The California Tech

California Institute of Technology

Volume LIX

Pasadena, California, Thursday, January 23, 1958

Number 13

Kirk and Godfrey, acting as

spokesmen for the board, ex-

plained that the reorganization

will make it possible for ASCIT

to discharge more successfully

and efficiently its responsibility

The proposal is the result of

an intensive study undertaken

by Kirk and Godfrey at the re-

quest of the BOD toward the

close of third term last year. At

that time the weaknesses of the present structure, designed for

a much smaller and less complex

operation about 20 years ago, be-

came apparent. There appeared

a need for rational re-apportion-

ment of responsibilities and pre-

cise definitions of duties before

the Board could hope to improve

its handling of CIT student af-

The amendment, whose text

will apear with full explanation

in next week's California Tech,

would reorganize the BOD, re-

ducing its membership from the

present nine to eight. It would

co-ordinate and provide better

direction for the activities of the

The new proposal also incor-

porates a more detailed ASCIT

committee sub-structure, making

it possible for more underclass-

men, especially sophomores, to

gain leadership experience in re-

Board's sub-structure.

sponsible positions.

to the Tech students.

Concert To Star Rogers' Group

Shorty Rogers and his jazz group will be on campus for an ASCIT sponsored jazz concert for Techmen and their friends on the evening of January 31. The performance will be in Culbertson Hall at 8:30 p.m.

Rogers is presently serving as Jazz director for RCA's West Coast Albums. He frequently records for them with both his famous "giants" and other groups. He also writes the themes for the UPA Magoo cartoons. His jazz movie themes have included

"The Man with the Golden Arm," and "The Wild One."
Shorty Rogers' career began as a trumpeter in high school. He later switched to the field of arranging and composing where he gained experience with Stan Kenton's group.



Shorty Rogers

The present members of the "giants" who will appear on campus include, Rogers, fleugelhorn; Bill Holman, tenor sax; Pete Jolly, piano, Ralph Pena, bass, and Larry Buncken, drums.

Great Success

Don Owings, ASCIT rally commissioner, says that the concert promises to be a great success since ASCIT has already planned an after-concert dance in the

Tickets for the performance will be available from the members of the rally commission, or at the door immediately before the concert. The price for single admission will be \$1.00.

Tech-Scripps Conference To Feature Talks, Fun

The first Caltech-Scripps Stu- formal program, there will be dent-Faculty Conference will be held the weekend of February 14-16 at a new camp in the hills between Pomona and Fullerton. This year's conference, an outgrowth of last year's student-faculty conference held by Caltech alone, is the first between Caltech and Scripps. It will deal with the relevance of religious, moral, scientific and artistic factors to modern life.

The conference will last from Friday at 5 p.m. until Sunday before noon. In addition to the

plenty of time for recreation, which will include square-dancing and volleyball.

Y-Sponsored

The conference is sponsored by the Caltech Y and the Scripps Religious Council, but it is open to the entire student body.

Approximately thirty students and twelve faculty members from each college will attend. Already, over eighty Scripps students have applied for the thirty available positions.

Caltech Profs Analyze Russ Science Education Program

Present Russian scientific education is probably no better than that of the United States, according to three Caltech professors. Dr. Murray GellMann of the Physics department, Dr. Jesse L. Greenstein of the Astrophysics department, and Dr. Norman H. Horowitz of the Biology department, all recent visitors to the Soviet Union,

spoke before a faculty seminar on contemporary Russian education at the Athenaeum on Friday. January 17.

One of the primary observations of the faculty group was that Russian primary and secondary schools are much better than those in the United States. The three said that the average Russian high school graduate has learned as much as the American college student after his second year, but when he reaches the graduate level he is on a par with his U.S. counterpart.

Gell-Mann went on to say that most scientific fields were not so far advanced as those of aeronautics and modern physics. He said, "High energy physics and aeronautics are being stressed because of their obvious prestige values." This viewpoint was substantiated by Horowitz, who said that the Russians are definitely behind the United States in the field of biology.

Greenstein was particularly impressed with the diffusion of Russia. According to him their libraries seem as complete and well equipped as well as being far more numerous than they are in this country. Highly technical books often sell better in their "pirated" Russian editions than they do in the country of their origin.

Greenstein said that there was undoubtedly too much compulsion in the program of mass education in Russia. Good students are forced to go to the University. Poor ones are given no chance.

Dr. Greenstein went on, "Russians are remarkably well educated in what is known. Yet, they have done little, if any, original work of import." This is part of the failure of their educational system. Many of the University graduates remain in the position of laboratory assistant for so long that they have no chance to do any original re-



AUFS Mexico Expert Visits Tech Campus

Dr. James G. Maddox, American University's Field Staff representative from Mexico, is visiting the Caltech campus this week to meet with a number of current affairs classes and sem-

An authority on the economics and agriculture of the Latin American country, Maddox has been emphasizing its rapid growth relative to other Pan American nations. Mexico is "not content with being only an agricultural and mining country, but is striving to become industrialized," according to the expert.

Mexico Is Proud

At present, "Mexico is proud," he reports. What does this mean in the waylof most prudent U.S. policy?

Maddox suggests that she wants capital in the form of loans and business investments, rather than outright gifts. Mexicans would like U.S. businessmen to establish companies in the country to employ the citizens, thus manufacturing the sorely needed goods for export.

