



School Sponsors Free Movies In Union Saturdays

Bringing the romance of science and engineering to the living screen, Armour Tech will inaugurate, on April First, a series of movies to be held each Saturday afternoon at two o'clock in the student union auditorium. Films will last from an hour to an hour and a half.

Complete cooperation from several large industrial firms has allowed three or four films to be secured for each program. The main purpose of these movies is to permit high school seniors to become better acquainted with the Institute. For this reason programs have been sent to all of the Chicago high schools. However, any who are interested are welcome to attend.

Subjects Cover Many Fields

Promising an interesting variety of topics, the programs for April have already been made out. On schedule for April First are four pictures—"Wonderworld of Chemistry," depicting the daily phenomena of the test tube; "Gems of the Rockies," a panorama of the national mountain highways; "We Drivers," vital data on safe driving; and the "Fourth Kingdom."

On April Eighth will appear a picture on automobile engines entitled "Where Mileage Begins"; "Where Champions Meet," a fishing picture; and an Underwriters Lab films showing the various tests and experiments performed to reduce fire hazards. "Chilled Car Wheels," a new type of railroad car on which the rims are frozen will be one of the films presented on April Fifteenth. The other two shown on that date will be "Safety's Champion," featuring Ab Jenkins, one of the world's ace racing drivers; and "Algonquin Waters," a fishing picture.

On April Twenty-second Armour will run "Flow," a film dealing with valves to control liquids; "Safeguarding the Speechways," methods of testing telephone lines; and "Diesel—the Modern Power," new developments in Diesel engineering. Climaxing the April programs will be four interesting films on the Twenty-ninth. They are "Science Save the Surface," the story of paints and varnishes;

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Cycle Features Photo Section

During the first week of June, this year's Cycle will be distributed. Several difficulties have prevented the presentation of the annual at the usual time—Junior Week. One of the problems was that of obtaining individual pictures of the members of fraternities. Another was the indefiniteness of the name of this year's Cycle. The alternate name suggested was the *Techhawk*. These problems have held up the printing of many of the manuscripts, and also the final settlements of cover contracts, etc.

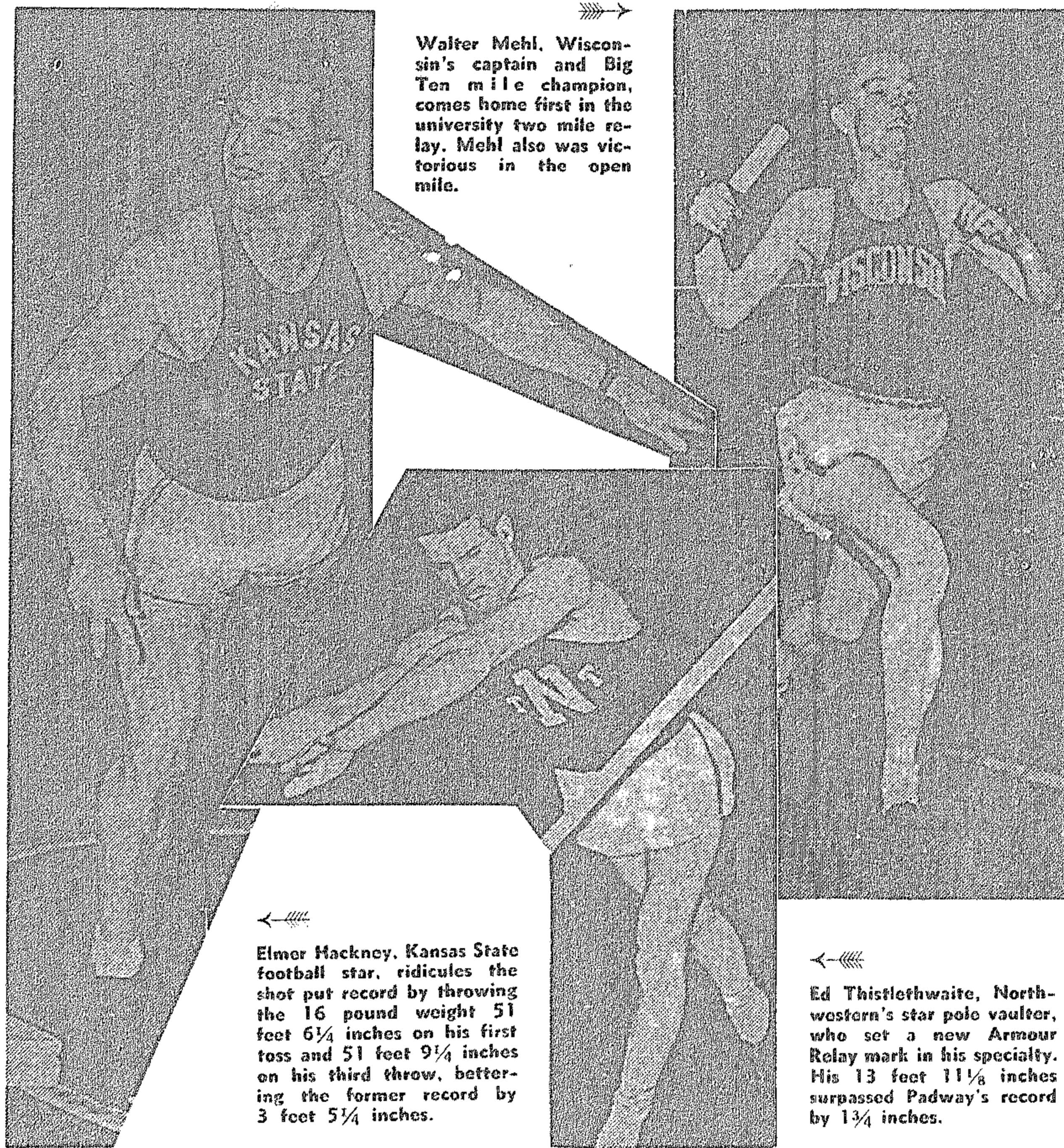
Innovations this year will be an enlarged snapshot section, and lots of two-color effects. Daniel Jacobson has worked hard to increase the number of pictures and also to reduce the quantity of manuscripts.

