New gym formally dedicated; Musselman, DuBridge speak

Scott Brown Gymnasium was officially dedicated in a half-hour ceremony during the Caltech-Lon Beach basketball game, the first in the new structure, Tuesday afternoon, Janu-

ary 13.

H. Z. Musselman, Director of Physical Education said the formal dedication is as much a dedication of the students as it is of the new plant of which the gymnasium is part.

Albert B. Rudoff, Chairman of the Board of Trustees, followed by a brief talk in which he gave the floor to Dr. Lee Dubridge, President of Caltech. Dr. DuBridge spoke of the history of the gym, its planning, gathering of sufficient funds, and the construction following, and noted the help of the students whose estate helped in a large part to pay for the gym and for whom the building was named.

Jim Adams, ARCST President, seconded the motion of the board of trustees. The audience in attendance for the Alumni Swimming Pool is planed for Saturday, April 14, in connection with the Alumni Seminar held on that date. Details will be announced in detail later.

Help! Help! Rivet coming

The Hot Rivet, a weird hybrid which is rapidly growing from a special issue of the California Tech into a full-sized hamburger store, was brought to Pasedena last year and launched its second term this year, and publication date of the first issue is about a span six times larger.

Writers are badly needed, they said, not only to write for the Hot Rivet but also to serve as models for young writers. Readers are also needed, they said, to serve as models for young readers.

Frosh choose class officers for this term

Froshmen class elections will be held this week to replace those appointed at the beginning of the year. Four new class officers will be elected on Thursday, Janu-

ary 21.

The running for office will be nominating a froshmen class meeting held last Thursday, January 13.

At this time the officials and candidates are:

President—Richard Kirk, Dave Leven, and Sam Young, assistant president—Ed Krehbiel, Herbert Noack, and Leonard Van Kampen. Secretary—Ron Leonard, Zach Martin, and Mich-

ael Risch. Treasurer—Jove Blackie and Vince Taylor. Ath-

letic manager—Clark Ross and Howard Hillon. Board of Con-

trol—Ken Collins, Alan Forshythe, Richard Neville, and Jan Steeman and Tod Whittmore.

Dancing classes conducted tonight

Dancing classes will be held tonight at Caltech. The be-

ginning class begins at 7:15 and the advanced class at 8:15. There is still room for more students in both of the classes.

Little Caltech gets its name in the papers as coach, lab, and airman get written up

"Well, young man, so you're going to Caltech? And you think you like San Luis Obispo? What kind of agriculture are you going to learn there?"

Technicians who are sick and tired of hearing this kind of foolishness from strangers on tramps. boys, plowmen, yachtsmen, railroad workers, and bar-

bers, will now be glad to hear that Caltech is getting nationwide publicity.

During the past month or two, in fact, up and down the country, have carried articles about the California Institute of Technology which could come on the fingers of one hand (if you have small hands).

California, Spanish and Russian, and the Christian Science Monitor are the only ones which your reporter could grab up on short notice, but the News Bur-

männer has others on file.

Probably the most widely read of these articles was the piece done for the Saturday Evening Post by Caltech's hall coach, Bert L. Lautzhammer. This item appeared in the Dece-

mber 25 issue under the title "Big Time Football is Not for Him." It was ghost-written for Coach Lautzhammer by someone with the inspiring name of Melvin Durig, whose "cousin" style is so "casual" that your reporter just let Bert write him it.

Sports fans who look at Tech's season losing streak generally feel sorry for Mr. Lautzhammer. He points out some advantages of small-time football which is as eas-

ily beckoned by the rabble. But, True, an athletic scholarship is something which other schools hand out to guys who flunk out of C.I.T. or to guys who would flunk out of I. C. T. if they came here. True, the coaching assis-
tants are fewer here by a factor of at least five.

Still and all, Mr. Lautzhammer can sincerely list half a dozen real significant and logical reasons for playing which is football in which is the SCIAC. The coach doesn't have to look through the alumni rolls to have to scout around high schools for promoter; he doesn't have to look to the practice field (wist gates!); and he has to give his best shot even if he does have a few bad sessions.

