Wednesday, July 14, 1971 by Jim Earle Apollo 15 to carry satellite Oldsmobile for prolonged moon study

Apollo 15 spacecraft will launch an 80-pound subsatellite that will remain in lunar orbit and radio scientific data to Earth for a year after Apollo returns.

The hexagonal-shaped device, 31 inches long and 14 inches in diameter, carries three of eight new experiments housed in a bay of the Apollo Service Module previously occupied only by an oxygen tank.

The scientific instrument module (SIM) bay, as it's called, is shielded during Apollo's threeday journey from Earth by a door that will be blown off by small explosive charges about 4½ hours before the spacecraft begins circling the moon.

The subsatellite, housed in a box-like container similar to a rural mailbox, will be pushed out by a spring mechanism shortly before the spacecraft leaves lunar orbit for return to earth.

When clear of the spacecraft, the subsatellite will put out three evenly spaced five-foot booms. On one of these is a magnetometer that will measure interplanetary

moon.

The other two booms balance it to stabilize the little satellite as it spins at about 12 revolutions per minute. The orbit will range from 55 to 75 nautical miles above the moon.

The subsatellite, powered by solar cells and a rechargeable battery, also carries charged-particle sensors and equipment to detect variations in lunar gravity caused by mass concentrations of dense material within the moon.

Other instruments in the SIM bay are:

-A gamma-ray spectrometeron the end of a 25-foot boomto determine the concentration of radioactive elements in the lunar surface;

-An X-ray spectrometer, to determine the concentration of major rock-forming elements in the surface:

-An alpha-particle spectrometer, to locate radon sources in the surface;

-A mass spectrometer, on the end of a 20-foot boom, to obtain

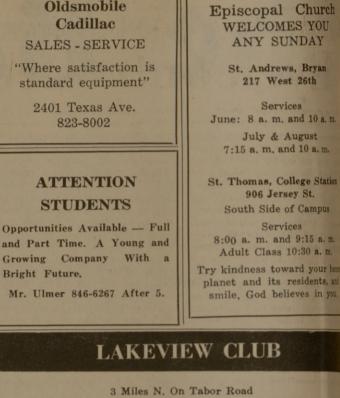
While circling the moon, the and earth magnetic fields near the data on constituents of the lunar atmosphere; and

____ A laser altimeter to measure precisely the spacecraft's altitude above the lunar surface.

Two other command/service module experiments will use the spacecraft's communications systems to detect variations in lunar gravity caused by mass concentrations and to obtain data on lunar electrical properties, surface roughness and depth of the surface layer of rubble.

Also carried in the SIM bay are a large 24-inch panoramic camera to take high-resolution photographs of the lunar surface, both stereo and monoscopic, and a three-inch mapping/stellar camera to obtain simultaneously exposed high-quality photos of the lunar surface and star fields to determine the precise location of the spacecraft.

To retrieve the exposed film, astronaut Alfred M. Worden will climb out of the command module hatch and maneuver handover-hand along the service module during the homeward journey. His "space walk" will be televised live and in color for viewers around the world.



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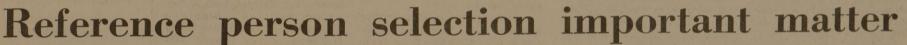
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Picture the time when you found someone you felt was worthy of modeling your life after. Maybe it was Ringo Starr or the local English teacher or your father. Whoever it was, practically everybody at some time during his life identifies with a friend or a parent or a brother or someone whom he wishes to emulate.

THE BATTALION

"There's just something about a man in uniform that's

College Station, Texas

CADET SLOUCH

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irresistible!"

Perhaps, though, these reference individuals, as sociologists call them, differ according to your sex or the location of the place where you grow up.

In any case, it isn't a minor matter. People's lives are changed by reference individuals and, through an understanding of their selection, we might be able to influence life decision-making and growth.

