

Graduate Student Vastano Studies Tsunami Stages

By GUS GARZA
Battalion Special Writer
Drew Vastano, a Department of Oceanography graduate student, has an extraordinary field of interest. Vastano is doing research on the tsunami (soon-ee).

Have you heard of a tsunami? Of course, but under a different name. Vastano explained that tsunamis are commonly and popularly called "tidal waves." Because of the difference in origin, however, the name "tidal wave" is a misnomer.

According to Vastano, tsunamis may be created by faulting or some other sudden movement of the ocean floor. But until some positive evidence of what happens at the source to generate a tsunami, the origin must remain somewhat in doubt.

The tsunami can be broken into four areas for purposes of research, Vastano said. The four areas are generation, propagation, modification and run-up. Generation is the origin of the tsunami, propagation is the movement of the tsunami in deep water, modification is change that occurs when it reaches an island and the run-up is when it actually runs up on the beach and further.

Vastano said once the tsunamis are generated, these traveling ocean waves may be of extreme length and period. Once in deep water there may be many miles from crest to crest, and just a few feet between the trough and the crest.

Transoceanic vessels can't feel the difference, but yet the wave

"feels bottom" and in a deep ocean may reach a speed of 600 m.p.h. When the tsunami reaches coastline or an island its speed decreases and the wave height increases, sometimes cresting to 100 feet. An impending tsunami is usually heralded by a gradual recession of the coastal water, Vastano said.

Vastano said his area of study was the modification stage of the tsunami. His research begins in deep water at the upward slope of an island and ends in shallow water where the run-up begins.

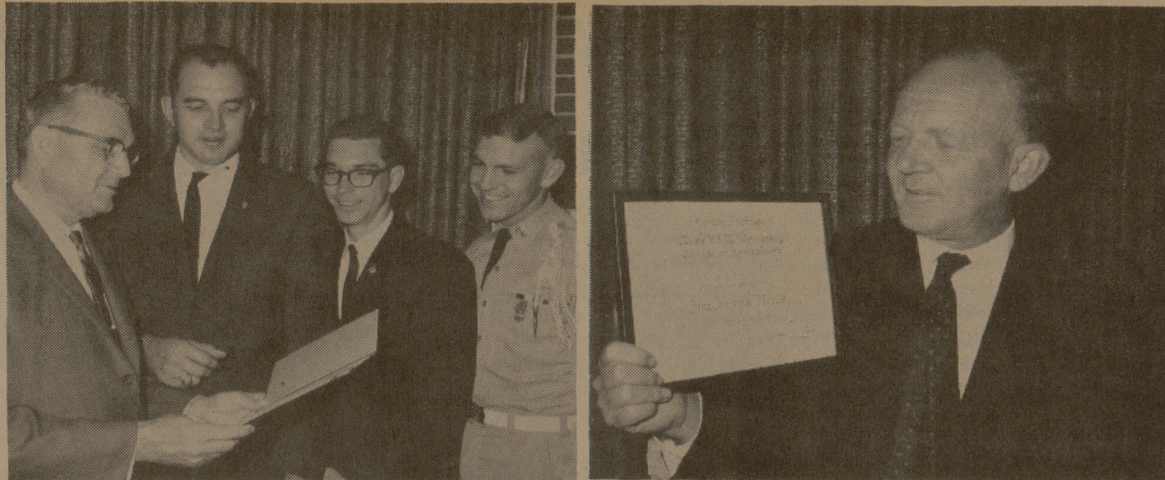
Vastano said the objective of tsunami modification research is to develop a tool to measure a known deep water wave as it moves from deep to shallow water in order to reveal what happens in the run-up stage.

The bulk of Vastano's research is done by feeding mathematical wave motion problems to a computer. Vastano said he became interested in wave motion problems while doing sonar work for the Bell Telephone Co. near Wake Island in the Pacific Ocean.

"Successful research of the tsunami can lead to protection of lives and property," he said. And the math and physical problems presented are quite interesting."

Vastano hails from Winston-Salem, N.C., but calls College Station home, moving here in 1962.

Vastano holds a bachelor's degree in nuclear engineering from North Carolina State and a master's degree in physics from the University of North Carolina. His research is sponsored by the Coastal Engineering Research Center affiliated with the Corps of Engineers, U. S. Army, which is vitally interested in all phases of coastal protection.



