

A hurried kiss...





Galveston's weathered Pier 19 was crowded with families, quired training for students enfriends and fiancees seeing the students off and shedding a few

ton Bay Saturday carrying 181

pean voyage of learning, fun and

students on an eight-week Euro-

Spirits were lifted when a Clipper" steamed out of Galves- Texas Maritime Academy band aboard ship swung into the "Aggie War Hymn" as the 15,000ton converted oceanliner pulled away from the dock.

> The cruise is part of the rerolled in the academy, a division of Texas A&M. The TMA cadets operated the ship under the super-

vision of the academy staff personnel.

Joining the 103 TMA cadets were 78 spring high school graduates enrolled in Texas A&M's "Summer School at Sea," which offers basic freshman courses.

While visiting four foreign ports, the students have been invited to participate in two special American-related events. They

will help observe American Independence Day at Denmark's Rebild National Park July 3-4 and join in observance of the 350th anniversary of the sailing of the "Mayflower" July 9 at Plymouth, England.

and they're gone ...

Other European ports of call include Cobh, Ireland, and Hamburg, Germany,

Warm, cloudy, humid

Winds South to Southwesterly at 12 m.p.h.

Thursday — Hazy, possibility of scattered light rainshowers.

Telephone 845-2226

The Battalion Vol. 65 No. 123 College Station, Texas

Wednesday, June 10, 1970

Grant awarded for four-year pollution study

Texas Clipper' sails

for European voyage

mental grant to support pollution for the four-year study. esearch in the Houston Ship

rofessor of environmental engieering, noted the supplement study of the results.

384

8 T

38

The Research Foundation has brings the total Water Quality A research boat, the R. V. Exeen awarded a \$45,815 supple- Administration grant to \$356,428 cellence, is used in the study

Dr. Hann said the increase was trial Waste Discharge in Complex Dr. Roy Hann Jr., associate cluding an enlargement of the field program and an analytical

Summer 'fish' meets started

Texas A&M's two-day summer eshman Orientation Conferces began this week on campus. th 13 scheduled between now d the first week in August. Auston Kerley, director of the nsoring Counseling and Test-Center, reports approximately freshmen and about 150 parats will attend each session. June ferences start each Monday nd Thursday with July and Au-

ind Friday only. All the new "fish" have been cepted for fall admittance. A&M's Registrar, Counseling d Testing Center, Housing Of-Deans, Student Life and OTC offices are involved in the gram that smoothes the way

just conferences held Thursday

the fall freshmen. When the new students report Aug. 31 start of classes, they ly have to pick up room keys be bonafide students.

During the conferences, the stuents receive placement tests, entation, dormitory assignnts, are measured for ROTC niforms, confer with deans and e-register for classes.

Fees are paid later but books ay be purchased or reserved, erley noted.

Advanced placement tests and edit by examination are given gible freshmen each Wednesy during the orientation period the student's major depart-

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

needed for expanded projects in- Esturine Systems."

sity dormitories for \$3.50 a night.

conferences are full.

10-11:15.

Kerley said the first four June

During the first day, the stu-

dents and parents meet together

at 7:30 a.m. Aptitude, achieve-

ment and personal interest tests

are given at 8:30 and the parents

have an orientation program from

meetings are held the first after-

noon. At 7:30 p.m., the students

meet with the parents for regis-

tration orientation and receive

Record 6,427

Texas A&M enrolled a record

6,427 students for its first semes-

ter of summer school, for an in-

crease of more than eight per

cent over the same period last

Registrar Robert A. Lacey said

An additional 182 students en-

rolled at Galveston for the Euro-

pean summer cruise of the Texas

Maritime Academy. The Marine

Laboratory, also at Galveston, has

Junction has an enrollment of 173,

including 110 freshmen and 63

geology and civil engineering

students conducting field work.

The Texas A&M Adjunct at

registered 57 students.

registration on the campus totals

enrollment

reports on the morning tests.

Civilian and Corps of Cadets

is funding 30 per cent of the total \$510,000 study. Dr. Hann noted the research is at the halfway point with two years remaining.

The university has also been awarded two federal grants totaling \$117,424 for research in control of both air and water pollution.

entitled "Management of Indus-

Seventy per cent of the funds

for the project is coming from

the Research and Development

istration, and Texas A&M's Texas

Engineering Experiment Station

Program, Water Quality Admin-

A \$16.221 award from the National Air Pollution Control Administration will support a new basic study entitled "Structure and Reactivity of Absorbed Oxides of Sulphur." Sulphur dioxide, on a tonnage

tributors to air pollution, noted Dr. Jack H. Lunsford, Texas A&M chemistry professor heading the new study. Lunsford said sulphur dioxide results from the burning of coal

basis, is one of the greatest con-

and hydrocarbons. He pointed out it also is a by-product of the mining industry. "We will be basically trying to understand how the molecules are absorbed and their properties in

the absorbed state," the Texas A&M chemist explained. He said the study also will explore ways to react the oxides to make useful products, such as sulphuric acid.

