AT NEW ANNEX

Unique Aircraft Being Developed

A Houston firm is conducting research at the A&M Research and Development Annex for an Astro-Kinetic Lift, an aircraft which resembles a flying saucer.

The Astro-Kinetic Corps, of Houston in conducting the tests, which may lead to future developments of the unique craft. Models of the ship are already in operation, with the phase of local work concerning producing a vehicle for manned flights.

Charles E. Hunter, vice president of Astro-Kinetics, says the United States Naval Research and Development Bureau has provided the corporation with a special light-weight engine which is being installed in the test vehicle.

Hunter, speaking on some of the principles of the aircraft, stated that the lift has a capability which is a totally new concept of aerodymanics. "This new concept device, because of simplicity of design and low production cost compared with the rotary blade concept, will conceivably bring a third dimension to commuter and personal transportation," he added.

Simple Operation

He said the simple operation of the lift will permit anyone to operate it with the same ease as driving an automobile. "It has the same maneuverability and load capacity as the helicopter," he said.

Corporation President W. Fremont Burger labeled the exisiting facilities available at the research annex and the reservoir of highly trained personnel and equipment available at A&M as the main reasons for the decision to locate in Bryan.

Burger referred to construction of the fiberglass lift as very simple in comparison to the helicopter. "It has no complex moving parts such as rotor heads," he reported, "and it is estimated that the initial construction cost of the lift will be less than half that of a comparable helicopter."

Keese Named TTI Executive Officer

Appointment of Charles J. (Jack) Keese as executive officer of the Texas Transportation Institute has been announced by Fred J. Benson, Dean of Engineering at A&M.

As executive director of the institute, Keese will be in charge of an organization devoted to research in traffic engineering, transportation economics, highway design, soils and improved paving materials.

Dean Benson, who has been T.T.I. executive officer since July 1955, said Keese will also continue his duties as professor of civil engineering.

"We are looking forward to Mr. Keese continuing to make the same fine contributions that he has been making in his research program and teaching duties," Benson said in announcing the appointment.

A 1941 civil engineering graduate of A&M, Keese served in Army intelligence and attained the rank of captain during World War II. After field engineer work with the Texas Highway Department he joined the A&M civil engineering faculty in 1948.

Game, Fish Group Plans Fair Exhibit

The Agriculture Show at the 1962 State Fair of Texas will feature an extensive exhibit prepared by A&M in cooperation with the Texas Game and Fish Commission.

Animals and plants of forest, plains, desert and seashore will take the spotlight in the show at the fair, Oct. 6 through 21 in Dallas.

The show will tell the complete story of Texas wildlife and game, with the benefits of recreation and the responsiblities of conservation.

Live specimens along with color photographs and moving pictures will illustrate the story.

Media Fund Established In Journalism

The receipt of a $100 check for the Department of Journalism's Media Scholarship Plan and the names of three new members of the Journalism Advisory Council were announced today.

The check was received from Staley McBrayer, publisher of the Daily News-Texan of Arlington. The first check in the Media Scholarship Plan was received earlier this summer from S. B. Whittenburg, publisher of the Amarillo Globe-Times.

The new members of the Journalism Advisory Council are James A. Byron of Fort Worth; James F. Chambers of Dallas and George Shannon, of Shreveport.

The Media Scholarship Plan will be used to encourage journalism students from high schools and junior colleges to continue and complete their education in journalism, according to Delbert McGuire, department head.

A publisher, firm or organization that wishes to participate sends $100 and is enrolled in the program.

When a student is selected to receive this scholarship, he is listed as carrying a scholarship from the contributor, who is sent progress reports. McGuire said that the donor is encouraged to nominate a local student as recipient, and the student receiving the assistance will be encouraged to intern during one summer with the contributing firm, if possible.

STATION W5AC
. . . Frank Stewart checks out transmitter

Study Discovers New Small Plants

Discovery of several new species of very small diatoms—one-cell plants of microscopic size—has been announced by a A&M research oceanographer.

Albert Collier, director of A&M's Marine Laboratory, said that several species and genera of the minute diatoms have been isolated from Gulf of Mexico waters at Galveston.