Collier's found out about this article and they countered two articles in a row, but with a story about Caltech's Earhart Plant Research Laboratory. Not only are they going to try to keep the trouble of visiting the Earhart Lab—it is a lot of trouble because of the stric-
tures kept on atmospheric condi-
tions, etc.—but those who have, according to Collier's, will wit-

(Continued on Page 4)

Contest to take place in new gym; Interhouse Sing Trophy at stake

The second annual Interhouse Sing will be held in the new gym February 14 at 7:30, according to plans announced last week. The Interhouse Sing Trophy, now shared by Dabney and Ricketts, will be given to the house which sways for "Cindy" as the contest number to be sung by the houses for judging.

In addition to "Cindy" each group will be allowed ten minutes for extra entertainment. Contest officials have announced that "anything musical" is suitable for this part of the program.

As an added treat for particip-
ting in both Interhouse and Pub-

toon, houses in en masse will sing the oldest known college song. "Guu-
demus," written by Mr. Old Profa-

sham, director of the Caltech Choral Society and Mr. Ex-

vagas, the Alma Mater will conclude the program.

As was the case last year, fifty percent of the house mem-

ber must participate. The con-

test number must be student-

directed.

It is claimed that this year each participation including the use of an adding machine will be taken to prevent the recurrence of the last year's mistakes, when the trophy was errone-

ously awarded before re-

checking the judges' tallies.

Talks due on India, biology

"India, the Implications of Co-

existence" is the topic to be pre-

sented by Dr. Charles N. Stearns at a Y Graduate Luncheon Forum in the Caltech-YMCA on Tuesday afternoon. Dr. Stearns, a frequent guest speaker at Tech, is professor of world religions at Harvard.

Your Future in Biology

Dr. Arthur Galston comes to the Frosh Lunch Club next Mon-

tday to discuss "Your Future in Biology," a subject in which the geologist counters this biology by talking to the student at his lecture, Career in Geology." The Frosh Lunch Club meets at noon at the training table in the student house basin.

The Y Graduate Luncheon Club will meet next Monday, as usual, at the training table. The speaker for this week has not yet been announced.

Atmospheric topic of Friday lecture

"The Earth's Atmosphere" will be the subject of this week's FRIDAY LUNCHEON DEBATE, which will be held tomor-

row night at 7:30 in 210 Bridge.

Dr. Oliver Wolf, Research As-

sistant in the Department of Physics, will discuss the composition and extent of the earth's atmosphere, the move-

ments of the air, the formation of clouds, the surface, and the effects of ultra-

sound waves within the atmos-

phere. Experiments will also be performed illustrating several of the points made in the dis-

cussion.

The student member of the U. S. Weather Bureau, who has Ph.D. at Caltech in 1928,
Victims of the Cold War

On the Caltech campus is a Chinese physicist forbidden by the United States Government from leaving. Although this man and 34 others, including a Caltech electrical engineering graduate, are not held in prison, by presidential order they cannot return to the United States and are obliged to report their presence in this country every three months. This injustice has transcended domestic courts and recently reached the body of the United Nations itself, when an appeal was made soon after Christmas. Mar's Case

Mr. Han Ying Ku left his home in China over six years ago to come to America for study in physics. He is now employed by the Caltech physics department and works in the sublevel basement of Engineering. Like 456 of the 500 Chinese students then in the United States, at the start of the Korean War, Mr. Ku wanted to return to China. However, under a presidential order declaring a state of emergency which authorizes the government to regulate the departure of aliens, 121 of these Chinese, the technically trained men, were sent home prohibiting their exit because it was felt their technical training would be a benefit to a hostile power. Since then, 62 of these changed their mind, 27 actually returned, leaving 35 Chinese essentially imprisoned in America.