As an additional step in this connection, Maddox advocates a reduction of tariff to encourage these exports and thus build the Mexican economy. He even suggests that, with our high rate of employment, we could help by making it easy for a number of Mexicans to enter the U.S. and gain employment.

They have technicians, according to Maddox, but could use assistance from some of the more highly qualified U.S. experts.

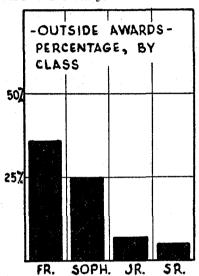
Agenda

Remaining on Maddox's busy agenda at Tech are speeches on Monday to two Econ 100 classes and the Y Undergraduate Lunch club. On Tuesday, he will dis-(Continued on page 2)

BOD To Propose New ASCIT Plan

Kirk-Godfrey Proposal Streamlines Government, Increases Participation

A constitutional amendment to streamline ASCIT operations and open the way for continued improvement will be placed before the student body by the BOD before the ASCIT general elections, according to Dick Kirk, ASCIT President, and Mike Godfrey, ASCIT Secretary.



Frosh Get **Bulk Of Awards**

It just doesn't pay to be an upperclassman, according to figures recently released by the director of undergraduate scholarships. This year \$187,000 was awarded by the Institute committee, and an additional \$97,000 by various outside sources; the final apportionment gives the frosh a definite edge, with the other classes usually coming out on the short end.

On a percentage basis, 62 percent of the freshmen received awards, while the comparable statistics for the other three classes are 57 percent, 47 percent and 47 percent. And, still looking at total figures, the size of the individual grants appears to vary inversely as the grantee's number of years in school. The average scholarship award for the senior class was \$664; for the juniors it was \$713; for the sophomores \$780; and the frosh, \$897.

Independent Donors

This year one hundred thirtyfour students received grants from independent donors. Breaking this total down, it represents

(Continued on page 6)

BOD Names Model UN Men

Six Techmen were named to Caltech's delegation for the Model United Nations which will be held late in April at the University of Washington. The BOD, at its meeting last Monday, selected Wally Baer, Brad Efron, Tom Jovin, Mike Milder, Cleve Moler, and Jim Wilkinson, after interviewing a field of ten candidates.

Bob Walsh had been previously chosen to lead the representatives, who will pose as Australians, attempting to proceed as actual "down-under" deputies would at the U.N. meetings in New York.

Pauling Presents Petition to UN

Caltech's Professor Linus Pauling, as spokesman for over 9.000 scientists from 43 nations, last week presented a petition to Dag Hammerskjold, Secretary-General of the UN, urging immediate action to suspend nuclear bomb tests. He was encouraged to circulate the petition as a result of the favorable response to his speech of May, 1957.

The petition expressed concern over the increasing dangers to human health and reproduction from radio-active fall-outs. The signers of the petition felt a special responsibility towards mankind since they understood best the dangers involved. They deemed it "imperative" to act immediately in stopping further tests.

Pauling's opposition to nuclear bomb tests stems from his belief that it is impossible to produce a "clean" bomb.

Pauling said that he was joined by over 33 nobel laureates and other members of the National Academy of Sciences of the United States, the Royal Society of London, and the Academy of Sciences of the Soviet Union.

There were some western scientists who told Pauling that nuclear bomb tests must continue in spite of radio active fallouts in order to thwart the Russian menace, he added.

Announcements

GOLF

All persons interested in participating in intercollegiate golf competition have been requested to meet in Scott Brown Gym Friday at 4 p.m.

EXAM

All undergraduates will take a two-hour series of experimental tests at 1 p.m. today. The tests, which are of the personality inventory type, will be administered in regular one o'clock classes, or in 201 Bridge for students having no one o'clock class.

Graduate Record Exam: An Insult To The Techman

The Educational Testing Service, the people who make up and administer the College Entrance Examinations, have a series of tests designed to evaluate the abilities of graduates (and near-graduates) in the various fields taught today. These tests go by the name of The Graduate Record Examinations.

Last weekend we sat for the Graduate Record Exam in Engineering. It was an insult.

It was notable that few, if any, of the problems were above the sophomore level. The most difficult mathematical problem was the following: "Evaluate the integral of x2dx from 1 to 3."—surely a test of the imagination and ability of the "creative type of engineer so urgently needed in our educational, governmental, and industrial development."

It was a source of considerable irritation to this writer that there were **no** problems on vectors or vector analysis; that there were no problems on orthogonal functions, fourier series, or boundary values (the words were not even mentioned); that there was a grand total of one electrostatics problem; that out of 150 problems, perhaps half were concerned with who was in charge of what in a factory, how many per cent return on an investment does a machine give, who was the inventor of stellite, and what are the dimensions of such-and-such a constant. This was evidently a test of one's knowledge of the pocket dictionary of scientific and technical terms, not a test of the abilities acquired during four years of college education.

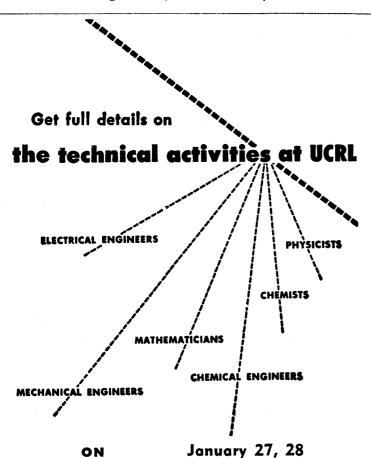
It is appalling to think that this very test is used as a basis for graduate admissions and fellowships in engineering.

