three times. He also goes through a certain routine in the dressing room before the game, the primary feature of which is that he always tries to be not the first, but the second player to get dressed for the game.

If you think I'm going to launch into a wholesale blast against superstitions in general, you're wrong. In fact I heartily agree with player number 29, and the only question in my mind is, "When is he going to get a set of winning charms?"

For those of you that didn't read the fine print in Sunday's newspapers, that was Bob Fendler of Pomona College who got a third place tie in the high jump in last week's Millrose Games in New York City. For my money, this lad looks like a good bet to cop a first place medal in the conference meet this season unless Dick Haddon of Occidental really gets down to work to defend

CONVAIR

(SAN DIEGO)

Representatives will be here, February 14

TO INTERVIEW ELECTRICAL, MECHANICAL, AERONAUTICAL ENGINEERS ABOUT TO GRADUATE

At Convair, in beautiful, smog-free San Diego, California, you will find the diversity of challenging, far-reaching projects that offers you the unlimited career opportunity you seek.

This is young country, beautiful, exciting country—the very heart of the busy, vital aircraft and missile industries. And good, young engineers are needed now to grow with new, long-range aircraft and missile programs.

You will find the Convair Engineering Department a genuine "engineer's" engineering department — imaginative, energetic, explorative. You will discover the very latest engineering equipment, excellent working conditions, salary, personal job advantages, and opportunities for continuing education.

Remember these facts about Convair: Convair was awarded the Nation's first production missile contract and the first production contract for supersonic all-weather interceptors.

Convair has the greatest diversity of aircraft engineering projects in the country, including high performance fighters, heavy bombers, large flying boats, transports, trainers, seaplane fighters, vertical take-off aircraft and guided missiles.

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Now you are invited to get full information about your career at Convair. Talk it over with our Convair Engineers on your campus soon.

GRADUATING CIVIL ENGINEERS interested in the field of aircraft structure are also invited to apply.

Graduate degree candidates in Engineering, Mathematics or Physics are invited to discuss Convair opportunities in the general field of advanced engineering analysis and design.

CONVAIR ENGINEERS WILL INTERVIEW ON YOUR CAMPUS

FEBRUARY 14

Please arrange appointment now!

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Sunny, smog-free San Diego on the coast of Southern California offers you a way of life judged by most as the Nation's finest for year-round climate, beauty and indoor-outdoor living. Sailing, fishing, swimming, golf, skiing, mountain and desert resorts, Hollywood and Old Mexico are all within minutes.



Westmont and Whittier next for hoopsters

Saturday the Beavers travel to Santa Barbara for a return game with the Westmont Warriors. Westmont took an early game in the Tech gymnasium, 69-49.

Dan Heinrichs stars for the Warriors at center; he scored 28 points in the first meeting of the squads. He exploded for 23 points in the second half to spark a big drive. Tech had held the Warriors to a 25-25 deadlock in the first half.

Another highlight of the Westmont squad is guard Bob Cannon, who delighted the crowd with his behind-the-back passing.

The Santa Barbara trip is the longest journey for the hoop-sters this year.

SCC STANDINGS Team Won Lost Pct. Occidental 4 0 1.000 Redlands 4 1 .800 Whittier 2 2 .500 P-C 1 3 .250 Caltech 0 5 .000

Caltech's varsity hoopsters will play host to the Whittier Poets tomorrow and travel to Santa Barbara Saturday to face the Westmont Warriors in a pair of return matches that promise to be closer matches than the first games.

In the first meeting between Caltech and Whittier the Poets grabbed a 58-42 win after building up a 32-14 halftime lead and watching the Beavers whittle away at their lead, mostly on the strength of an 18-point scoring spurt by Sonny Nelson.

Whittier bases its scoring hopes on forward Stan Hubert and Center Hal Conley, with Bob Bland and guard Bill Harmon as key playmakers in the Poet plans.

Coach Aubrey Bonham's Quakers have posted a 2-2 record in conference play, and a 7-11 overall season record. The Poets will be weakened by the loss of seven players due to scholastic deficiencies, among them Joe Wohlmuth, their leading scorer, and Jed Warner, hustling guard.