Discover Unknown Types

He and his research associates discovered the heretofore unknown diatom types during experimental studies on filterable organisms isolated from surface waters of the Gulf.

The biological research scientist named the diatom species "Chaetoceros galvestonensis" to designate the location where they were found.

"Diatoms are one-cell plants that take on many different forms," Collier said. "The Chaetoceros galvestonensis are microscopic in size—1.5 microns on the apical axis and three microns on the prevalvar axis."

Diatoms Dimensions

In layman's terms, the overall dimension of a diatom is about half the size of a human red blood cell, or about the size of the typhoid bacillus, he explained.

Oceanographic biologists and other scientists see many possible areas of study evolving from the discovery of the minute diatoms.

The small size and consequent high surface-to-volume ratio of these cells, plus their ability to multiply rapidly, have several implications for the oceanographer.

These factors might enable the diatoms to reproduce rapidly even under mineral nutrient concentrations, while their power of intense utilization of nutrients might cause depletion of food for other sea life, he said.

The diatoms also may interest chemical and physical oceanographers.

"These cells might have effect on light scattering, sound scattering and heat absorption," said Collier.

W5AC Calls CQ, CQ... It's Radio Aggieland

By TOM HARROVER
Battalion Staff Writer

"CQ, CQ, CQ. This is W5AC calling CQ 20. CQ 20, CQ 20. This is W5 Alpha Charlie calling CQ 20. . ."

Amateur radio station W5AC is owned and operated by Aggies. Sometimes referred to as "Radio Free Aggieland," the station and its services are well known to some—unknown to many.

The station is operated by the members of the Memorial Student Center Radio Committee, one of the many special activities programs of the MSC Council and Directorate. The radio committee holds its meetings in the MSC and its "shack" is located over the bowling alley in the southeast wing of the Center.

"The main service our club gives to the college is that of transmitting messages for Aggies to distant cities," said club president Frank Stewart, a graduate student from Dallas.

The club maintains a table with radiogram blanks and instructions for filling out these blanks in the connecting causeway just outside the bowling alley. Also, a box for the completed forms is located there.

Sent Through Networks

The box is checked periodically for messages by club members. Messages are sorted according to destination and urgency, and are sent through various amateur radio traffic networks.

"Suppose an Aggie decides at the last minute to go home for a weekend and wishes to notify his girl but can't afford a long distance telephone call," said Stewart. "If he lives in Dallas, for instance, his message would be transmitted through the North Texas Traffic Network to a Dallas ham, who would relay the message to the girl by telephone."

"If he lived in California, his message would be sent through one of the national traffic networks."

Stewart explained that these networks are the result of various amateur radio clubs and associations. The North Texas traffic network, for example, is handled by a specified operator each day. The control duty passes from operator to operator, changing once a day.

Stations Check In

It operates this way:

The controlling frequency signs on the air at a given time and frequency, identifies himself, and asks listening operators to "check in." Each operator who is listening to the network checks in by identifying himself by call number and location of his station.

The network control operator then announces the destination of that day's messages and asks listening operators with stations at those destinations to stand by. He then contacts the ham who signed in for Dallas and gives him the messages for that city. He does the same for each city or area for which he has a message and a listening operator.

Frequently, the network operator has a message to be transmitted to a point for which no operator signed in. In such a case, he asks the aid of those who have contacted him who are nearer the destination than the control station.

In this way, a message may possibly be relayed through three, four, or even five radio operators before finally reaching its destination.

'Telephone Patch Service'

"Another service we offer, like the radiogram, is the "telephone patch," said Stewart. "What we do in this case is contact a ham in the desired city and ask him to make a "patch" between his rig and telephone, and to dial the person to be contacted."

"There is some misunderstanding about patches, however," he said. "Sometimes we have someone walk in and ask to talk to his girl in El Paso. He just doesn't understand that we can't flip a few dials and switches, and locate an El Paso operator immediately."

Stewart said the odds were very poor on simply sitting down and contacting a ham in a desired city.