Institutions such as the National Science Foundation who receive the results of this test will not receive a picture of the relative abilities of the men taking the test. It seems that remembering obscure facts is paramount to being able to get results in the eyes of the Educational Testing Service.

It is our feeling that either four years of "A" work in physics and engineering at Caltech is wasted compared to four years at the bottom of the heap at Podunk U., or the Educational Testing Service has been led down the garden path by their so-called engineering test committee, composed of men from all of the finer engineering schools (Caltech and MIT were not represented).

The Graduate Record Examination in Engineering is a test lacking even the faintest semblance of sophistication. It was with a feeling of unspeakable disgust that this writer searched in vain for any question which would represent a reasonable challenge to the graduating engineering student.

For the Caltech graduate, this test was quite an insult.



a UCRL staff member will be on campus to answer your questions about the scientific and engineering activities at the Livermore laboratory.

Work at UCRL covers a broad range of projects at the frontier of nuclear research. Managed and directed by some of America's outstanding scientists and engineers, the Laboratory offers umatched facilities and encouragement for young men who have ability and imagination.

Call your placement officer now for an appointment.



California Tech

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VENEZUELA

Marco Perez Jimenez, president of Venezuela, has resorted to a reign of terror in order to squash dissatisfaction with his regime. There were riots in the capital city of Caracas following a showdown between Jimenez and General Fernandez after which Fernandez was forced into exile and twenty percent of the officer's corps were thrown into jail. Fernandez had been made Defense-Minister after the New Year's revolt and failed in his try for power because a young officer's clique remained faithful to Jimenez.

France protested sharply to Tunisia after a French border patrol in Algeria was attacked from the Tunisian side and five prisoners were taken. Tunisia replied that there were neither belligerents nor prisoners on her soil. Premier Gaillard sent over French envoys, and President Bourguiba refused to see them. France was incensed.

Meanwhile, French agents seized enough arms to equip five battalions from a Yugoslav ship passing through territorial waters off Oran. Intelligence said the arms were bound for Algerian rebels.

FRANCE

France kept her Premier Felix Gaillard by only 20 votes on his extremely touchy proposal of keeping government spending and deficits within their legal limits by postponing payments to veterans until 1959.

INDIA India's second five year plan for industrialization and increased national income is failing miserably for lack of money. Nehru is looking for more than a billion dollars in help. The United States, especially worried about Russia's offers of aid, has agreed to help to the tune of a quarter of a billion dollars and a million tons of grain.

BUDGET

Eisenhower's budget reached 73.9 billion dollars for the 1959 fiscal year — one billion more than last year and the largest peacetime budget in history. Security received 64 percent of the appropriation. Other major expenditures included: interest, 8 billion; veterans, 5 billion; agriculture, 4.6 billion and labor and welfare, 3.6 billion.

The administration is still counting on an economic upswing to bring one billion more income taxes and balance the budget. It was also suggested that the limit on the national debt be raised five billion to 280 billion dollars.

AGRICULTURE

Eisenhower hopes to reduce the budget by setting farm price supports at 60-90 percent of parity, shelving a clause demanding higher supports as the surplus is reduced, and by maintaining the land conservation part of the soil bank plan to cut farm production. He is opposed by a large bi-partisan group.

ECONOMY

The economy is in a definite recession with drops indicated in the Federal Reserve Board's index of industrial production, personal income, and unemployment the highest in nine years. To stimulate an expanding economy, the Federal Reserve Board nas reduced the government U.N. Food and Agricultural or- lending rate to commercial banks from 31/2 to 3 percent, and the straight cash which must be put up to purchase stock from 70 to 50 percent.

Editor, The California Tech:

The forthcoming proposal for a revision of the ASCIT Board of Directors is, in fact, a timely step toward a new organization to replace one which, over the years, has become largely outmoded.

The basic effect of the proposed revision will be to reassign duties of the individual Board members on a logical basis, provide more efficient channels of information between the Board and other organizations directly concerned with student body affairs, and create a greater number of positions of responsibility within the ASCIT structure.

It is the intention of the proposal to increase the efficiency of the ASCIT government and to give a greater number of students the opportunity to supplement their academic training with valuable activity in the field of student body government and administration.

At the present time the Board is reviewing the details of the proposal. It is hoped that a final, constructive amendment will be prepared in time to be put to a vote of the student body before the coming ASCIT elections.

> Michael Godfrey ASCIT Secretary

Secretary's Report

MODEL UNITED NATIONS

The following people were appointed to the Model U.N. delegation which is led, this year, by Bob Walsh: Wally Baer, Brad Efron, Tom Jovin, Mike Milder, Cleve Moler, and Jim Wilkinson.

ASCIT FORMAL

Tony Iorillo was given an extension of his budget so that he may hire a big name, and high quality, band for the Winter Formal. The cost of bringing a nationally known band to Caltech will be about \$500 plus an admission charge of one dollar a person. Iorillo also stated that tuxedos will be required at the dance.

