fund-raising, lobby try TSA plans

By RICHARD CHAMBERLAIN **Battalion Staff**

oter registration drives on member ises, lobbying efforts concerning affecting Texas college students and aising plans were discussed at the meeting of the Texas Students As-on Saturday at Texas A&M Univer-

A&M chapter of TSA will conduct er registration campaign in late Seper or early October, said Jerri Ward, tudent government vice president for nal affairs at A&M. The University of ton is planning a three-day cam-, beginning August 30. Most er campuses will conduct similar

he past, most registration drives at consisted of a few tables set up in Memorial Student Center, with unered students having to go to them. ear, however, the Aggies will try to mething more imaginative, Ward

The weather

Partly cloudy and hot through norrow. High today 98. Low night 73. High tomorrow 98. o rain. Wind southeasterly 12 mph.

said. Just what action might be taken has not yet been decided, she said.

The student organization is working for the passage of a bill which would establish a fund for educational grants. The fund, to be known as the Texas Assistance Grants, would contain \$3 million the first year and \$5 million thereafter. The bill has passed a Texas Senate committee on a 7 - 6 vote. Texas has the second highest unmet financial need in the nation, behind New York.

Students want control of fees

TSA supports legislation that has been proposed that would give students control of the allocation of the student services fee. HB 2060, if passed into law, would require that student governments on state-supported campuses determine budgets from the fee. The budget would budgets from the fee. be subject to approval by the board of regents of the school.

A&M already uses a similar system. However, the president must approve the

budget before it is sent to the regents. Coordinating Board of Higher Education in Texas has a vacancy and the TSA wants a voice in choosing the person to fill it. While no one has yet been suggested, the organization hopes to have a minority member appointed.

Gov. Dolph Briscoe has proposed a budget for the next two years which will include \$825 million for the construction and repair of highways in Texas. \$200 million of that would come from the federal revenue- sharing money which helps sup-port state colleges and universities. A&M received \$14.3 million in revenue-sharing funds during the present budget cycle. TSA is fighting the proposal.

Another legislative proposal would af-fect students nationwide. A bill currently under consideration in the U.S. Congress will, if passed, prevent students with federally-insured loans from declaring bankruptcy until five years after graduation. The bill makes an exception for stu-

dents who would experience "undue hard-ship" if prevented from going broke. The National Students Association (NSA) is lobbying against the proposal. TSA is a member of the national organization.

TSA supports tax reform

The U.S. Senate has passed an amendment, which the TSA strongly supports, to the tax reform bill. The amendment would allow students or their parents to write off the costs of tuition on their income tax. A credit of up to \$250 would be available.

TSA is also lobbying for the passage of an amendment that would require students who are consulted about the medical service fee to be accountable to other stu-dents. A bill passed by the last legislature required that students be consulted about the fee, but because of the wording of the bill, the students were not required to answer to their peers. TSA expects little trouble in this particular endeavor.

In order to raise money to support their

lobbying activities and to provide services for students, TSA is looking into the possibility of having Willie Nelson stage a benefit concert for them. Although there are, at present, no concrete plans, Nelson has in the past expressed an interest in and gratitude to Texas students. Last year, Nelson played a benefit at North Texas State University.

A&M won't endorse insurance plan

The National Students Association has endorsed a life insurance plan for college students. The underwriters of the plan have offered to pay the students association five cents for each name and address of incoming freshmen each year. Several member schools of the TSA have expressed an interest in the plan.

Texas A&M refused to endorse the plan. Two years ago, A&M had trouble with a similar program because many people did not want their names released, said Ward. In addition, A&M already has

an insurance plan. TSA is considering raising money with a program similar to A&M's Student Conference on National Affairs (SCONA). The student government at A&M solicits funds from alumni and corporations to finance conferences on important national issues. SCONA has been very successful and TSA is interested in establishing it state-wide.

A proposal to establish a "Trade Fair" at the fall convention was adopted. Trade Fair would be an advertising medium for companies with products aimed at college-age persons. For a given sum (probably \$100), a company could buy a booth at the convention in which to display its wares.

The fall convention this year will be held the first weekend in November on the campus of Southwestern University in Georgetown, Texas. TSA will conduct its next board meeting October 2 at North Texas State University in Denton.

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College Station, Texas

ampus police seek burglar

neone in grade trouble apparently into a Texas A&M University profes-office sometime Monday night or ay morning and stole the grade book. ematics Professor Charles K. Chui ted to campus police yesterday morn-that his office had been burglarized ing the night. The office is located on nird floor of Harrington.

pus police took fingerprint speciand are still investigating. ui said the thief apparently broke through the ceiling tile of the hallway outside the office and entered the office through the ceiling as evidenced by broken The on both sides of the office wall. He said the grade book was in his desk. "I have never locked my desk because I

trust everybody," he said. Although papers were scattered all over the room, Chui said the only thing he has

found missing so far is the grade book. With final examinations for the term coming up Friday, the missing grades pre-

sented Chui with a problem. He resolved it by asking the 37 students in his Math 210 class to bring in their old tests for the past session. He said most of the students are being very cooperative.