The pictures of the classes are arranged with that of the class officers first, followed by a picture of an event which was typical of the class during the past year. This will be followed by the pictures of the body of the class.

Group sports photographs have been taken from an unusual angle, giving unaccustomed depth to them. The portions devoted to the publications contain photographic reductions of recent copies. These features count for the fact that the Cycle will be the largest issue so far published.

The staff has been welcoming suggestions made by the students, and any person with a definite and well thought out plan for possible improvement will find a ready audience. The office of the staff is located in the rear part of the alumni offices.

Stars Shine at Tech Relays



Walter Mehl, Wisconsin's captain and Big Ten mile champion, comes home first in the university two mile relay. Mehl also was victorious in the open mile.

Elmer Hackney, Kansas State football star, ridicules the shot put record by throwing the 16 pound weight 51 feet 6 1/4 inches on his first toss and 51 feet 9 1/4 inches on his third throw, bettering the former record by 3 feet 5 1/4 inches.

Ed Thistledwaite, Northwestern's star pole vaulter, who set a new Armour Relay mark in his specialty. His 13 feet 11 1/4 inches surpassed Padway's record by 1 3/4 inches.

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Four Records Broken, One Tied As Michigan Normal Takes Title

Hackney, Smashes Shot Put Mark

Record breakers have had their nights but seldom have they enjoyed such disregard for limits as they did last Saturday evening at the Eleventh Annual Armour Tech Relays. In all, four records were broken while a fifth mark had two names added to its list of holders.

The first mark to hit the sidelines before the spectators had had time to be seated. Here Elmer Hackney, football star from Kansas State University, threw the 16 pound weight 51 feet 6 1/4 inches on his first effort in the qualifying round. This feat not only broke the former record of 48 feet 4 inches but was itself bettered when Hackney tried a third time. Fifty-one feet, nine and one-quarter inches were traversed before the weight hit the ground for what was the longest toss made by any athlete in competition this year. It also bettered by 7/8 of an inch the Big Ten indoor record set last week by Watson of Michigan.

Kauffman, Shelton Tie Record

While Hackney was smashing the shot put record, two sprinters were busily engaged in an effort to lower the minimum time for the 70-yard dash. In his semi-final heat, Kauffman, Wisconsin's star sprinter, planted his name alongside that of Grieve of Illinois, Johnson of Illinois State Normal, (Continued on page three)

North Central Second; Grinnell Third

Armour's "Night of Stars" proved to be truly a night of stars when four old records were broken and one tied in the eleventh annual running of the Armour Tech Relays at the U. of C. fieldhouse last Saturday before a large and spirited crowd. In addition to the record breaking that went forth at the meet, North Central, the victor in last year's games, was prevented from retaining the title by the all-around ability of the Michigan State Normal team, who scored in every event with the exception of the 70 yard dash. The three leading teams of the evening were close all the way with the finals events deciding the winner. In winning the team trophy Michigan Normal, who scored 21 points for a third last year, scored 56 1/3 points, North Central rated a second place with 42 points, while Grinnell showed a lot of strength to cop third position with 37 points. Armour was not able to repeat last year's performance when they scored a fourth, but were able to garner only 2 1/3 points.