Michael Godfrey ASCIT Secretary

UNITED ARTISTS

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MEXICO (Continued from page 1)

cuss "Economic Progress in Mexico" with the H5 class, and on Wednesday he will lunch with the Geology club and will conclude his stay with a talk to an H124 seminar in the evening.

Maddox received his Ph.D. degree from Harvard, and also studied at the University of Arkansas, the University of Wisconsin, and the London School of Economics. He was secretary to the American delegation at the time of the founding of ganization, and was active in two Rockefeller Foundation agencies for aid of underveloped Latin American regions.



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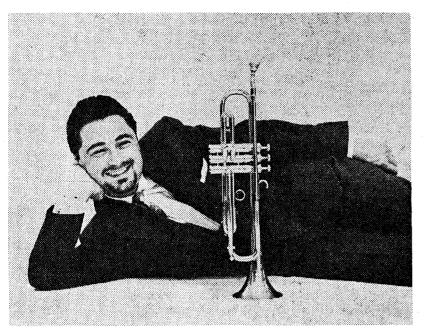
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the

Jazz



Shorty Rogers and his Giants

Jazz at Caltech

Jazz Concert, Jan. 31st, 8:00 in Culbertson Hall. Featuring:
Shorty Rogers, fluegelhorn
Bill Holman, tenor sax
Pete Jolly, piano
Ralph Pena, bass
Larry Bunker, drums

Throughout the first half of the fifties, the West Coast jazz scene was almost completely dominated by Shorty Rogers. The man behind the goatee is synonomous with the "West Coast school" of jazz, as Rogers' personality and musical views have influenced a host of young jazz musicians.

It is difficult to define comprehensively any trend in music, and the "West Coast" style is no exception. There are, however, some general observations that can be made. The bands tend to be small, numbering five or less musicians, and there is a wide variety of instrumentation. As a result of a constant search for "new" sounds, many unlikely instruments have been introduced to jazz, notably the flute, oboe, fluegelhorn, and cello. Too often, I am sorry to say, these "new" sounds have proven to be simply revoicings of old cliches.

Rogers developed a loosely swinging, highly arranged style of scoring the first choruses of songs, and also set the standard for original compositions. Almost everything is played up tempo, with only dreamy ballads to relieve the consistency of meter. There is a conspicuous absence of anything resembling the mood of a slow gutty blues.

Although many of his followers have degenerated into cranking out endless variations on simple chordal structures and calling them originals, Shorty Rogers continues to be somewhat a paragon of taste in the matter of composition. His tunes tend to be lyrical, intriguing, and contrapuntal in nature.

Rogers has made much more of a name for himself as an arranger than as a soloist, scoring the bulk of the arrangements for the local groups. Many trumpeters, however, have studied his many-noted fluegelhorn style.

Pete Jolly, who is currently the planist in the Rogers quintet, is one of my favorites on keys. With his right hand, he favors a percussive, driving, single line attack, with a minimum of variation in dynamics. It is his left hand, though, that gasses me! It's always working, punching out major sevenths, forming rhythmic patterns, and punctuating melodic phrases. Jolly needs little accompaniment, as he furnishes more rhythm than the average drummer, with his big left hand.

Ralph Pena, the bassist in the group, has endeared himself to my heart for his work in the Jimmy Giuffre trio. His bass lines are melodic and well worth noting.

I am looking forward to this concert mainly because of the presence of Jolly, who could make any group. I would expect the highlights of the performance to lie in Jolly's solos, and in the arrangements of Rogers, which are consistently nice. See you there;—bring your horn.

Lloyd Kamins

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This weekend was the scene of a party at the newly opened pad of Messrs. Conover. Conway and Ger Lawrence. Now picture a room in this pad containing all of these plus dates and various assorted couples. Front and back doors locked and the windows haven't been opened, the only other door in the room leads to the bed room. During the course of the evening Conway and his date disappear. Your job, find 'em. Beak Friday found them all right but in order to protect the guilty he won't say where they were or what they were....

Robbie's Right

Every morning bright and early one Robbie Snaildork toddles out of bed and down the hall to the head. Life is full of pitfalls at this hour of the morning and Robbie found one. Well gosh at five in the morning without your glasses and you're blind in one eye and can't see out of the other a fellow is liable to slip up. The end of the story is

that Robbie's roommates were awakened as Robbie sloshed back to bed in his stocking feet.

Dabney Frosh Revolt

Dabney's initiation chairman, John Cooper got sent to Vegas in a real original Frosh prank. It seems the Frosh got together and abducted John and took him for a little ride. First they took him out to eat sort of a last meal affair. Sly John slipped the waiter a note saying that he was being kidnapped and to call the police. Harry Spermus caught on and told the waiter that Cooper was a PCC Frosh and that he was going through initiation. Naturally the waiter took it in the light of gay fun and did nothing. Next stop the airport and a ticket to Vegas.

John wasn't through, he tried once more with the ticket girl. Cool head that he was he leaned over the counter and whispered in her ear, "Isn't it illegal to force someone to go across a

state line against his will in a public conveyance like an airplane?" The girl, thinking that he was being fresh told him to go home and ask his mother. Finally on the plane he was in a plight; no money to get back on. The end is sort of disappointing. He borrowed 25 dollars from a nice man who offered him some candy, and flew home.