OUTSTANDING AGRICULTURE PROF, STUDENTS
Jim F. Mills, right, of the Department of Soil and Crop Sciences, has been named the College of Agriculture's outstanding professor. At left, Dean R. E. Patterson presents outstanding agriculture student awards to James R. Supak, Allen Matthys and Roland Smith.

30 Students, Staffers To Make Leadership Trip

Thirty Texas A&M students and staff members will visit Houston Sunday and Monday on the Student Leadership Program trip.

The students will tour the ship channel and port of Houston, the Manned Spacecraft Center and the Museum of Fine Arts. Performances at the Alley Theatre and by the Houston Symphony Orchestra are also on their schedule.

Deans of the A&M colleges nominated students and the committee then invited these students to attend the program.

J. Wayne Stark, director of the MSC, and Mr. and Mrs. Carl Shafer will accompany the students on the trip. Students attending are Jerry Lummus, Jose Adame, Cornelius E. Hill, Martin Hefley, David Gay, Tom Neal, Leslie Bugai, Michael Holloman.

Dennis Hohman, Wallace Johnston, Donald Envick, Louis Moeberg, Darrell Smith, Kenneth

Reese, Jerry Stevens, Tom Tyree, Mark Berry, Ronnie Coleman, Larry Hearn, Wesley Leftwich, James Allen, Michael Holman and Lani Presswood.

POST OFFICE RATES INCREASES FOR INSURANCE, MONEY ORDERS

Increases in money orders, insurance, registry, certified mail and COD rates are now in effect at campus post offices.

The increases, put into effect under the authority of the Postmaster General, include a five cent increase on all domestic and international money order fees.

The minimum insurance fee is now 20 cents instead of 10 cents with the revised fees as follows:

\$ 0.01-\$ 15	20 cents
\$15.01-\$ 50	30 cents
\$50.01-\$100	40 cents
\$100.01-\$150	50 cents
\$150.01-\$200	60 cents

The registry fees of 60 cents and 75 cents are now combined in a single fee of 75 cents for items valued at less than \$100. Registry fees for items valued at more than \$100 are unchanged.

The COD fee brackets of 40 cents and 50 cents are now combined into a single fee bracket at 60 cents for amounts up to \$10. For articles valued above \$10 there is no charge.

The fee for certified mail is increased to 30 cents from the former fee of 20 cents.

Consolidated Prep Take Top Honors In District Meet

A&M Consolidated High School students received awards in University Interscholastic League district competition at Conroe last week.

A&M Consolidated took the top three places in typing. Billy Bandal placed first, Dicky Hervey took second and Linda Isbell third.

The A&M Consolidated team of Mary Ruth Watkins and Marion Peters won top honors in spelling.

Wayne Powell won third place in science. Steve Prescott won first in persuasive speaking for boys and June Sanders won third for girls.

Duke Miller took second in poetry interpretation and Mary Ruth Watkins won third place in ready writing.

The three typing winners and Prescott will compete in regional competition at the University of Houston April 22-23.

Profs Collaborate On Industrial Book

A textbooks written by two Texas A&M professors for high school industrial arts classes was released this week.

"Technical Woodworking" was authored by Department of Industrial Education head Dr. Chris H. Groneman and another industrial education professor, Dr. Everett R. Glazener.

"The book emphasizes the uses of wood products and the techniques of operating modern wood-working machinery," Groneman pointed out.

The volume, illustrated with 1,550 photographs and drawings, covers design, safety, assembly, finishes, hand tools, wood-products industries, forests, research and conservation.

Groneman, author or co-author of 14 books, is a consultant to McGraw-Hill Book Company. Glazener has produced five books.

2 Local Students Enter Science Fair

Two students' projects at the A&M Consolidated Science Fair will be presented at the district fair in Houston Friday.

Wayne Powell's project is entitled "Effects of Agricultural Chemicals on the Heartbeat of Daphnia." Daphnia are commonly known as water fleas.

"Nutrition of Bacteria," Paul Oxley's project, will also be sent to Houston.

The Houston Science Fair is sponsored by the Houston Post and the Engineers Council of Houston.

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