While these people are technically trained, such as Mr. Ku, and Dr. Hsu, the Caltech graduate, they are not working with classified material, and one, a woman theoretician at Berkeley, is doing no work for fear of losing her chance for exit. Although they came to the United States on student's visas, intending to leave on completion of their education, many have earned their degrees and have been permitted to hold jobs while awaiting a change in status. This year, 31 of these still desiring to leave have been sent to a state-run internment camp in Utah.

The alternatives: jail or leave. Detaining these people is an act of bad faith and contrary to the United States Government to return home. However, under a federal law, the State Department has denied considerations for their case.

A Question of Justice

All this leads to a very important question: does the United States have any more right to detain these innocent civilians than China does to keep our much-disputed fliers? Mr. Ku, like the others, came to the United States as a guest and has become a prisoner. Detaining him is a flagrant violation of individual freedom.

Modern Odyssey

Some of the group left wives and families in China and have therefore already endured a painful separation for many years. All of them share the plight of not being able to use their training to help their people, of being dispossessed, and, virtually, wasting the best years of their lives.

First Friendly Assistance

In keeping with our democratic tradition of dissemination of knowledge, America has been able to assist these Chinese to an extent. None have worked with secret military information and it is doubtful that the security of America would be endangered were they to return. Is Chinese technology a major threat to our country’s research program?

Detaining these people is an act of bad faith and contrary to the sacred American ideals of freedom.

It’s not too early

With this issue the Tech again begins its annual tradition of printing the interview schedule. It is considered to be materially of interest to seniors, telling them when representatives of different companies will be on campus to interview seniors interested in employment after graduation. Most interviewers are interested in taking only to seniors, and hence those who are not about to join the ranks of the graduated usually skip over this list.

But it’s never too early. In one short year juniors will find themselves just where the seniors are now: they must have made the decision between grad school and employment, and if they choose the latter they must have some ideas of what companies to work for. Sophomores and freshmen have a little more time, but the decision is a hard, long one to make; by starting now they have enough time to look into the matter thoroughly.

For the graduate, the choice of an employer means the key to success or failure. Much is up to his own efforts, but if he chooses the wrong company, no amount of effort will move him very far. There is no one company that is “the one” for everybody, and there is not any “sure-fire” method for choosing the organization that is right for you.

But if the undergraduate begins in advance to find out what companies are interested in hiring men in his particular line of work, and what the job opportunities with the various companies are, he will have a double advantage when second term of his senior year rolls around. First, he will have a better idea what he wants and hopes to get and to the company representative is bound to be impressed by the fact that he knows what the score is, and consequently he may get a beter offer. Start now to follow the interview schedule and get seniors’ reactions to interviews; it’s a priceless opportunity.
Astronomers see red shift but no light reaches Fried

(By Jerry Fried)

No, the cosmos aren't invading—"red shift" refers to an astronoumical theory, the shift of spectral lines of distant galaxies toward the red end of the spectrum, which means that the galaxies are moving away from us.

After twenty years of the study of the spectra of distant galaxies, Dr. N. G. M. Mayall, Lick Observatory, and Dr. Milton Humason and Allan R. Sandage, both of Mount Wilson and Palomar Observatories and Caltech, has come up with some new evidence supporting the theory that we live in an expanding universe.

Dr. Sandage said in a report to the American Association for the Advancement of Science that each galaxy studied seems to be receding from all others and with a speed directly proportional to its distance from us. (Would this mean that its star constellations are as good as mine?)

The reason that the spectrum shifts to the red when a galaxy is moving away is supposedly that as it recedes, its light waves are stretched out and thus appear longer—more toward the red end of the spectrum. (This explanation seems rather peculiar to me, since I seem to remember something in one of my froh physics lectures about relativity causing the light waves to appear to be the same length no matter where the observer is or how he is moving relative to the light—this was supposed to be due to the shortening or lengthening of "the light yardstick" to compensate for the motion of the light-produce object. If what I was told about relativity is true, then how could the "red shift" theory hold? This is all very confusing to me freshen. Ah—to be a senior and know all.)