Master Bate is playing tea party at two-bits a cup. Beak dropped buy and tried one. It wasn't too bad but tasted a little

Drop by and see Davie Troll-master's new cute green shoes. Are you ONE? Try Googies.

like some one took a both in it.

M. Bogot is looking for a rapid transit service to Quartzite Arizona. It seems that his car is stranded there and he can't get back. Next weekend should bring the fourth trip to see about it.

Reynolds Mother: "I didn't it would be that kind of party."



Ever meet a dreamer?

Frills instead of fundamentals are what interest him. In his future job he dreams of a carpeted office, a resounding title, an acre of polished mahogany to sit behind. Wide-awake men, on the other hand, look first of all for fundamentals — sound training, advancement opportunity, challenging work, professional associates, good pay. The frills will follow.

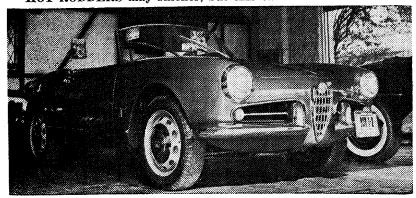
The Bell Telephone Companies offer such career fundamentals to wide-awake, ambitious young men majoring in the arts, the sciences, business or engineering. Why not make arrangements to talk with the Bell System interviewer when he visits your campus? And for more information about the careers these companies offer, read the Bell Telephone booklet on file in your Placement Office, or write for "Challenge and Opportunity" to:

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HOT RODDERS may snicker, but this car is hot for its size.



Pit and Paddock

by Kirk Polson

In late 1955 the Italian factory of Alfa Romeo started production on the Alfa Romeo Guilietta Spyder. The Guilietta was the first attempt of the Italian motor car industry to market a car in the under \$4000 class. The American public was enthusiastic in its response. The performance of this machine on the track and on the street has continued to keep its popularity high.

The Guilietta is a small car with a wheelbase of 87 inches. This gives it a tight turning radius; yet, unlike most short wheelbase cars its riding quality remains good. The four coil suspension system not only makes for a good ride but provides excellent cornering.

To the purist the engine is a thing of beauty. A four cylinder, 1300 cc DOHC engine developing 65 HP at 6000 RPM drives this car to a top speed of about 100 MPH. Zero to sixty time is about 15 seconds. The hot rod crowd may laugh when they think of the much better times they get with engines four or five times as large, but for this size car 15 seconds is very good.

The interior of the car is well done with leg room for six footers. Well-made leather bucket seats give the interior an overall look of craftsmanship and quality, something not found in American cars.

The gear box is a four speed job with a floor stick. Its only drawback is that its throw is a little too long.

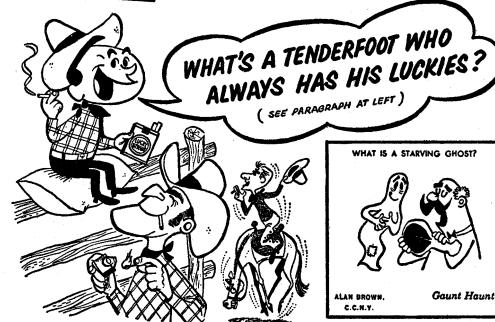
On the West Coast the base price is \$3295 but items like crating and tax bring this up to about \$3400. For anyone considering a car of this type and price range the Guilietta Spyder is a car high on the list of good investments.

Race Results

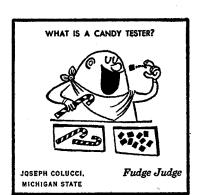
Last weekend the first of the Formula I races which count for the 1958 driver's championship of the world was held in Argentina. Stirling Moss, of England, took the lead on the thirty-eighth lap when Fangio had to make a pit stop to replace a bent wheel and never gave up the lead. Luigi Musso was second and Mike Hawthorn third both in Ferraris, while five-time world champion Juan Manuel Fangio finished fourth in a Maserati.

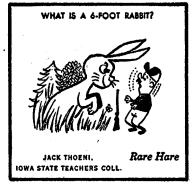


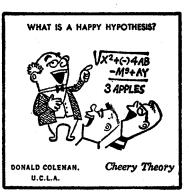
go without. Wash-and-wear chaps? Shock-resistant Stetson? Foam-rubber saddle? Nope, nope and nope. What you need is plenty of Luckies! (Figured we'd say that, didn't you?) Luckies, you see, mark you as a man who really knows his brands. Have 'em handy, and you'll be considered a Shrewd Dude! Dubious distinction, maybe—but you've still got the cigarette that's light as they come! Luckies are made of naturally light, wonderfully goodtasting tobacco, toasted to taste even better. Try 'em right now!

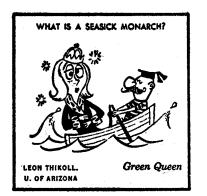


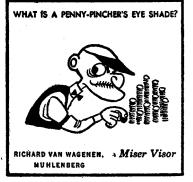
Do you like to shirk work? Here's some easy money—start Stickling! We'll pay \$25 for every Stickler we print—and for hundreds more that never get used. Sticklers are simple riddles with two-word rhyming answers. Both words must have the same number of syllables. (Don't do drawings.) Send your Sticklers with your name, address, college and class to Happy-Joe-Lucky, Box 67A, Mt. Vernon, N.Y.