Chui said that those who bring in their tests but are not making satisfactory grades and those who do not bring in their tests will have to take a "very difficult final." So if the thief does not know his math, it looks like he is going to get it in the end

Electric power from the sun; use and feasibility discussed

By KEVIN VENNER

Battalion Staff Some like it hot. Others like it hotter because they like to be cooler.

Sound strange? Not if you attended the Applied Solar Energy Seminar this last weekend. The full-day conference, which was cosponsored by the Texas Engineer-ing Experiment Station and the Texas A&M University System, featured several solar energy proponents, who presented applications ranging from greenhouses to providing one-third of the United States' energy needs within 30 years.

Mr. Kurt Toliver, a representative of the Boeing Co., detailed the latter appli-cation, which would utilize a power station in space. Toliver said that Boeing's studies of the system economics indicate the power satellite (powersat) is possible and that commercially competitive electric power from satellites is promising.

Powersat will consist of four modules weighing about 15 tons each, that will provide 10,000 megawatts of useful power. Each module will use 10,000 to 12,000 ¼-acre lightweight mirrors to concentrate sunlight into a cavity, heating the cavity so it serves as a boiler, said Toliver. This heat absorber is surrounded by twelve 300 megawatt helium turbogenerators, which will convert about a third of the input heat energy to electricity. Toliver added that the excess heat energy would be radiated away from Earth

The electricity from the generators will be converted to a microwave beam for transmission to a receiving antenna on Earth. After this beam is reconverted to electricity, Toliver said that the power would be commercially distributed.

Toliver said that in order to provide out one third of the U.S. pow

orbit, 22,000 miles above Earth. He said the initial program costs, which include the development and application of power generation and transmission, space trans-port, ground systems and orbital systems, would total \$60 billion for the first powersat. Toliver added that each satellite following would cost only \$13 billion and that all costs would be amortized in 30 years at

an 8 per cent discount rate. Each powersat is so large, 60,000 tons and 12,000 acres of plastic film mirrors, that they will have to be assembled in a low Earth orbit and then transported to its working orbit, Toliver said. A space freighter will drop its 250 tons of building materials at the assembly station, which will utilize over 200 men, return to Earth and reload within a 24-hour period. To-liver said that the freighter will be stored, launched and landed on a lake because "no crane on Earth is capable of lifting it, so we have to float it.

Toliver said that an orderly three-phase development program could place the first operating powersat in service in about 15 years with projected costs of the electrical service about equal to those projected for nuclear power in the 1990's. Boeing's study showed this to be slightly more than most current coalfired power, but cheaper than current oil-fired electric power.

Dr. R.R. Davison, a professor of chemical engineering at Texas A&M University, said yesterday that the powersat project is technically feasible, but the costs will probably be prohibitive. "If you had to pay your electricity bill from that thing, you would switch to candles," Davison said.

At the seminar, Davison pointed out the good and bad characteristics of solar energy. Although the sun's energy is clean, plentiful and renewable, its abun-

"The problem is that solar energy is diffuse, intermittent, and even capricious...it doesn't always rise," Davison said. Davison, as did most of the speakers at

the conference, emphasized the cost feasibility of a solar energy system. He said that hot water heating is the most attractive use of solar energy at the present time and that he does not think cooling with solar energy to be economically at-

tractive for the time being. Dr. Fred Kettleborough, a professor of mechanical engineering at Texas A&M, said that solar energy cooling is economically feasible now, but that it would be best to design a cooling system into a new house instead of adding the solar system.

Anna Fay Friedlander, editor of "Solar Engineering," gave various reasons for consumer use of solar energy. Independence from the utility companies is the consumer's first priority, she said. Conservation reasons are next, Friedlander said, because of our depleting energy sources and the "clean" power of the sun. The novelty of having your own solar energy device was third on her list, with economic reasons being the least considered by today's consumer.