According to Dr. Sandage, the farther away from the earth a galaxy is, the more the light waves from them are shifted toward the red end of the spectrum. This indicates, according to that crony mixed-up red theory, that the farther a galaxy is, the faster they are moving. The amount of shift indicates that the speed is directly proportion-

al to its distance from the earth.

Distances to the different galaxies are calculated by observing brightness and using the inverse-square relationship. While this too seems rather odd to me (how do we know that stars aren't just naturally brighter on the other side of the universe?), I hesitate to challenge the good professors, inasmuch as they de-


Another interesting development is the arrival of the Automatic Production line, which has been given its chance to grow, to find the work and the engineering problems involved, like Alspach, each
trol complete systems. Automation is a way of manufacturing based on the continuous-flow concept. Products will be made, inspected, assembled, and packaged by a series of integrated ma-
chines in one uninterrupted flow. As industry evolves toward greater automation, more workmen will become skilled machine spe-
cialists or maintenance experts able to control complete systems.

Phil Alspach and the men under him now draft layouts for automatic systems, tackle the engineering problems involved, design automation equipment, and even build some.

23,000 College Graduates at G.E.

This is a big and important job. Alspach was ready for it a careful, step-by-step pro-
cess. The development of the good of G.E.'s 23,000 graduate-employee concept is given his chance to grow, to find the work he does best, and to realize his full potential. People of long have come to believe this: When fresh young minds are given freedom to make progress, everybody benefits—the individual, the company, and the country.

Trapnell voted sailors' proxy

Fritz Trapnell, a Caltech jun-
ior, was elected president of the Pacific Coast Intercollegiate Yacht Racing Association. He was elected at an association meeting held on December 19 at the Newport Harbor Yacht Club.

On the two preceding days the meeting the association held its annual Pacific Coast Championship. Regatta. Teams from ten west coast colleges took part in the regatta, which was also held at the Newport Harbor Yacht Club.

Trapnell and ten Wann skipper-
red the Caltech boats with Chuck Hall, Gordon Barlenbrook, and Dick Lewis as crews. Our team was bandied of lack of experience in Leham dignities, which were used for the regatta but managed to outgux FPC and the University of Wash-
ing.

First place in the regatta was captured by Stanford, San Diego State and Pomona were a close second and third.

Caltech team's next meet is January 16 at Newport Har-
bor, where they will be opposed by Orange Coast College.

Tech aero prof predicts big advances in aviation

Within the next 50 years, any place on the globe can be reached in a day," says Dr. Arthur Klein, Professor of Aeronautics at Caltech.

In a recent talk at the Golden Anniversary Meeting of the S.A.E. Dr. Klein made a number of bold predictions on the future of aeronautics. Within the next half-century, we should expect the following things to happen:

Flying speeds of 10,000 miles per hour will be common, making any place on earth only a day away.

The helicopter will come into widespread use. Although the helicopter poses a much greater safety problem, its tremendous convenience will make it desirable. Its full utilization awaits only improvement in reliability and safety, and a reduction in cost.

In 50 years aircraft airplanes will be as reliable as today's telephone. Our present instrument flying system will be replaced by something less burden-

some, and the pilot will be given a 3-D type of presentation so he will have a natural view of the situation.

We can expect a great deal of progress in metallurgy "since the metallurgists are just beginning to come out of their kitchens and do their thinking at desks." Structural alloys should be twice as strong as those we use.

Dr. Klein also addressed him-
self to the question of education of tomorrow's engineers. "The engineers of the future will be much better educated, having a solid foundation in the basic ac-
tes, and in addition he will be given a background in eco-
nomics, industrial management, and psychology. He will know that all devices fail, and will recognize that he himself is prejudiced and will accept sug-
gestions even if they come from disagreeable people."

"Education to prepare the dis-
ing engineer for his job will consist of an academic training roughly equivalent to the pres-
et day Ph. D. plus an intern-
ship under careful supervision."
Choice of Parents
Choice of Wife
Choice of Job

You don’t have any choice on the first and very little on the second...

On the third however, it’s strictly up to you — a poor choice can throw you years behind your classmates and a good choice can put you years ahead.