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Heard From The Wings

by Joel Yelli

Chamber music, that part of the literature written for small instrumental groups, is difficult to perform but is quite satisfying to the listener when done well. The Los Angeles County Museum presents chamber music concerts every Sunday afternoon at 3. They are free and may be heard on KFAC.

Last Sunday's artists were the Amati String Quartet: Jeanette Violin and Mary Laporte, violins; Maxine Johnson, viola; and Gloria Strassner, cello.

On the program were the Beethoven Quartet Opus 18, No. 5, and Brahms' Quartet Opus 51, No. 2. The Beethoven was played with a certain reserved taste, avoiding an excess of dynamical emotion, while the Brahms work received a creditable execution. On the whole, the performers presented a far better than average recital of difficult pieces in the chamber repertoire.

*

EMIL GILELS, easily one of the foremost masters of the contemporary keyboard, makes his Los Angeles debut Wednesday, January 29, in Philharmonic Auditorium. Mr. Gilels recently made a very successful concert tour through the United States and also found time to make some fine recordings. His performance on RCA with Fritz Reiner and the Chicago Symphony of the Tchaikovsky B-flat Concerto ranks as the finest presentation of this much abused work, always excepting the older treatment, also on RCA, of Vladimir Horowitz and Toscanini. Mr. Gilels has also made a new recording of Beethoven's "Emperor" Concerto which will be reviewed at some later date.

THe FINAL event in Eduard vanBeinum's current concert program will be a performance on January 31 in Shrine Auditorium of Beethoven's great "Choral" Symphony with the Roger Wagner Chorale and soloists. This is a seldom played work whose presentation will be most interesting.

ONE OF THE more brilliant contemporary composers is Samuel Barber. The most frequently heard of his works are the "School for Scandal" Overture, and his difficult piano sonata, written especially for Vladimir Horowitz and recorded by Mr. Horowitz for RCA. Barber's First Symphony, a brooding melancholy piece, is usually neglected, but Howard Hanson and the Eastman - Rochester Symphony have recently recorded it.



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STRIKE

Rowdies Wallop Blackermen In Discobolus Football, 33-15

The time worn Discobolus returned to Ricketts from Blacker last week as the Rowdies downed Blacker in 6-man touch football.

On the first play of the game, however, Blacker scored on a screen pass. Ricketts scored three times by the half to make it 19-6.

The second half was marked by a safety, several fumbles, lost downs and lines of scrimmage, darkness and general confusion. Blacker made a safety by picking up a bad pass from center which glanced off Walsh and into the end zone. Some confusion resulted due to indecision on the part of the officials as to the status of the score. Soon after Blacker was called for roughing the kicker. Unfortunately, the line of scrimmage marker was moved, and so on.

The prettiest play of the game

was a delay pass from Walsh to Takido in the clear but for one man. Art beautifully side-stepped the defender while running for the TD. The rest of the game was played in semi-darkness to a final score of 33-15 with Blacker scoring again on their final

Throop has submitted a challenge in tennis, softball, and bowling. Ricketts has accepted in tennis and they look strong with Frank Cormia, John Walsh, Carl Morris and Clint Frasier backboning the team. Throop has Joel Yellin and sleepers.

The present standings: Ricketts, Fleming, Blacker 4 Dabney, Throop 0

Opinion

AS I SEE IT

by Dick Van Kirk

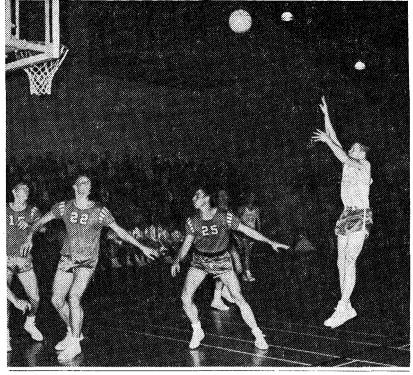
For the past two weeks, Coach Gene Rock's varsity basketball team has not posted a spectacular win-lose record. Playing against much taller opponents, the Beaver hoopsters seemed to be trying just a bit too hard to out-hustle their opponents into defeat. As a result of misdirected energies and hurried shots, the Caltech team lost two games last week by large margins.

A series of serious defeats can do a lot to undermine a team's poise and confidence, and Coach Rock stresses these items as essential characteristics of a winning team. With a better shooting percentage, a bit more of the polish that comes from competition against experienced opponents, and the same output of hustle and drive shown in their games thus far, the Beaver hoopsters will win their share of

As a final note on basketball for this column, I'd like to challenge any other college basketball team in the country to come up with a starting five whose tallest man is less than 6'1". This, of course, is the height of Caltech's two "big" men in the starting five, Glenn Converse and John Stene.

Track season is just around the corner, as the old saying goes, and the Caltech tracksters have started their pre-season workouts. Standouts from last season who return include Tony Leonard, school record holder in the half mile, Mike Rusch, ace distance runner, Larry Kraus, high jumper, and Ron Forbess,, promising quarter-miler.

Caltech figures to be weak in the weight events this year and strongest in the distance runs.