State legislation and its effects on solar energy was presented by Texas State Rep-resentative Bill Presnal. Presnal, who is normally a "state's rights" advocate, said that he wants the national government to regulate solar energy standards to facilitate rapid advancement in this source of energy

Dr. Stephen Riter, associate director of the Center for Energy and Mineral Re-sources at A&M, said that this seminar and other activities of this division of the Energy Advisory Service for Texas is to inform the public of research and results of



anyway

Steelman campaigns in B-CS

By JERRY NEEDHAM **Battalion Editor**

S. Rep. Alan Steelman of Dallas this campaign for U. S. Senator to ge Station and Bryan yesterday.

eelman, who is facing incumbent d Bentsen in the November general ion, lunched with community leaders hen walked door-to-door in downtown meeting with voters.

uring a question-and-answer session lunch at the Aggieland Inn, Steelman several points.

think one of the greatest single threats e survival of the small independent ess and the family farm is the estate emption which is unrealistically low,

teelman is the cosponsor of a House bill rease the estate tax exemption from 000 to \$200,000.

sked whether he thought Texans would illing to fill both its senatorial spots Republicans, Steelman said that a rey conducted last November indicated 77 per cent of the 17,000 polled did not if the two senators were both Republior both Democrats.

think that the people of Texas don't whether they have a Republican, a ocrat, an independent or a vegeta-I think what they want is a principled resentation." he said. Dueried about a socialistic pattern evolvin the United States, Steelman replied, e are not irretrievably on the road to sm, but there's danger if we aren't ilant now to defeat approaches that say government can arbitrarily set wages prices and productivity goals. Most of the western European counes have taken such approaches, and st of their economies are not nearly as mg as ours. In fact, I think they have the spark that's necessary to keep ble working and to keep a good system ree enterpise going," he said. What I would like to see us do is defeat Humphrey-Hawkins Bill, defeat non site picketing, keep our rightwork law on the books and enact the nset Bill," he said. he Humphrey-Hawkins Bill, now be-Congress, proposes a system of nanal health insurance. The common site keting bill, also before Congress, would uire all unions working on a common ject to go on strike if any other union rking on that site declared a strike.

Steelman is the principal sponsor in the ouse of the Sunset Bill which would rere every federal agency to prove to ress every four years its need for coned existence. If the agency could not w the need, it would be phased out or

Battalion photo by Scott Sherman Rep. Alan Steelman, candidate for U.S. Congress

"The Sunset Bill would be a way of reducing the size, the cost, the regulation of government that would free up the free enterprise system to operate and to continue to make this a system of democratic capitalism rather than a system of democratic socialism which a lot of our democratic allies are," Steelman said.

On pollution of the environment, he said, "I think the best way to deal with it is to have federal standards that the states meet in whatever way they can come up with. That way we don't have a lot offederal guidelines that arbitrarily tell the companies and the states not only what standards they have to meet, but how they have to meet them.'

Asked why Bentsen should be unseated, Steelman said, "I've said throughout the

campaign that Congress is dominated by big government, big labor and big business rather than sitting as elected representatives of people and representing the rank and file union member, the small businessman and the average taxpayer. It's these large, impersonal special interest groups that get all the representation. Mr Bentsen is the very epitome of this kind of elite, special interest, privileged senator.

"I've raised the question whether Bentsen is doing the public's business or his own and asked him to do as I have done. Every year I've been in the Congress, I've disclosed my income tax returns and my financial statement to let the people see that I'm not becoming wealthy at their ex-

Bentsen makes a campaign swing into College Station and Bryan next Monday.

put 30 of these satellites into synchronous son said.

by the year 2000, Boeing would have to dance is to some extent an illusion, Davi-

power experimentation so people can take advantage of advancements in technology.

on land Microbes clean oil spills

Oil, that dirty, smelly lifeblood of the world's economy, has been an environ-mental nightmare since Texas became a major producer over a century ago.

Oil spills can happen in many ways when millions of barrels of oil are produced and transported thousands of miles in Texas alone. Pipelines, which criss-cross Texas and other states such as Alaska, also bring the risk of high-pressure spills.

However, Texas A&M University and Exxon scientists have come up with a relatively inexpensive way to get oil-damaged land productive again in as little as nine months, a far cry from the years it would take in nature.

A microorganism named "Acinetobacter-caboaceticus" is the hero (if such a term applies) of this breakthrough. These microorganisms, working in the soil, can clean up oil spilled on the land.

Dr. Fred Turner, a soil scientists with A&M's Texas Agricultural Experiment Station has been working with 20 foot by 20 foot plots of earth soaked with the equiva-lent of 10,000 gallons of oil per acre and has brought them back to life within a year.

When a spill occurs all surrounding crops, grasses and trees and even weeds die and the land remains unsightly and unproductive.

Now our research shows that in many soils these microorganisms can be encouraged by the proper fertilizers," Turner said. "Where they do occur, they can be added by applying cultured strains in con-junction with the fertilizer."