The \$16,221 grant provides first-year support for a threeyear study.

Dr. William B. Davis, head of the Environmental Engineering Division of Texas A&M's Civil Engineering Department, said the \$101,203 grant from the Department of Interior continues support of the university's graduate student training in water quality

He said 18 students will share in the funds while assisting in university projects at Houston and Dallas, as well as on the Texas A&M campus.



DR. GORDON I. SWANSON

World traveler key speaker at conference

Concepts of successful business management can be applied in making education more relevant, the keynote speaker suggested at the School Administrators and Supervisors Conference.

'In towns of 1,000 or more population, the most successful business can be accurately predicted as banks, insurance companies, chain drug stores and I. Swanson claimed Monday.

The University of Minnesota international programs coordinator said in a less successful category are hardware, produce and implement firms, bakeries, laundries and dry-cleaners.

"Something consistent about the first category is that these businesses use management data systems," Swanson informed 500 county and district superintendents and instructional super-

"Where is the school, toward the first or second category?" the conference lead-off speaker asked. "How are schools using their community resources? Can these local forces be mobilized for education?"

ization and entrapreneurial methods be used by schools? Can schools survive on the basis of these kinds of management?" he continued.

Swanson suggested planning, goal rather than strategy orientation, and community involvement are necessary in education.

"Planning was not a respectable concept in education 10 years ago," he claimed. But its respectability is improving. Reasons are that planning is the best way to educate officials and associates, it is part of the competitive enterprise system, leads to goalsetting activities and can reconcile one part of a system with the whole or another system, the speaker said.

Sonic booms' effects possible to minimize

are a fixture of the modern world about which very little can be done directly.

"The effect can be minimized." Texas A&M graduate Dexter C. Collier of San Angelo said, "but it will have to be done by operating planes flying at supersonic speeds within prescribed guidelines."

The guidelines will consist, the May aerospace engineering graduate believes, in restricting supersonic craft to designated maneuver areas outside populated areas, very high cruising altitudes and strictly-controlled climb and descent phases of flights.

A sonic boom is a simple physical phenomenon naturally associated with an object moving through the atmosphere at sonic or supersonic speed, Collier described.

If the object is large enoughsuch as an airplane — and low enough, a shock wave that trails like an arrowhead from its leading point intersects the ground.

Pressures in front of and befranchise businesses," Dr. Gordon hind the shock wave differ. The ear of an observer, windows and other fragile structures interpret passage of the pressure wave as

At one time an interesting phe-

Window-rattling sonic booms nomenon experienced only around air shows or military bases, sonic booms are increasing in number and distribution due to larger numbers of military planes flying at sustained supersonic speeds,

the aero student added. Proposed supersonic transports (the SST) will result in almost everyone hearing sonic booms occasionally.

Indications are that some people are hearing too many already. Reacting to sonic boom fears, the Senate Appropriations Commit-

(See Student, page 4)

Oceanographers beginning project

Oceanographers Dr. Thomas J. Bright and doctoral candidate William W. Schroeder started an unusual project this week, a survey of bio-acoustical sound fluctuations of underwater marine

They will remain 50 feet underwater throughout the 21-day research period, sleeping, eating and working from a Tektite habitat planted on a coral reef beneath the surface of Great Lameshur Bay in the U.S. Virgin Islands.

The scientists entered the water at 1 p.m. June 1. They are scheduled to come up at 10:30 a.m. Sunday, June 21.

A 20-hour decompression peri-

od will follow.

Bright and Schroeder are on the fourth mission of the ambitious underwater science program known as Tektite II. The program started in April and will continue to Nov. 1, 1970.

Site of the study is the Caribbean, off the south shore of St. John in the U.S. Virgin Islands.

Tektite II was designed and programmed by more than a dozen government bodies, educational institutions including Texas A&M and private industry. The U.S. Department of the Interior is the lead participant.

General Electric designed and built the underwater lab and living quarters.



Soft Crash—This test vehicle at Texas A&M University's Texas Transportation Institute received only moderate front-end damage when rammed at 63 mph into a collapsible concrete device designed to "cushion" bridges and other rigid obstacles along the roadside. Instruments indicated the wreck would have been survived by passengers wearing seat