Occidental wins Caltech Regatta

Occidental handily won the two-day Los Angeles Yacht Club Invitational Regatta last weekend.

Oxy's 63 points easily took first place over Santa Barbara, UCLA, Caltech, and Pomona, who followed in that order. Tech's 43 points lacked one of pulling into a tie with the Uclans.

Twelve races were held on Saturday and Sunday. One point was awarded to each starting team and one to each finisher. In addition, each team scored a point for each beat defeated.

Occidental had previously won the Pacific Coast Championships.

Your Nearest Laundry SUDS-KISSED

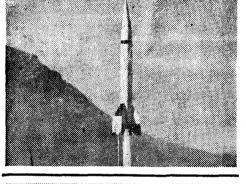
Authorized Westinghouse Laundromat

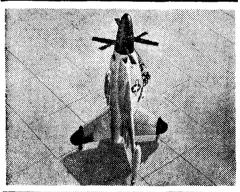
Near corner of Lake and California

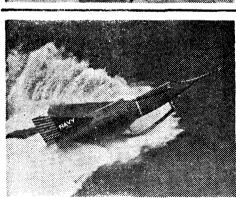
Dry Cleaning—Finished Laundry
Free Parking—S&H Green Stamps

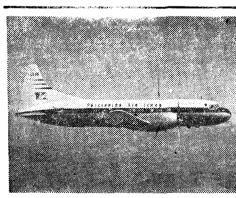
24-Hour Laundry Drop

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INTERHOUSE TROPHY

Nazarenes drop Beavers in second half point spree

Pasadena College (Nazarene) took advantage of an extremely cold Caltech basketball team to overcome an eighteen point deficit in the second half and grab a 53-42 win Tuesday at the Scott Brown gymnasium.

The game also cost the Beavers the services of forward Sonny Nelson for the rest of the season, as a first half tumble reinjured his weak right knee, forcing him to leave the game.

Coach Carl Shy's Beavers started the game as if they meant to make a runaway of the contest, building a 21-5 first quarter

Interhouse sports

Intramural competition

swings into the second half of

the year's activities Saturday

with the Interhouse track meet.

at this stage in trophy stand-

ings, but Fleming is expected to

be strong in the remaining

sports and is considered a po-

tent threat. The Fleming men

are expected to fight it out wtih

Ricketts for top honors in the

Field events are scheduled to

begin at 2 p.m .Saturday, with

track events commencing thirty

track meet.

minutes later.

Dabney boasts a strong lead

lead, mostly on the strength of Phil Conley's 14 points in the first period. At one stage in the first half the Techmen held a 27-9 lead, but the Crusaders from across town began to whittle away at the Caltech lead. The Beavers left the floor at halftime enjoying a 30-14 lead.

The second half was an entirely disappointing one for the Beavers, as the Nazarenes steadily cut down the Caltech lead, while holding the Beavers to only 12 points, on three field goals and six free throws, in the half. Crusader center Jim Bond put Paz Naz ahead for the first time with two minutes left in the game, and the Crusaders pulled away steadily to the end of the game.

Conley was the game's high scorer with 25 points, while Bond scored 14 for PC (N).

Redlands drops Tech hoopsters

Coach Carl Shy's varsity hoopsters took an early lead Saturday against the Redlands Bulldogs but failed to hold it, dropping a 65-52 decision in the opening game of the second round of conference play.

The win boosted the Bulldogs' championship hopes, giving them a 4-1 record, while the Beavers sunk lower in the conference cellar, posting an 0-5

Caltech began the game at a rapid pace, scoring eight points before Redlands sank its first basket. Displaying a rapid-moving pass-and-cut offense, the Beavers drew repeated foul shots, and moved to a 25-19 lead after the first ten minutes of

In the second quarter, however, the Techmen ran into one of their patented cold streaks, and scored only four points while the Bulldogs piled up 21 points for a 40-29 halftime lead.

The second half was practically even as far as scoring, with the Beavers trying futilely to catch up. At one point Tech pulled within seven points of Redlands, but repeated fouls helped the Bulldogs to restore their 13 point margin.