At Chance Vought, young engineers (Aeronautical, Mechanical, Civil and Electrical) have every opportunity to make a mark for themselves in the industry that places the greatest value on engineering skill and ingenuity.

The very nature of the modern aircraft — its immense complexity and its never-ending development — presents technical problems that are unparalleled in any other field of engineering.

The chart illustrates two things; first, the extent to which our work involves the various engineering and scientific specialties and second, the scope of the opportunities that exist for the young engineer.

For more information regarding these employment opportunities please contact your placement office in order to arrange for an interview with our representative when he is on campus, or write for a copy of “Your Career With Chance Vought Aircraft”.

Address:

We invite you to discuss your career opportunities in the aviation industry with us. Contact your placement office today for an appointment for your interview with Sam J. Townsend, Chief of Propulsion, Chance Vought Aircraft Engineering Personnel Representative, who will visit your campus January 17 and 18.
Diego Wiberg conduct a graduate course and

Visiting prof to teach astro

Dr. Ludwig Biermann has been appointed visiting professor of astrophysics at Caltech for the current term by the board of trustees.

One of the leading theoretical astrophysicists on the European continent, Professor Biermann comes to Caltech on leave of absence from the Max Planck Institute and the University of Gottingen in Gottingen, Germany. He is in charge of the astrophysical section of the Max Planck Institute. At Caltech he will conduct a graduate course on the astrophysical theory of stellar magnetism and plasma physics.

He is a specialist in problems connected with the interaction of electric and magnetic forces with ionized matter in hot stars, or in interstellar space. He has studied such diverse problems as the method of acceleration of the cosmic rays in space by using magnetic fields and the problems of the production of large magnetic fields in space by the turbulent motions of the interstellar gases.

There is something to be said Intend to make one. More experienced players than M. Navroth would probably have seen more early in the hand that 12 tricks would develop and would have found some way to lose two more than he did. In fact, it is only fair to point out that the partnership that made six had only 21 high-card points as against the defense’s 10.

Though for the thought: In general, when playing for money, it is better to have all the Goren than none at all.

Tech biologists raid Pacific for specimens

(By Purves and Howell) A group of Tech biologists, with their usual aplomb, ventured forth on a field trip last weekend which showed that field trips, besides the academic interest derived therefrom, can be a lot of fun. Dr. Davenport, professor of biology at the University of California, Santa Barbara, and last summer’s visiting professor of zoology at Caltech’s zoology course at Corona del Mar, made arrangements with the Oceanarium at Palos Verdes and with the Scripps Institution of Oceanography at La Jolla to accommodate some of his students and former students on the excursion.

The Oceanarium (a major engineering project itself), has a fascinating collection of fishes, sting rays, porpoises, spiders, crabs, et al., displayed in two gigantic tanks. The tanks, one circular and one oval, may be viewed from four different floors, three underwater and one above. From the “stadium” on the top floor one can watch the porpoises playing catch with the spectators, using a volleyball and a small rubber ball, or leaping some nine feet out of the water to take food from the feeder’s hand. Besides these two tanks there are a number of small tanks containing exotic tropical fish. Very shortly there will also be a large octopus grotto which is to contain a few very big octopi.

From Palos Verdes the group travelled to Corona del Mar so that the Santa Barbara students might see the marine laboratory — summer resort where Caltech biologists write away their summers.

And then on to San Diego. While the spoiled UCStanleys roomed at a plush motel in La Jolla, the frugal Techmen slept on the living room floor of Jay Glaser’s house in Ocean Beach. Arriving bleary-eyed at the Fort Rosecrans naval base, the eager scientists set sail (fig.

Continued on Page 8)
Big magazines stoop to publicize Caltech

(Continued from Page 1)

One of the toughest problems in modern science, the possible hazards of high-energy radiation, was discussed by Tech geneticist Dr. A. H. Sturtevant in an address here last Tuesday.

The two general types of radiation pointed out by Dr. Sturtevant as hazardous for human beings were direct radiation burns suffered by individuals in the immediate vicinity of intense radiation, and the long term genetic effects caused by radiation-induced gene damage.

