

## Reactor slated for shut down for alterations

The nuclear reactor at the Nuclear Science Center will be shut down next month for alterations.

Dr. John D. Randall, center director, said the reactor will be out of operation the first two weeks of August for modification of the core to accept fuel follower rods.

"We've burnt up so much fuel that these changes have to be made," Randall said.

Five of the 25 TRIGA fuel elements in the reactor were replaced last year, due to increased operations following the 1968 boost of reactor power to 1,000 megawatts. The reactor compiled more megawatt hours in 1968 than in the previous six years operation.

Users of the research facility which recently expanded its laboratory quarters include 10 commercial institutions, six A&M departments and 12 presently-active experimenters, Randall said.

The center also cooperates in a reactor sharing program through Atomic Energy Commission contract, with experimenters from Prairie View A&M, Rice, the University of Texas at Austin and Sam Houston State using the facility located near Easterwood Airport.

## Graduate lecture to feature prof from Oklahoma

Processing of reconstituted and high moisture harvested grains for fattening beef cattle is the topic of an Animal Science Department graduate lecture Thursday.

The speaker is Dr. Donald G. Wagner, assisting professor, in the Institute of Animal Sciences and Industry at Oklahoma State University.

Program time is 10 a.m. in the Lecture Room of the Animal Industries Building.

Dr. Wagner is in charge of feedlot cattle nutrition research at Oklahoma State, and in this position, is concerned with many of the same problems in feedlot cattle nutrition facing Texas feeders.

Dr. Wagner received the B.S. degree from Ohio State University and M.S. and Ph.D. degrees from Cornell University. His advanced training was in Animal Nutrition and Biochemistry.

He joined the Animal Science staff at Oklahoma State in 1965 and served three years in Ethiopia as a participant in the Oklahoma State AID Program in that country.



Nixon cartoon by Arie Schinnar  
He signs his work, Apasche, a combination of his initials

## Social cartoonist likes brevity in expressions

By Fran Haugen  
Social cartoonist Arie (pronounced R. E.) Schinnar likes brief, to-the-point expression.

"If you can say something in one line, why use two?" asks the 23-year-old Israeli who is studying architecture here. "I read very

few books—if you can say something in one page, why use 200?"

The brown-eyed, black-haired social interpreter did poorly in high school, but published a cartoon in the New York Times two weeks before he turned 18.

He served as a lieutenant in the 1967 Six Day War, and although he says wars are "not necessary" he had ambitions after the war to stay in the army because, "I'm a beast like every other animal."

In Israel (his home is about 10 miles from Tel Aviv) he was a cartoonist for three newspapers—one liberal, one conservative and one which wanted "the scoops."

An opinion is part of Schinnar's attire. He'll give it to you, but warn you that he may change his mind 30 seconds later.

What follows are excerpts from an interview with him. These are his opinions—if he hasn't changed his mind.

On cartooning as social and political comment—"I'm interested in people and their behavioral patterns, and they are funny indeed. I don't look for the funny approach. I only try to point out and exaggerate what people do, think and react to their customs and stupidities. Society has to grow, evolve. Some people see society as finished (as far as development goes). I think we are pretty mediocre, even less.

"I don't think my cartoons are funny. They're a reflection of myself. I don't claim to be an artist. I'm an expressionist. The cartoons are 95 per cent ideas, 5 per cent emotion. I have the tendency to twist things. I'm really very (See Cartoonist, page 3)

University National Bank  
"On the side of Texas A&M."  
—Adv.

## Demonstration highlights 41st training school

A public fire-fighting demonstration tonight highlights first-week activities of the 41st annual Texas Firemen's Training School.

The fire show begins at 7:30 at the Brayton Firemen Training School south of Easterwood Airport.

A record preliminary registration of 1,548 for the one-week municipal school was announced Monday afternoon by Chief Instructor Henry D. Smith.

Smith noted the enrollment includes 1,196 student firemen, 84 above last year's first day registration.

Smith predicted totals to climb even higher from late registration. Included in the preliminary report are 352 instructors and manufacturing representatives.

Officials estimate 2,725 will enroll during the next three weeks in either the municipal, industrial or Spanish-speaking schools. Each school runs Monday through Friday.

Complete registration figures for the municipal school will be announced tonight.

Smith pointed out most of the firemen attending the municipal school are volunteers representing departments from small cross-road settlements to small

cities. There also are men from full-time paid metropolitan departments.

Another 800 men are expected next week for the industrial school and 175 are scheduled to attend the Spanish-speaking school Aug. 2-7.

Smith said the community firemen represent small cross-road settlements to full-time paid firemen from large metropolitan areas.

Smith noted \$600,000 in consigned equipment, over \$65,000 in consumable fire-fighting chemicals and \$25,000 in fuels are being unloaded at the training field.

Approximately 180,000 gallons of flammable liquids have been

donated by chemical and petroleum companies.