Phil Conley and Sonny Nelson led the Caltech scorers, with 15 and 14 points respectively, while Jim Welsh contributed eight points and a fine floor game. J. R. Perkins paced Redlands with 16 points, followed by Al Endeman with 10.

We Highly Recommend **CARL'S**

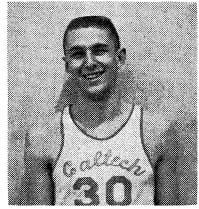
CALTECH BARBERS

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Meet the Varsity



The gent you see wearing that broad grin above is none other than Jim Workman, Junior guard on the varsity cage squad. Playing his second year on the varsity, Jim has worked his way up from the ranks into contention for a starting berth.

Workman doesn't confine his athletic abilities to the hardwood, however, as he is a two year letterman in football and runs the distance races on the varsity track team during the spring.

Jim comes from the nearby town of Orange, California, and is serving as student body athletic manager.

DISCOBOLUS TROPHY

STANDINGS STANDINGS Blacker 6 Dabney 66 Fleming ______ 6 Blacker _____ 521/4 Ricketts 6 Fleming 51 Dabney _____ 1 Throop _____ 39½

Contact your placement department to arrange for appointments.

MONDAY FEBRUARY 13

Company representatives will be on campus for personal interviews regarding engineering positions with an international organization manufacturing centrifugal pumps.

> FOOD MACHINERY & CHEMICAL CORPORATION PEERLESS PUMP DIVISION

Young scientist works on new ways to improve metals

Today scientists and engineers face one of the toughest barriers of all - the "metal barrier." Modern technology has progressed so rapidly that today's metals can't meet the tremendous demands placed upon them. For such fields as aviation, electronics, atomic energy, present metals must be improved and new kinds of materials must be developed.

One of the young men playing a role in this new and important field is 30-year-old Dr. Roland P. Carreker, Jr.

Carreker's Work Interesting, Vital

As a research associate in the General Electric Research Laboratory's Metals and Ceramics facility, Carreker's chief concern is the improvement of metals through new processing techniques.

In his work, Dr. Carreker has dealt with such important metallurgical problems as metal failure in high-speed turbine rotors, determining the strength of pure metals from -425°F, the temperature of liquid hydrogen, to 2,800°F and economic studies of new metallurgical processes.

25,000 College Graduates at General Electric

When Carreker came to General Electric in 1947, he already knew the work he wanted to do. Like each of our 25,000 collegegraduate employees, he is given a chance to grow and realize his full potential. For General Electric has long believed this: When fresh young minds are given freedom to make progress, everybody benefits - the individual, the company, and the country.

Educational Relations, General Electric Company, Schenectady 5, N. Y.



AUFS rep Robinson tells about current problems in Turkey

(Continued from page 1)

Robinson said that one reason the traditions of the people are yielding to new materialistic ideas is that the increasing mechanization of agriculture is giving the Turks a new faith in the pragmatic solution of problems. Village youths must have some military training. When these youths return to their villages with new fundamental mechanical concepts and tell the villagers, sometimes loudly and boisterously, how this or that job may be done more efficient-

Oak Ridge leader lectures at Tech

Dr. Alvin M. Weinberg, director of the Oak Ridge National Laboratory, is a guest lecturer at Caltech this week.

Dr. Weinberg is giving a series of lectures in the field of nuclear engineering and is meeting with students and faculty in the engineering and physics departments.

The conference is financed by a \$5,000 gift for this purpose from the General Dynamics Corporation. According to Dr. Milton Plesset, professor of applied mechanics who is in charge of the arrangements, there will be another conference late this spring, one in early fall, and possibly a third in January,

Y lunch clubs plan programs

Speakers for this week's Y.M.C.A. lunch clubs will include geochemist Harrison Brown, Alfred Ingersoll, assistant profesor of civil engineering here at Caltech, and three secretaries.

Tuesday at the undergraduate lunch club Harrison Brown will speak on his experiences at the Geneva Conference. Mr. Brown was one of the few scientists to be picked by our government to attend this conference.