The relation between radiation dosage and genetic damage is extremely difficult to measure. "No scientist interested in exact quantitative results would touch the subject were it not that its social significance leaves us no alternative. We must either not, or try to get some idea of how much, of what, is happening to how many people."

The genetic interest in high-energy radiation artists, he said, from the fact that radiation (acting through germ cells) increases the frequency of mutations in the genes. Some of the factors which the geneticist must consider are: There is almost no threshold value below which radiation is ineffective in inducing mutations, the effects of successive exposures are cumulative.

Edie from natural background radiation which is always present and about which nothing can be done, radiation doses may come from bomb fall-out and medical X-ray exposure.

The Danger

Discussing the "maximum permissible" radiation exposure set by the International Commission on Radiological Protection, Dr. Sturtevant said that if the entire population were exposed at this maximum rate continuously (say, as the result of atomic war) that the result would be about one-third of a million in-fants born annually with harmful gene mutations, in the United States alone.

The reckless use of medical X-rays was condemned as being, in much of the world, a far more effective "radiation artist" than is radioactive fallout. He urged caution for anyone who submits to an unusually large number of medical radiation exposures.

Speaking on more general aspects, he said: "It may seem that this is a negligible proportion (his figures on genetic damage due to fall-out) and it should be emphasized that--no individual should be practically disturbed by the probability that his immediate descendants will be affected. But, from a humanitarian point of view, any increase at all in the number of individuals that are defective mentally or physically is not to be lightly dismissed."

A final note of warning was made by Dr. Sturtevant: "The medical uses and the fall-out danger are different not only in the amounts of radiation involved, but also in some ethical aspects. An individual does not usually have to submit to an X-ray examination or treatment, and when he does the irradiation is administered for his own personal advantage. But we are all of us subjected, willfully or not, to fall-out and while it may be argued that some of this is for our ultimate advantage, it must be recognized that we get fall-out from atomic bombs as well and that the rest of the world gets it from Russian and American bombs alike."

Lucky Droddees! Loads of 'em!

WHAT'S THIS? For solution see paragraph below.

(A.T. Co.)

Howard Tobey, pupil of John Maynard, claims to have discovered a new method of making tobacco taste better. He was inspired by the Droodle above, titled: "What are your Droodles?""WHAT'S THIS?"

We pay $25 for all we get.

STUDENTS!

EARN $25!

Lucky Droddees are pouring out at the rate of over 10,000 a year. We pay $25 for all we get, and for many we don't. So send every original Droodle you can think of, with its descriptive title, to Lucky Droddees, P.O. Box 87, New York 46, N. Y. Address: Lucky Droddees, San Francisco 11, Calif.

STUDENTS ARE ECTSTATIC about Luckyies. That's the word, straight from the latest, largest college survey ever. Again, the No. 1 tobacco. Luckyies taste better. All of the leading brands, coast to coast -- border to border -- Luckyies taste better. They taste better, first of all, because Lucky Strike means fine tobacco. Then, that tobacco is toasted to taste better. This famous Lucky Strike process tones up Luckyies' taste, as Dr. Sturtevant has said. So be smart, like the student in the Droodle above, titled: Lucky smoker swinging in hammock. Swing to Luckyies' self. Enjoy the better-tasting cigarette... Lucky Strike.

Better taste Luckyies...LUCKIES TASTE BETTER...Cleaner, Fresher, Smoother!
Tech wins in new gym

Coach Carl Shy's Caltech cagers returned to winning ways Tuesday afternoon with a thrilling, 65-46, overtime victory over Long Beach State College. It was a hard-fought victory for the Beavers who were playing their first game on their own court of the season. Long Beach spectators who turned out were not disappointed.

Close Contest

The game was tightly contested all the way and at no time did one team hold a substantial lead. Both teams were cold in the first half and at the intermission the score was tied at a low 22-22 figure. The second half was just as close at the first, when the Beavers grabbed a 57-55 lead in the final minute and regained possession of the ball, it looked like they had the game won. But not yet, for a Tech player drew a foul andFoerster of the visitors sank two free throws to tie the game up.