P-C, Oxy, LaVerne Defeat Tech Five; Record Now 3-4

Caltech's Beavers dropped three straight games last week, each defeat worse than the last. On Wednesday the Pomona-Claremont Sagehens traveled to Pasadena to open the SCC league with Gene Rock's crew. The visitors were hard pressed to a 72-63 win. On Friday, Tech's Arch rivals, the Oxy Tigers, came over and beat the Beavers 72-52. The next night, the casaba men traveled to LaVerne. LaVerne took this one, 89-36.

In the league opener, the Sagehens led all the way. The second half was very close with Tech scoring 37 points to the visitors' 36. Sonny Nelson and Fred Newman were high point men for the Beavers, scoring 17 and 16, respectively. For the Sagehens, John Nichols dropped in 22 during the evening's festivities.

Oxy Victorious

Tech rooters packed the Scott Brown gymnasium Friday night hoping to see a repeat of the victory scored over Oxy in football last year. They were disappointed though, as the Tigers, a full three inches taller than the Beaver squad, racked up a 72-52 victory. Early in the second half, Tech showed strong signs of catching up and even forging ahead, but with a mere two points separating the teams, the height advantage of Oxy began to tell and they slowly pulled away. Fred Newman again scored 16 points to become high man for the Beavers.

La Verne Game

Saturday night Tech received a 89-36 beating from La Verne. Eleven players scored for La Verne, six scoring eight points or

Test your

Bulldogs Host Beaver Five

League-leading Redlands hosts Caltech's basketball teams this Saturday, with the freshmen tangling at 6:30 and the varsity scheduled to start at 8:00 p.m.

Redlands boasts a well-rounded team which, though unspectacular, has a 2-0 conference record and won second place in the annual "R" tourney, having been narrowly beaten by local "rock." Paz-Naz, 47-45 in the final. They have a tall team and this bodes no good for Tech's "short five."

Height, (Sigh)

Height, of course, has been the big problem all year, but though height is the easy way to win ball-games, it is not the only way. Tech has some fine shooters, notably Sonny Nelson, Fred Newman, Bob Emmerling, and John Stene who can all score consistently from the outside. Also there is Glenn "Hooks" Converse, starting center, who led the team against LaVerne last

To put it rather cornily, a basket from the outside is worth just as much as one from the inside. Moreover a fast-moving spirited team keeps the opposition off balance. All-in-all, Redlands and any other future opponents will really have to work to beat the Beavers, and not all of them are going to do it.

SCC Standings

Redlands is now the only undefeated team in the league having beat Pomona-Claremont to take undisputed lead. Standings as of 1-20-58.

Team	\mathbf{w}	L	Pct.
Redlands	. 2	0	1.0000
Pomona	. 2	1	.667
Whittier	. 1	1	.500
Oxy	. 1	3	.250
Tech	. 0	2	.000

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Do you find the dimensions of a parallelogram more intriguing than those of an hour-glass figure?	YES NO
2. Do you believe that your studies should be allowed to interfere with your social life?	
3. Do you call off a movie date with the campus doll because somebody tells you the film got bad reviews?	
4. Do you think anything beats rich tobacco flavor and smooth mildness in a cigarette?	
5. Do you believe two coeds in your brother's class are worth one in yours?	
6. Do you feel that your college's dating rules are too lenient?	<u>, </u>
7. Do you prefer smoking "fads" and "fancies" to a real cigarette?	
8. Do you avoid taking your date to a drive-in movie because	

Have a <u>real</u> cigarette-have a **Camel**

The Barfly

by Monty

Of the many kinds of palatables considered by Tech students, that which is most often overlooked is wine. Wine is as old as civilization, and it is as puzzling as history. Here are a few suggestions concerning the possibilities of taking up wine drinking as a hobby.

Kinds of Wine

There are many sorts of wine, but only four broad categories: Natural still wines, such as claret or Sauternes.

Sparkling wines, such as Champagne.

Fortified wines, such as sherry.

Aromatized wines, such as vermouth.

Wines are either red, pink, or white. Most red and pink wines are dry (lacking added sugar). Port is the sweet exception to this rule.

American Wines

There are two kinds of American wines, native wines and California wines. The native wines are grown in the East, on vines peculiar to that district, and are not widely circulated. The vines from which California wines are taken were originally imported from Europe, and Caliofrnia wines are generally modeled after their European counterparts. The label of a California wine does not indicate its contents, but rather the type of grapes which were used to make it. The top ranking California grape varieties are: Riesling, Johannisberg, Semillon, Cabernet, and Pinot Noir. A drinkable domestic wine cannot be purchased for 69c a gallon, but should cost in the neighborhood of \$1.00 or \$1.50 a bottle.

Most wine drinkers will agree that French wines are the best

SCHOLARSHIPS (Continued from page 1)

36 percent of the freshmen class, 25 percent of the sophomores, 71/2 percent of the juniors, and only 5 percent of the seniors. Looking at it from the other side, however, the trend is reversed. The total of 254 Institute scholarship holders represents about 44 percent of the seniors, 40½ percent of the juniors, 35 percent of the sophomores, and a mere 33 percent of the frosh class. Insofar as numbers are concerned, the freshmen top the list for outside awards with 68, and the juniors are in first place from the Insttiute with their 69.

Any way you look at it, Techmen are better off than most; an average Caltech scholarship is over twice the national average. More than half of the student body has won scholarship aid

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in the world, for they are the product of many generations of skill and labor. French wines are named for the district in which the grapes were grown, and are further subdivided according to experts, the finest wines in the world are produced in a small area, no bigger than Rhode Island, called Bordeaux.