On Wednesday at the Athenaeum Dr. Ingersoll will speak to the graduate faculty lunch club. The title of his speech is "India, challenge to the free world." Dr. Ingersoll was a visiting professor at the Bengal College of Engineering for a year. Wednesday's lecture will be illustrated.

The frosh lunch club has gone under a complete reorganization. At the election of officers last Monday, in which Wally Baer was elected president and Bob Lange was elected vice president, it was decided that the club should meet on Thursday rather than on Monday. Next Thursday will be a panel of three secretaries who will discuss dating and various problems arising from it.

EGAD!!

She: Do you always think of me when you're away, darling? He: Yes, sweet, I always bare you in mind.

Caltech Pharmacy

PRESCRIPTIONS

Dependable Registered Pharmacists **FOUNTAIN** BREAKFAST, LUNCH, DINNER 882 East California Street SYcamore 2-2101 Pasadena 1, California

ly, they frequently arouse resentment.

Sharp disagreement often results, sometimes causing young men to break off from their clan and family. But though there is some adverse reaction to it, mechanization and materialism are in Turkey to stay. Nine years ago there were 1,700 tractors in Turkey; now there are 40,000.

"The villagers are becoming more and more independent. Friction between the village and the national government is increasing," said Mr. Robinson. Unfortunately, he concluded, no obvious solution appears to be in sight.

Humanities class offered to sophs

A third term course in human relations will be open to the first 40 sophomore engineers to sign up. Only sophomore engineers can take the course. Those interested must sign up in Dr. Weir's office before preregistration.

The course, P7, is an introduction to the principles of human relations with the emphasis on the development of groups. Psychological and emotional factors influencing group behavior, group leadership and group cooperation will also be explored.

Dr. Charles Ferguson and Dr. Evely Hooker, both of UCLA, will teach the course.

Weekend social program features Valentine Dances

All the houses are getting into the act on this week's social schedule. Forthcoming activities include three Valentine Dances, an informal party, and a weekend in the mountains. In addition, there will be an open house at Fleming after the Whittier game on Friday.

The three Valentine Dances will be held Saturday in Dabney, Ricketts, and Fleming lounges from nine to one. Swedlow of Ricketts has engaged the "Stardusters," promising an elegant affair. Tony Iorillo will play for Dabney.

The Blacker lounge this Saturday is to be the scene of an informal party in the "Doc" Eagleson manner, featuring dancing, "games," and refreshments. Throop has an exchange with SC on Thursday and will round out the weekend, "a la snowdrift," with three days at Snow Valley. The men and their dates will stay at the Caltech Skin Hut, properly chaperoned by Coach Huttenback.

CAMPUS BARBER SHOP In Old Dorm Where Everyone is Welcome Paul A. Harmon

Seniors in Engineering **Mathematics Physics**

The California Division New

of Lockheed Master's Degree

Aircraft Corporation Work-Study

announces its Program

The program enables you to attain a Master's Degree while gaining important practical experience on the engineering staff of Lockheed Aircraft Corporation.

The program in outline:

You carry at least six units per semester at the University of California at Los Angeles, University of Southern California or other approved universities.

You work three days per week on Lockheed engineering or scientific assignments.

You are paid 3/5 of a full-time salary during the school year. (Salary and work on a full-time basis during school summer vacations.)

Eligible are U.S. citizens who are graduating with a B.S. degree in Aeronautical Engineering, Mechanical Engineering, Electrical Engineering (Communications or Power), Mathematics or Physics and members of the Armed Services who possess appropriate degrees and are being discharged.

Tuition, fees and books for a maximum total of 36 units of fulltime study are paid by Lockheed.

Travel and moving allowances are provided those residing outside the Southern California area.

Additional information may be obtained from your Placement Officer or Dean of the Engineering School or by writing E. W. Des Lauriers, Employment Manager and Chairman of the Master's Degree Work-Study Program.

Lockheed California Division staff members will visit this campus soon and will be happy to discuss your role in the program with you. Your Placement Officer can arrange an interview.

Master's Degree Work-Study Program

California Division

Lockheed

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