Moody Saves Tech

In the overtime period Caltech doubled two points behind at 60-58. Then Donald Moody scored on two gift baskets to send the contest into another overtime. But in the second extra period, Tech was not to be denied as Conley and Moody backed field goals to give the Beavers a four point lead and put the game on ice.

Tech Center Phil Conley scored 26 points for high point honors while Kohler had Long Beach's top of 15.

Frosh cagers win second straight game

(By Bob Walsh)

Caltech's frosh cagers sprouted to a quick twenty-point lead against Occidental at Oxy on Wednesday at 3:30 p.m. and glided to an easy 87-53 victory.

Tech scored a second in succession for the undefeated first-year men, Guards Ron Mann and Sonny Nelson scored a total of fifty points, 29 and 21 respectively, and center Glenn Converse sank seventeen. Don Wiberg netted nine points and Dick Van Kirk matched the lone floor game with eight points.

Oxy Next

Smooth free throws and good shooting point to the possibility of a winning season. Next test is in two weeks at Oxy. Usually has a good team, says Carl Shy. Oxy tended the game by Pomona with a large margin. They can be expected to put up tough game; however, Bell and Whitaker are considered to be the top frosh teams in the conference this year.

Wiberg Whacked

Wiberg received a blow on the nose that forced him to leave the game temporarily, but he returned to the game and played most of it despite another whirl on the tender protrusion. He is a smooth, fast-moving basketball man in high school and is virtually learning the game, but hard work is paying off and he may become of some help to the varsity in a few more years.

Marson Deadly

Marson sank 11 free throws of his other 20 points came on set shots. He has a sharp eye and can handle the ball well. Last year he scored for Beverly Hills High School.

Nelson, a starter on last year's championship West Phoenix High team, scored his 21 points largely on fast-clogging and set shots. "Hooks" Converse acquired the nickname in this game as he is able to find things worsted for most of his 17 points. His play of the boards was very good, as was Van Kirk's. The team rounds well for its height.

Kraus Motor Company

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Service on All Foreign Cars

Special to All Aztec Students and Faculty:

A FREE 6-MONTH LUBRICATION CARD FOR ANY FOREIGN CAR, COME IN AND GET YOURS

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Reserves

Of the reserves Jim Stedman played well, replacing the wounded Don Stockton. Don Stockton totaled two points and Larry Berry added a free throw to round out the Tech scoring.

Press Box (*) NOTER: I was impressed by the spirit and sportsmanship of the Chapman student body ... Kay Sugahara played only about a minute but proved a very colorful figure ...

The game started half late because of difficulties in finding the school but everything went smoothly afterwards.

Cagers split pair with nonleague opponents

Tech edged by Chapman

Caltech's varsity basketball team returned to action last Saturday night after a month's layoff and suffered a heartbreaking 61-62 defeat at the hands of Chapman College. The visiting Beavers led 62-61 with five seconds to go in the game, but Al Chavez of Chapman got the ball at that point and dropped in a layup to put the home team in front. He was fouled on the act of shooting and sank his free throw for the final point. Tech had one more shot before the gun went off, but it was short.

Early Leads

Things looked bad for Tech from the very start of the game as Chapman grabbed a quick lead. It was only Rolland Moody's accurate shooting that prevented the home team from running away and at halftime the score was Chapman 36, Caltech 25.

(Continued on page 8)

Tech cagers face busy week

Tech meets Oxy tomorrow night at Oxy in the second league game of the season. The Tigers have a well-balanced team led by deodee Bob Henry and Lyle Swenson, a good rebounder. They also have Dick Soode, a 6'7" center who has been hitting the hoops pretty consistently lately. Oxy lost to Redlands by one lone point in early season play, and then turned around and beat the Dogs by three, so Tech has a fight on its hands.

Saturday night the Beavers travel to San Dimas to meet the Cal Poly quintet. That is the team that Caltech beat 67-38 in the first game of the season, but it looks like the score is going to be a lot closer this time.