French wines may be either a blend, or better, they may be the "chateau-bottled" variety. When buying a wine of one of the famous vinyards you can be sure you are getting a good wine. When buying a French wine an uncertainty arises, which is not present in the purchase of an American wine, and that is the problem of the year. The following is a short run-down of the better recent years for wines.

Red Bordeaux: 1945, **1947**, 1949, 1950, 1952, **1953**.

White Bordeaux: 1945, 1947, 1949, 1952, 1953.

Red Burgundy: 1945, 1947, 1949,

1952, 1953.

White Burgundy: 1947, 1950, 1952, 1953.

Champagne: very touchy, vintage years are safest, and most expensive.

The best chateaus are: Margaux, Haut-Brion, Latour, d'Yquem, and Olivier.

German Wines

German wines are excellent, but are not as easy to obtain in this country as the French ones. The best German wine districts are the Rhine and Moselle regions. The character of a German wine is determined by the manner in which the grapes were picked, and a list of the terms used follows.

Auslese — made from selected fully ripe grapes.

Spatlese — grapes gathered late in the season.

Beerenauslese — made from the very ripest grapes.

Trockenbeeren auslese — made from semi-dried grapes.

Wines labeled with the first two terms tend to be dry, while those labeled with the latter are very sweet and rich.

Fortified Wines

The most suitable wines for consumption by Tech students are the fortified wines. Not only do they contain more alcohol, but they may be kept for a longer period after they have been opened. Sherry should be from Spain, and Port should be from Portugal, neither should be from California. The flavors of Ports and Sherries vary greatly, and personal tastes are best decided by trial or in conunction with a competent liquor dealer.

Serving of Wine

There is a great deal of superstition and mystery involved in the serving of wine, and many people avoid drinking wine simply because they are afraid of making a social error. Most inexpensive wines can be drunk with almost anything, particularly the California varieties. The rules of wine-drinking were made with better wines in mind, and they apply only to those which are worth the trouble.

First, wine should be stored, on its side, in a cool dark place.

Second, wines which are aged in the bottle throw down a sediment, and should therefore be poured carefully, and NEVER shaken.

Third, red wines, and fortified wines should be served at room temperature, whereas white wines should be chilled.

Fourth, food eaten with wine should not overpower it, and the wine should fit pleasantly with the food. Generally, it is best to drink red wine with dark meats or highly spiced foods, and white wines with more delicate meats or deserts. Champagne can be drunk with anything.

Good wines are easily obtainable, and well worth the effort involved. Wine is like a woman, for it offers consolement during particularly hard Strong problems, as well as a pleasant companion for ones lighter moments. Unlike women, wine should be shared, for it leads to pleasant philosophical discussions and the solutions of the world's problems.



Sales Representative Gene W. McGrew came to IBM following his military service after college. Here he reviews his progress and tells why the electronic data processing field offers one of the most exciting sales careers in America today.

What's it like to be with IBM ?

Gene McGrew won a scholarship and went through Princeton in the top third of his class... managed varsity track... commanded an artillery battery in Korea. "When you put a lot of preparation into your career," Gene McGrew feels, "you should look for a lot in return."

Out of the Army in 1953, he discussed IBM with a sales representative. It sounded like real opportunity. After an interview with an IBM branch manager, Gene McGrew was sure. Although sales was only one of many jobs he felt he could handle, this kind of selling (IBM machines are as much an idea as a product) would enable him to capitalize fully on his education, experience, and talents. He's learned also that "no other form of training or career development I can think of provides such diversity of experience in all phases of business and industrial activity. This kind of training and experience develops top business executives."

Thus began an extensive and interesting training program marked by merit salary increases. The first three



Outlining programming test

months of the training course combined introductory machine schooling and observation of branch office operations in Pittsburgh (his home town). The next three months were spent studying the application of the Company's data processing machines to major phases of accounting in business, science and

government. With this background of know-how, Gene McGrew was ready for seven months of practical field training, during which he became a real contributing member of the sales team, working with a succession of experienced salesmen in a variety of situations with many different customers. With this experience behind him, he was ready for IBM's famous sales school, a final five-week polishing course in selling techniques.

Receives first assignment

Upon the successful conclusion of this course he was given his long-awaited first sales assignment, his own territory near Pittsburgh. This territory was comprised of some fourteen companies presently using IBM equipment, together with many companies who were logical potential users. Gene McGrew's job is to assist his customers in achieving maximum efficiency through the use of their equipment, as well as to help them ex-

tend its use to new applications. He is also responsible for the development of new business. His biggest sale

was to a large industrial corporation. Now installed, this IBM electronic system simplifies various major phases of the customer's accounting work. His fine job with this customer resulted in the expanded use of equipment and the ordering of three additional



Discussing customer's installation

medium-sized data processing machines. He is now working to develop the sale of one of IBM's largest computers, the 705, to another customer.

Future wide open

"Advancement opportunities in IBM," Gene McGrew says, "are excellent, as you'd expect in the leading com-



Checking out new client's system

pany in a dynamic and rapidly expanding industry. Ahead of me on the sales management advancement road are nearly two hundred Branch Managerships, seventeen District Managerships, and numerous executive positions at the Regional and Headquarters level in five different divisions."

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