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This Is Your Problem, Navy

What is to be done with the ITSA funds? Faced with this question, and with the determining question of, will the navy support it, and that means support it financially, a long and heated debate marked the regular ITSA meeting last week.

While the ITSA has set up two committees to determine what will be done with the present reserve fund if the navy does not support it, they have done nothing to find out whether or not the navy will support it. It would appear at this time that they disfavor the idea, but they may change their minds. An assembly should be held in the very near future where the pro's and con's of the issue can be aired. Then a vote could be called for, with the will of the majority deciding the issue. If the majority want the ITSA, then all navy men would have to support it. The fees could be deducted from their pay checks.

If the navy disfavors support, then the entire reserve fund of the ITSA should be put in trust until the return of a greater number of civilians. There can be no question about this decision. One, after all, does not build up a \$10,000 fund over a number of years and then hand it to a non-contributing group so that they might reap the benefits of it. The civilian students will not allow such action to take place.

Certainly, one thing that is not expected next semester is that the remaining civilians carry the burden by paying for themselves and their fellow students in blue. The minority cannot be called on to pay the check for the majority's needs.

The next question to arise is whether or not the ITSA should continue as the student governing body. Most certainly it should. There will always be a need for such a group where the student can meet on common grounds with the faculty and administration. Of course, the field of the ITSA activity would be greatly restricted, but it would still be a necessity.

At this stage, it would be well to point out some of the confusion that may exist if the navy does not support the ITSA. Under such conditions, both the Integral and the *Technology News* would go on a voluntary subscription basis. Until sufficient numbers of students had subscribed, work on both publications would have to cease. Since many students are reluctant to take the time to pay for such items, publication of this paper might be suspended for several weeks. In addition to this, some other means would have to be devised to pay for the necessary expenditures of the athletic teams, of the orchestra and intramural events.

Certainly there will be no group to finance the ASSC, and there will be no group willing to back a dance such as the Navy Ball. There will be no group willing to lose \$1,200 on such a thing as the Navy Ball. If there is to be a dance, the money will have to be ready beforehand if the students wish to enter into a contract with a band or ballroom. There appears in the offing a drought of social activities during the next few semesters.

What will happen is dependent upon the navy. Their stand should be determined this week.

—H. BURKART

Junior Week Fashions



Research Reports—

Nash Delves Into Stresses Beyond the Elastic Limit

(EDITOR'S NOTE: This column will present each week a brief report of the various research projects being carried on at IIT. Since *Technology News* is the student newspaper of a technical school, these articles will be of a more technical nature than would be possible in an ordinary newspaper, but they will nevertheless be written in such a manner as to be accessible to the majority of the student body.)

The condition of structural members after being stressed beyond their elastic limit is being investigated by William Nash, research assistant in mechanics. Nash received his BS degree in civil engineering at IIT last February. He is working under the supervision of Dr. Le Van Griffis of the mechanics department, on a project for the Chicago Bridge and Iron Company.

It is well known that up to a certain point the elongation of a metal bar subjected to tension is directly proportional to the force applied to the ends of the bar. This point is called the elastic limit. When the load is further increased, the elongation is no longer proportional to the force and the bar is said to be in the plastic state. Very little is known of the actual stress and strain conditions that exist after the elastic limit has been passed. The case of a bar subjected to end forces causing only tension, one of the simplest cases in the plastic region. When a specimen of metal is subjected to stress in more than one direction, the problem becomes increasingly difficult.

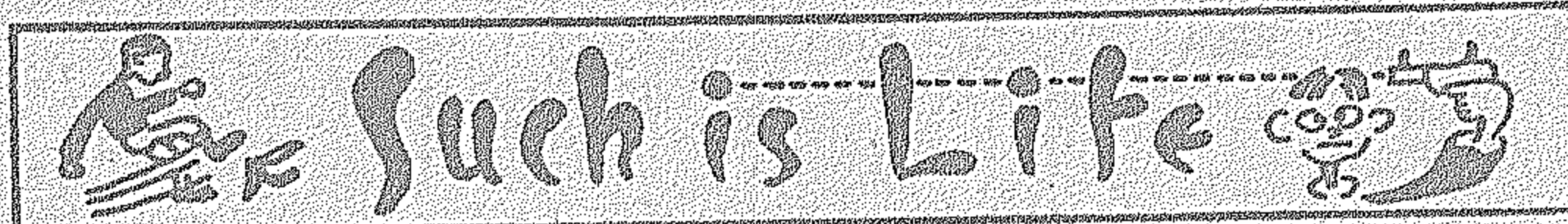
Many structural and machine members are often in a state of plastic stress, although they are seldom designed as such. Due to a demand for more knowledge by machine designers, structural engineers, etc., more must be known of exactly what happens after the elastic limit has been passed.

One common example of a structural member in the plastic state is a water tank, formed of cylindrical sides and either a conical or

ellipsoidal bottom. The tank, after completion, is first subjected to an initial internal pressure of twice the actual pressure that will exist in it when it is filled with liquid. This pressure is then removed, but it will be found that the part of the tank at the junction of the cylinder and cone has suffered some permanent deformation, i.e. it has not returned to its original shape or size. This difference probably will not be noticeable to the eye. The metal at the junction is said to have been deformed plastically.