Pomona comes into town Tuesday night for the first conference game in Scott Brown gymnasium. The Sagehens are in the middle of a winning streak, but Tech figures to give them a tough time.

In the new year, Caltech students will sit in the south bleachers and will be more convenient to enter the building via the gates at the end of the building. Students should not use the main entrance.

A Campus-to-Career Case History

“Always something new”

“Different types of work appeal to different men,” says Donald O'Brian (A.B., Indiana, '50), in the Traffic Department with Indiana Bell Telephone Company. “For me, I’ll take a job that keeps me hopping. And that’s just the kind of job I have.

“You’d think that after two years as a telephone engineer, or with Bell Telephone Laboratories, I’d be bored, that I’d have all the variables pinned down. But it doesn’t work that way. When you supervise telephone service for thousands of different customers whose needs are always changing, there’s always something new coming up.

“I started with Indiana Bell in 1952, after two years in the Army. My training program exposed me to many different kinds of telephone work—customer contact, personnel, accounting, operations. I saw a lot of jobs which looked as interesting as mine. As much as I like the kind of work I’m doing now, I bet I’ll like my next spot even better.”

Don’s enthusiasm for his job is pretty typical of how most young college men feel about their telephone careers. Perhaps you’d be interested in a similar opportunity with a Bell Telephone operating company, such as Indiana Bell...or with Bell Telephone Laboratories, Western Electric or Sandia Corporation. See your Placement Officer for more information.
Biologists go to Scroobies

(Continued from page 5)

It will be taken to Costa Rica. On board are facilities for the examination and preservation of both live and dead specimens.

The entire excursion on Saturday was run solely for the benefit of the visiting students and faculty of Caltech and the University of California at Santa Barbara. This was a nice gesture by Scroobies, especially since the cost per day of such an operation is about $75.

The return trip to San Diego was quite exciting, and then someone would cry, "There she blows!" and they'd-be
everal whales a few thousand yards away, swimming for air. And churning back into the harbor at its full speed of 12.5 knots, the boat attracted the attention of a school of persons, each of whom entertained the passengers by swimming (immediately ahead of the bow doing barrel rolls), peeling off simultaneously in pairs, and occasionally leaping into the air.

The day ended at 5:00 p.m. when the ship docked and every one disembarked, though the only score still readable with empty "refreshment" cups, tertained themselves and the potential score. A certain (40 cents) of light green toilet paper, chloroform was really five rolls at its full speed of 12.5 knots, the boat attracted the attention of a school of persons, each of whom entertained the passengers by swimming (immediately ahead of the bow doing barrel rolls), peeling off simultaneously in pairs, and occasionally leaping into the air.

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painter Jordan Belson, will also be on the program with the U.P.A. cartoon, "The Emperor's Cloths.

The film in the series, to be shown on February 25, will be "A Streetcar Named Desire" starring Marlon Brando and Vivian Leigh, who won the academy award for her performance in this film. The story is concerned with the mental and physical breakdown of a middle-aged prostitute in the environment of the New Orleans slums. The short on the airplane is a new Warner Brothers cartoon "Figs is Pig's done in typical U.P.A. fashion.

The following tickets term this week, and individual tickets at the door at the reduced price of 35 cents.

TECH EDGED

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Coach Sly must have shot some adrenaline or something into the troops during the intermission for it was a different team that took the floor for the second half, and the officials called a lot more spirit and soon caught up with the Pac-10 frontrunners.

In the final analysis, the game was all of the last 20. At one point, the Bears had a 12" lead, but Caltech came back. Chapman guard Rick Hollander scored 14 free throws and made good on 20 of them. Tech, on the other hand, could connect only 18 of 34 charity shots.

Caltech center Phil Conley led all scorers with twenty-four points, while Don and George Madsen each had ten for Tech. Smith, who was 8-for-12 from the field, added 18 points. Davis, do youOn board are facilities for the examination and preservation of both live and dead specimens.

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