Therefore, Dr. Wayne Oberle, sociologist in the Texas Agricultural Experiment Station at A&M University in College Station, has focused study on 478 metropolitan and nonmetropolitan low income Negro 10th graders to attempt to understand the differences place of residence and sex make on reference individuals selected

"There seem to be a lot of common sense notions around that parents are instrumental or very influential in influencing a child's whole orientation toward life, work and other things," said the sociologist. "But there really has been very little, if any, research to document the extent. For exent states of development." Oberle, also an assistant professor in the Department of Agricultural Economics and Rural Sociology, asked the high school sophomores to "Think of the person who you would most want to fashion your life after." The students had to choose one of the following: a teacher or school counselor, father or mother, an older brother or sister, a relative not in the immediate family, a close friend, a movie or T.V. star, a famous athlete, an important government official, or some oth-

er person Little difference between nonmetropolitan and metropolitan youth in their selection was observed, indicating that their life models are not so different as many persons have hypothesized. "The traditional 'rural-urban' distinction seems to be less rele-

vant than it used to be," Oberle said. "In this study, nonmetro-

Texas A&M anthropologist Dr. led already to a new understanding of the age of prehistoric man Vaughn M. Bryant Jr. leaves Friin South America, said Bryant. day for Peru where he will join an expedition sponsored by the He explained some crude tools

with the bones of extinct Pleisence Foundation. tocene mammals. A radiocarbon dating test from that deposit

graders had fairly similar choices for reference individuals, indicating that they are not different homogeneous groups.'

They are similar in that metropolitan and nonmetropolitan males aspire to emulate glamour figures first and parents second. In both types of communities, females hold teachers in high regard, although nonmetropolitan girls also select glamour figures as the most common reference individual.

Oberle did find, even though there are similarities between metropolitan and nonmetropolitan youth, that metropolitan youth select friends more often than do nonmetropolitan youth, and nonmetropolitan youth select glamour figures more often than do metropolitan youth.

A significant finding in the study is that sex differences are quite substantial. Males select glamour figures more often than politan and metropolitan 10th females, and females select teach-

A&M anthropologist will join prehistoric study in Peru

Robert S. Peabody Foundation for Archeology and the National Sci-

Bryant is a new faculty mem-

often than do males.

Oberle also found that the more often a youth is likely to select a glamour figure for a reference individual, the more often also are parents selected and the less often are relatives and teachers selected. The more often relatives are selected, the more often friends are selected.

"In terms of suggestions for future research," he said, "we

ers, relatives and friends more certainly have added a real question in the necessity of analysis that focuses on the difference the place of residence makes. At least in terms of our analysis here. place of residence differences in the selection patterns of reference individuals were relatively minor. In terms of sex differences, we found they're quite significant because sex does make a significant difference in the selection of reference individuals."





ample, parents are more or less influential in a comparison with teachers or peers.

"It seems, as an opener, that different socialization agents are

er of the thropology Department. He previously taught at Washington State University.

The Peruvian expedition, now more or less important at differ- in its second field season, has

Franchi-Singing Cadet record now available in B-CS area

Franchi with the Singing Cadets of Texas A&M is now available at several local record dealers. The 45 r.p.m. record is on sale at the Tip Top record shop, Memorial Student Center gift shop and Exchange Store at \$1 each.

through Singing Cadets Director Robert L. Boone in the Student Program Office of the MSC.

"No Man" was performed by Franchi and the A&M glee club on an Ed Sullivan Show telecast in January.

Franchi arranged the single is- Cadets were cut out of a separate sue and made it possible for the number.

A stereo single recording of Singing Cadets to share in prowith Franchi's "I Search the World for Love" on the flip side, features "No Man" with a modern beat and full orchestra backing. Franchi first heard the song through Boone and the Cadets at the Miss Teenage America It also is available for \$1.50 Pageant in Fort Worth last December. He lined up their appearance on the Sullivan show to join him doing "No Man Is An Island." Franchi's suggestion of the single was in part the result of a programming problem on the Sullivan telecast, on which the

making it the oldest record of man in South America.

The study is being conducted near the town of Ayacucho in the Andean highlands. Its objective is "to search for the origin of agriculture and to discover the relationship of this phenomenon to the development of village life and ultimately to civilization in New World Centers."

Included in the interdisciplinary "No Man Is An Island" by Sergio ceeds from the sale. The record, study are biologists, geologists and ecologists, as well as anthropologists and archeologists.

> Bryant's main field of research is ethnobotany, man's utilization of plants. While in Peru, he will be seeking to determine the types of plants prehistoric man in that area used for his food.

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Che Battalion

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EDITOR DAVID S. MIDDLEBROOKE