The key seems to be to provide the microbes with the correct nutrients so that they can utilize the carbon in the oil," he explained. "The oil damaged land is high in carbon and low in nitrogen. The fertilizer supplies the microbes with the necessary nitrogen and phosphorous needed to decompose the organic material in the oil.

In addition to its potential usefullness to individual landowners, this technique, while under development, is of value to industrial interests since many oil spills occur near factories and industrial sites. Exxon Research and Engineering Company helped fund and cooperated with Turner's research.

Texas coast rapidly eroding

The Texas coast around the mouth of the Brazos River is eroding at the accelerated rate of 30 feet per year, a change A&M scientists have traced back to man-made reservoirs along the river.

Larry L. Minter of Dallas and his faculty advisor, Dr. Christopher Mathewson, both of the department of geology, say they have noticed a correlation between erosion rates at the ocean and a decrease in the amount of sediment coming down the river.

The pair, and four undergraduate students, are working on the project which is funded by the Office of Water Resources and Technology, Department of the Inter-ior, through the Texas Water Resources Institute. The funds were matched by A&M.

"I decided to look at the river and the dams that were built on it to see what had happened," Minter explained. "The two basic changes we examined were what was the dam doing to the amount of water flowing through the river and what was the change in the amount of sediment moved down the river.

'Another parameter was the decision to look only for sand-sized material which would relate to the beach material that is being deposited and washed away at the delta," he continued.

"We found that the same amount of water is passing down the river, but the rate has changed significantly," Minter said. "Before the dams were put in, the flow of water would come in peaks. The construction essentially smoothed out the peak flows and eliminated the flooding stages.

"From our study we discovered that 75 per cent of the sand-sized particles pro-duced in the Brazos River Valley is trapped

behind the dams annually," Minter said. The Soil Conservation Service did a study to show the amount of sediment produced during the 1950s. Minter took into account modern conservation practices, which stopped about 25 to 30 per cent of the losses, and calculated the deposition currently taking place in the Brazos River reservoirs.

"However, by eliminating the flooding, the ability to move large amounts of sand was also eliminated," he said. "The sand which was lost to the coast is now sitting in the reservoirs.

There are 150 million cubic feet of sand-sized particles trapped each year by the dams out of a total produced of 195 million," Minter said. "All this, which was normally used to

hold back erosion at the ocean, is gone

"In 1930, the beach was receding at an average 13 feet per year," he said. "Today it is an average of 20 feet per year since major dam construction which corresponds to an extra loss of 49 million cubic feet of beach sand

With charts he produced, after taking more than 400 sand samples all along the Brazos River and in the reservoir areas from Lake Whitney to the delta, Minter has put together a method to predict the amount of recession at the ocean any new reservoir will cause

We calculate that a reservoir, for example, the proposed Millican Dam, would have reduced the sand delivered to the ocean by an additional 5 million cubic feet per year, which is almost another foot of coastal erosion per annum," Minter said.

The details of this study will soon by published in a Texas Water Resources Institute report entitled "Impact of Water Resource Development on Coastal Erosion, Brazos River, Texas.

Assisting in the project were Joe Watson of Hammond, La., Jack Oswalt of Austin, Bill Thomas of Godley, and Doyle Wilson of Houston.

Lack of funds halts center that there are no funds available at this "The program needs to be put forth to

By LILLIAN FOREMAN Battalion Staff

The chances for opening a day care cenat A&M are slim, said Dr. Douglas win, assistant professor of Education Curriculum Instruction.

'We haven't been able to get any finansupport from the possible sponsors that have contacted," said Godwin.

The first funds that are received will be ed for the renovation of the facility and to equire the necessary equipment that is equired by law, he added.

A committee has been researching the pposed day care center idea since last . Funding inquiries have been sent to rious agencies that sponsor non-profit

The usual answer from these agencies is

time," said Godwin. Ms. Nelda Bravo, committee member,

said that the committee also circulated day care center survey forms last spring which indicated that the parents of at least 200 children were interested in day care for their children.

"We are striving to provide a day care center that is close to A&M, convenient for the student parents, and that will allow parents to pursue their educational goals and also have a close relationship with their children," said Bravo.

The committee is in the process of finalizing requirements for the day care center and also in the acquisition of a building.

Committee member, David Scarfe, said that the program must be approved at the university level.

the administration, the dean of education or other university officials for their approval and sponsorship. At this time we are pursuing many different avenues such as the state and federal agencies, private

foundations and trusts and have even been considering The Former Student's Association for possible funding," said Scarfe.

He also said that the committee is hoping to get the day care center incorporated as a department or even a sub-department which would probably involve many students from various other departments and interests.

"We are also looking for qualified people to work in the day care center," Scarfe said. Those interested should contact Scarfe at 693-9374 or Godwin at 845-6811.