Smith expects this year's school to be the largest ever held.

"Even though the economy is down, there is major interest in fire safety and precaution," Smith says.

"A tighter economy has placed more emphasis on the current value of resources in our communities."

Smith noted an 80-man pump maintenance class, including several master mechanics, will rebuild the pumps. Parts and transportation are paid by the individual communities while labor is provided as part of (See Firemen, page 3)

## Journalists here for annual confab

More than 500 high school journalists and their sponsors arrive here next week for the 12th annual High School Publications Workshop.

The one-week program is sponsored by the Journalism Department.

Workshops are planned in both beginning and advanced photography, yearbook production, publications production and newspaper production, noted department head C. J. Leabo.

Experts from throughout the nation will serve as workshop instructors.

Activities start at 5 p.m. Sunday with an opening convocation and continue through Friday night's awards banquet.

A highlight of the annual affair is the Miss Workshop Contest. Each participating school nominates one entry. The Miss Workshop contest and dance is scheduled Wednesday night.

Sam Pierson, Houston Chronicle photographer and past president of the National Press Photographers' Association, will give a special lecture at 8 p.m. Wednesday in the Architecture Auditorium.

Pierson's use of visuals in

publications talks will be aimed at all delegates, not just photography students, Leabo said.

A graduate of the University of Houston, Pierson won the Joe Costa Award, the highest award presented by NPPA. His assignments have ranged from President Kennedy's assassination, the Apollo II flight and the USS Manhattan's first voyage through the Northwest Passage.

Howard Eilers, A&M photography instructor, and Mrs. C. J. Leabo are workshop co-directors.

Heading the newspaper division is Bill Ward, director of the mass communications division at Southern Illinois University, Carbondale.

Assisting Ward will be Mrs. Evelyn Dunsavage of College Station, Chet Hunt of the University of Texas, Austin, Journalism Department and George Pearson of St. Cloud State College (Minn.) Journalism Department.

Mrs. Leabo heads the yearbook division. She is to be aided by high school publications sponsors Ben Allnut of Germantown, Md., Miss Hattie Steinberg of Minneapolis, Minn., Miss Mary Frances Freeman of Beaumont and Mrs. Elaine Pritchett of Houston.

## Engineering trio telling shrimpers how it's done

What can engineers tell shrimpers about shrimping?

For openers, a trio of graduate students here have come to the conclusion a shrimp in the open sea must be mighty unlucky to get caught. If their plan pans out, there could be about twice as many unlucky shrimp.

Tackling the problem are James A. Burke of Dallas, Ralph E. Foster of Nashville, Tenn., and Walter A. Wicklein of Towson, Md. Burke, an Army major, is studying for a master's degree in aerospace engineering, while Foster is working toward a Ph.D. in industrial engineering. Wicklein, an Air Force captain, is studying for a master's degree in computer science.

Their overall goal is to illustrate a systems engineering research project. They zeroed in on the shrimping industry because of its economic significance in Texas and its apparent need for technological change.

In striking contrast to the extent of technological innovations in manufacturing, transportation, agriculture and communications, the researchers observed shrimp are caught today just as they were a half-century ago. They also found profit margins are decreasing.

The problem is not a shortage of shrimp. Best estimates indicate only two to eight percent of the shrimp in the Gulf of Mexico are caught each year. Unlike some other food sources, a doubling of the shrimp catch would have little effect on species survival.

"Such an increase would be about the same as catching salmon for the canning industry with a rod and reel," quipped Foster.

"Increasing the catch by a factor of 10 would have no effect on the future supply of salmon."

The problem is one of efficiency, the trio pointed out.

In a typical trawling operation, only one shrimp is caught per 1,000 square feet. The Texas A&M engineers have set their sights on the seemingly modest increase of one additional shrimp during such a drag. Four shrimp likely inhabit a 1,000-square-foot area.

While the researchers are exploring the need for change in all facets of the shrimping industry, they are focusing their attention on the trawl and related underwater equipment. The standard Otter trawl has not been essentially altered since it was introduced about 1912.

One concept which deserves more study, according to the Texas A&M graduate students, involves the use of electricity to control movement of the shrimp. They noted the reaction of shrimp to pulsed DC electric fields indicates they can be "herded."

If such a concept proves practical, the net could be reduced to provide only enough frontal area to act as a catch-and-hold device, with electric wings extended on either side to doors 50 to 500 feet from the net. This, the researchers explained, would reduce drag and extend the area covered.

While Burke, Foster and Wicklein wrestle with the problem of bagging more shrimp in the open seas, other researchers are taking a different approach by growing such seafood in Gulf Coast ponds in economic feasibility studies.

Either way, more unlucky shrimp may wind up on some lucky person's plate.



Student firemen—prepare to put out a fuel tank fire at the firemen's training school through this week. The firemen learn to put out fires such as this, as well as house and truck fires.