Although no trophies were awarded for team performances in the university division, Marquette by unofficial count was high scorer of the evening with 56 1/2, followed by Wisconsin, 50 1/2; Kansas State, 32; Illinois, 25 1/5; Northwestern, 19 1/2; Michigan State, 14; Chicago, 11 1/2; and Nebraska, 6.

Fenske in 4:12.5

In the special mile event Fenske ran against Deekard of Indiana but not able to better the time which was established in the Tech Relays of last year when he covered the distance in 4:08.9. Last Saturday, paced by his teammate Dick Cooper, Fenske led his opponent, Deekard, all the way and broke the tape in 4:12.5. Another teammate of Fenske, Walter Mehl of Wisconsin, brought the crowd to its feet on several occasions by his great running. Mehl put on a spectacular finish to win the one mile open. After holding back for most of the race, Mehl came up fast in the final lap to pass Pedler, Western State Teachers, and break the tape. Running as anchor man in the university 2 mile relay and the university sprint medley relay, he showed his superiority by distancing

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A.I.T. to be Host At Second Annual Power Conference

Design of Small Plants To be Discussed

Chicago's famous Palmer House will be the site of the second annual Midwest Power Conference sponsored by Armour Institute of Technology on April 5, 6, and 7. Last year's conference director, Dean Grinter, will head the conference again this year. Cooperating with Armour Institute will be seven other colleges in this vicinity. These are: Iowa State College, Purdue University, University of Illinois, Iowa State University, Michigan State College, and the University of Wisconsin.

Twenty-five topics covering various phases of power engineering will be discussed at the conference in an effort to make the program as complete in its scope as possible. Steam, diesel, electric, and hydraulic power will be the principle topics discussed, and special papers will be presented on them. The results obtained by L. W. Wallace of Crane Co. in laboratory researches will form the basis for a discussion of new spheres of industrial and commercial applications and methods.

To Tour Research Lab

The A.S.M.E. and A.I.E.E. will cooperate with the Conference in two special luncheons Wednesday and Thursday of the Conference week. On Friday an inspection trip of the Armour Institute Research Laboratories will be made. This will be followed by a visit and luncheon in the Crane Co. plant.

Mr. F. Elwell of the Buick Motor Division of General Motors Co. and Mr. G. A. Gaffert of Sargent & Lundy Co. will present a paper on the design and application of small power plants. Discussion will follow this paper. The social aspects of diesel power will be presented by Mr. L. H. Morrison, editor of "Diesel Power," and the technical aspects of diesel power will be covered by Mr. C. G. A. Rosen of the Caterpillar Tractor Co.

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Armour Alumnus Wins Hero Award

Bruce A. Young, M.E. '13, has been awarded a Carnegie Hero Medal. He is one of two Chicagoans who have received this award for risking their lives to save others from drowning. The medal is awarded to those who perform outstanding feats of heroism at the risk of their own lives.

While passing through Douglas Park on March 5, 1938, Mr. Young saw two small boys break through thin ice on the lagoon. They were about 90 feet from shore and in about 10 feet of water. He had to swim through an open channel to rescue the boys, Sidney Richer and Ezra Aranoff, ages 8 to 11 respectively. After diving for one of the boys, he held them both with one hand and swam to shallow water.

Mr. Young is now Assistant Superintendent and Chief Engineer at the printing plant of R. R. Donnelley and Sons of Chicago. He is a member of Delta Tau Delta.

New Lab Acquired For Sewage Study

Armour Institute has acquired a new laboratory to be used by students of the day and evening classes engaged in the study of sewerage treatment and water purification. Included in the equipment of the laboratory is an "iron filter" capable of purifying enough water for a town of from 600 to 800 people. This system is also used for removing the dissolved oxygen from the water.