After the tank has been placed in service, the internal liquid pressure again gives rise to stresses at the junction. These stresses are still more difficult to analyze, because they are affected by the initial plastic deformation of the material mentioned above, that is, there are "residual stresses" in addition to the stresses set up by the fluid pressure. This is the specific problem of the Chicago Bridge & Iron Co.

Approximately a year will be devoted to an analytical study of the fundamental problem. This will be supplemented by experimental work. A thorough study of the literature of previous work done in the field of plasticity is being made, as a prerequisite to any original work.



Yup, the life of a newspaper columnist ain't what its cracked up to be. How'd you like to be faced with a blank piece of paper, and not have a single printable thought in your head. You have to pound out 250 words about something you hope will interest the public, but when you get through with your effort, it looks as if the Russian army had walked through it with their shoes off.

The guys who hack out the stuff for the big dailies must lead a hell of a life. But they get paid for it, I suppose, so it helps feed the baby and pay the income taxes. The odd thing about newspaper columns, though, is that the big dailies buy

them, not for their prestige, but because they are cheap. We have all heard that a big-time writer has a salary ranging into hundreds of dollars a week, but this is due to the appearance of his or her column in about a hundred papers each day. If you figure that the writer makes half a grand each week, with 100 subscribers every day, it figures out that the poor jerk gets only one U. S. dollar per column per paper. If that isn't cheap, what is?

Yup, such is life. A dollar a day. A million days, a million dollars, but a million days is about 300 years, and who wants to wait for 300 years for the draft board to make up its mind?

Oh, that Navy Ball! What an affair! The biggest in ages! Could have anyone resisted? I saw that all of you had a bit of that verve and vigor for a violent affair. It seems that all that is seen at present is that sparkling eye after a rampageous evening. From what we found out, plans were formed in those calculating minds for that night of hectic romance.

It seems that these boys with their girls from out of town really had some gay times. Especially some of those who had arranged for a room for their women.

From what was sniped out we found that Bob Petrillo, Wesley Muthig, Dick Graham, Charles Hendries (and those I have not yet put the finger on) came back to the apartments and had a drink or two. Many of them claim to have had an interesting time playing cards (that new game Shauff-koph). Oh these engineers! They are the gay boys. Most of the others spent the evening trampling thru the various night clubs in the district whooping it up and I mean that. Ray Bojonowski, Charlie Smith, Vernon George and Bob Anderson really whooped it up. A few of them found navigating quite unfavorable. I hope they didn't keep those gay young ladies out so long that they yielded.

But I really feel sorry for those lads who were financially unstable and had to return home early for night clubbing is the thing. However, if I know these engineers they enjoyed themselves just as well if not better. All and all it was swell to see those smiling satisfied faces with their gorgeous women in arm. Those ravishing formals were very tempting to the eye and it was swell to see such a fine gathering of beauty.

A/S Riesinger of House 5 seems not satisfied with his three beautiful females. He has to rub it in with the rest of the boys by having them meet him in front of the house in a huge Buick convertible.

It's rather hard to understand why some guys always wait around until the last minute to do things. A/S Jack Marsh is the kind of a guy who waits until the telephone begins to ring before he answers it. He waited until last Thursday night before the Navy Ball to begin to get a date. It began to look bad, because most of the girls resented Marsh's suggestion that they wear a red, white, and blue formal to go with the corsage he had already ordered. But one girl finally consented—she ripped up an old Uncle Sam costume her brother had once worn in a play!

Beta Nu fraternity announces initiation of new member, A/S Bob Hammack. It seems that the Mississippi Kid would rather pound a typewriter than take calisthenics in his P. T. class. Hammack has been making the Aragon regularly to meet a certain slick chick, too.

One of the chief duties of James R. Cavanagh seems to be that of keeping the wolves away from his secretaries in the War Training Office. The manpower shortage being what it is, the secretaries show little cooperation in this work, thus creating just about the most difficult job on the campus for Cavanagh.

For conduct unbecoming to naval officer candidates, two men, members of the IIT V-12 Unit, have been recommended for the rank of SSNO (Smallest smallest naval operators). They are A/S Bill Cannon and A/S Wendell Omer of Quarters No. 7. Both claim the record of never having a date since their arrival to Chicago last July. However, they say that this is not because they are SSNO's but actually because they are remaining true to their respective fair friends in Salt Lake City. Maybe so, but, 11 months is a long time to be dateless.

A/S Wesley Spear, the "Grant Park Gladiator" of Quarters No. 7, has of late developed the title of "homewrecker". It seems that he struck up a "fairly platonic friendship" with an engaged young lady whose spouse to be is off to the wars. Everything was fine in a "purely platonic way" of course when the above mentioned young lady announced, with star light in her eyes and a smile upon her lips, that the engagement is off and that she is again available. We wonder what Seaman Spear's next move will be. However, we all must wish him the best of luck.

Those gay old M.P.s on patrol who let no obstructions hinder them, and drive over coal piles just because they are in the way, have nothing on Bill Krone. If anyone saw him barrel around in his little coca-cola truck, they would surely sign him up for M.P. service.

—BROTHER ALOYSIUS