

# aerospace

## AIRPORT SAFETY

### Device to reduce skidding accidents

A new portable meter that measures the coefficient of friction between an airplane tire and the runway surface, developed in England, is now being introduced in the United States.

The testing device is designed to give airport authorities, control tower personnel and pilots more accurate readings on the conditions of runways, thereby improving airport safety by reducing landing, take-off and taxiing accidents.

The Mu Meter, as it is called, is towed from a station wagon or other vehicle on airport runways in the same pattern planes would use. Tests can be made at rates varying between 40 and 120 miles per hour.

Soiltest, Inc., a subsidiary of Cenco Instruments Corp., Evanston, Ill., is marketing the device in this country.

## LUNAR EXPLORATION

### Study proposed for roving moon vehicle

No flight program has been approved for a lunar roving vehicle, although many such schemes have been considered in the past. But proposals for a preliminary design and definition study for a dual-mode LRV have now been requested from 11 aerospace companies.

The National Aeronautics and Space Administration says the study will take about six months.

The dual-mode vehicle must provide mobility for astronauts on the lunar surface as well as remote control capability for performing automated long-range scientific traverses across large areas of the lunar surface. The vehicle design must be compatible with several spacecraft delivery systems.

When delivered on the moon by manned spacecraft, the LRV would be deployed by one astronaut, who could make sorties of up to six miles from the landing site.

## PILOT TRAINING

### Vertigo-inducing flight simulator

A device that simulates an airplane flying into a cloud, at which point vertigo is induced, has been developed at the request of the Federal Aviation Administration.

Called the Vertigon, the new simulator will be used to acquaint pilots with the inherent dangers of vertigo, a false sense of motion. In those conditions new pilots tend to rely on their senses during flight rather than on instruments.

The FAA requested development of the device by Flight Products, Inc., in Moonachie, N.J., following months of research by two aviation psychologists into pilot disorientation.

## SATELLITES

### Two biosatellites terminated

All further work on two biosatellites that were to have taken life forms in earth orbit for 21 days beginning in 1971 has been terminated by the National Aeronautics and Space Administration.

Although fund cutbacks made the cancellation necessary, the possibility of carrying biology experiments aboard future manned flights was also a factor in the decision. The biosatellites were to have carried plant and animal life forms in an effort to study the effects of space travel on biologic processes.

The contracts with the university investigators chosen to fly experiments on the canceled missions will be continued until they can be redirected to other efforts.

## AIRCRAFT TERMINALS

### Offshore airports

The rapidly rising costs of land and the scarcity of suitable areas for airport development, as well as mounting objections to aircraft noise from adjacent communities, make the prospects of constructing terminals on offshore sites more and more inviting (SN: 7/27/68, p. 83).

The Federal Aviation Administration is, therefore, requesting proposals for the collection and analysis of information on the engineering, economic and operational aspects to be considered in the construction of such offshore aircraft terminals.

Proposed methods for constructing future facilities include floating airports, those built on fill or on piles, and those built in areas protected by dikes. Existing airports with runway portions extending over water areas are not included in the study.

## SOUND POLLUTION

### Australians study aircraft noise

The Australian Government has appointed a seven-man committee to study the causes, effects and control of aircraft noise in Australia. The leader of the opposition party, E. G. Whitlam, termed the move "an amazingly prompt response" to a call for such a study by the Parliamentary Works Committee.

Civil Aviation Minister R. W. C. Swartz said the committee will examine the major forms of aircraft noise and the problems resulting from it on people, property and communities. It will also investigate noise measurement and any factors peculiar to Australia that should be taken into account in considering acceptable levels of noise for various sections of the community (SN: 7/20/68, p. 61).

## SATELLITE COMMUNICATIONS

### Fifth global TV satellite launched

The world's newest communications satellite, Intelsat 3-A, was launched into orbit on Dec. 18 from Cape Kennedy. It soared into space on the 10th anniversary of the launching of the first communications satellite.

Intelsat 3 is the first in a new series of space vehicles designed to extend commercial communications by satellite virtually globally by late summer. It is operated by the 63-nation International Telecommunications Consortium, or Intelsat, which paid the National Aeronautics and Space Administration \$4.7 million to launch the \$6 million satellite.

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