Attending the evening classes are engineers who represent some of the largest industrial plants of the city. It is the purpose of these classes to train the men so that they will be able to treat the polluted water in such a manner that if it enters the lake it will not affect the drinking water.

Dr. Mohlan, Chief Sanitary Chemist of Chicago, is the instructor of this course. He is also the editor of the journal entitled "Sewerage Work."

Terzaghi Gives Talk on Earth Pressure Work

"Earth-pressure Theories" was the title of a lecture given before the graduate division by Dr. Karl Von Terzaghi last Tuesday evening, March 14, in Chapin Hall. Some of the more prominent men of engineering were in attendance as well as all members of Dr. Peck's advanced soil-mechanics class.

According to Dr. Terzaghi there are two fundamental earth pressure theories—the empirical theory and the scientific theory. The empirical theory concerns retaining walls, foundations, and embankments and was developed by Coulomb in 1780. Coulomb was an army engineer at the time and most of his data was developed primarily from his field observations.

The scientific theory was developed by Rankine in 1850 to get rid of an inconsistency in Coulomb's work. Coulomb, it is said, did not take into account the fundamental equilibrium equation that the summation of moments about any point are equal to zero. Rankine also developed a mathematical treatise on the same subject.

During later years a number of simplifications were made. The work of Professor Karmin generalized Rankine's theory. From a study of these data Dr. Terzaghi made two important conclusions—one, that Coulomb's theory for active earth pressures was only correct for practical engineering purposes—two, that a modification was necessary for passive earth pressures.

Dr. Terzaghi is consulting engineer for the Chicago subway. He was a guest of the graduate school and, with the aid of the aforementioned theories, lectured at length about the design of high retaining walls, location of tunnels in hillsides, and the design of bulkheads. Dr. Terzaghi, who is now with M. I. T., recently made the headlines in the daily papers for his soil testing work in loop area.

W.S.E. Proposal Near Solution

Formation of the much discussed Armour branch of the Western Society of Engineers has taken a concrete form, following a meeting held last week in the Student Union. Two representatives from each Armour engineering society formed a committee to discuss the problems which have harassed the organization in its early attempts to organize.

Revising of the by-laws occupied the major portion of the meeting, for this raised much controversy in various departments. Each section of the by-laws was taken up separately and restated to the satisfaction of all.

One of the important objections concerned the article providing for unlimited assessments on members of the society. This article was changed to provide for an annual payment of \$2.50 per organization. The fee will qualify all members of each society to full membership in the Armour Branch of Western Society of Engineers. Freshman students are excluded from formal membership in the branch.

A board of managers composed of two members from each of the component organizations will govern the society and elect from its body a staff of officers to preside over the affairs brought before the society. Representatives will be elected by secret ballot within each group. They are to be seniors and will be elected during the first few weeks of the second semester in the Institute's program.

Seniors To get Second Chance To Buy Jewelry

Seniors who have not yet ordered their rings or keys will have another chance to make a selection on March 27 and 28 in the main building lobby. A large variety of distinctive jewelry is available at prices ranging from \$5.00 to \$13.75 for the rings, and \$4.00 to \$6.25 for keys. Well made, the pieces are of ten karat gold and may be obtained in onyx, ruby, spinelle, sardonyx, and other finishes. Only half the payment is required when making an order, the rest being due by the time delivery is made, thirty days later. Seventy men who placed their orders two weeks ago can expect their rings or keys to arrive by Easter.

Seniors Hold Second Dance Saturday Eve

Again Armour's seniors have selected the Student Union as the site for their class dance, to be held next Saturday night, March 25, at 9:30 p.m. in the main auditorium. Since bids may be purchased for only one dollar, and many dancers are expected a limitation has been placed on the number of couples attending. Only 250 bids are in the hands of the committee members, and when these are disposed of, no more can be had. The entire Student Union will be available for students and their dates. Several additional waitresses will be on hand to handle the soda fountain trade and the lounge, which is always well populated during any dance in the Union, will be in shape to receive the guests.

In starting this series of inexpensive dances, the seniors are attempting to encourage more social affairs in the Student Union. The price is so reasonable that everyone can afford it, and those that remember the old Mission building are practically unable to resist the opportunity to "show off" their new social center.

The committee in charge of affairs, and from whom bids may be purchased, are: B. G. Anderson, chairman; Tom Collier, Irv Footlik, Bill Chapman, Russ Kotol, Sig Moleculeski and Ed Mitchell. Don't forget, it's NEXT Saturday night!