

METEOROLOGY

# "Rain Making" Under NSF

With Senate passage of a bill empowering the National Science Foundation to study the problem, an end to the seven-year "rain making" controversy may be in sight.

► A SEVEN-YEAR battle concerning what Government agency should have the final say over studies of "rain making" and other weather modification methods is now in its final stages.

The National Science Foundation would direct research in this economically important field if Senate bill, S. 86, is passed by the House as it has been by the Senate.

Virtually since the first cloud seeding experiments in 1946, weathermen have debated the effectiveness of trying to make rain or snow by throwing chemicals into likely looking clouds.

Suppression of hail, lightning and fog has also been tried.

As more and more commercial cloud seeders came on the scene, the controversy and public clamor to settle it increased.

Separate bills to put "rain making" under the Department of Agriculture, the Department of Interior or the Weather Bureau were introduced in Congress between 1951 and 1953. Lengthy hearings were held, emphasizing the necessity for evaluating the cloud seeding operations to determine if they were producing results.

Finally the Advisory Committee on Weather Control was set up by an act passed in 1953. It was directed to recommend to the President and Congress by June 30, 1956, the extent to which the Federal Government should experiment with, engage in or regulate attempts to increase precipitation or otherwise affect the weather. It was authorized to evaluate cloud seeding operations, but not to conduct experiments itself.

The Advisory Committee's life was later extended to June 30, 1958. However, under the bill S. 86, the Committee would be abolished as of Dec. 31, 1957, and its

"functions, duties and records" transferred to the National Science Foundation.

Although the Advisory Committee's final reports are still to come, a technical report recently issued showed there has been a significant increase in precipitation over that expected naturally when clouds on the windward slopes of the western mountain regions were seeded. These results apply only to the specified conditions.

They do not apply for the Great Plains, the Southwest or eastern states, where considerable commercial activity has been concentrated. (See SNL, July 27, p. 53.)

Variations in rainfall amounts in these areas are too large for any effects of cloud seeding to be detected by presently known statistical methods.

Solution to the problem is scientifically controlled experiments. The National Science Foundation will be authorized to direct such studies if the proposed bill is approved by the House or Representatives as is expected during the current session.

Science News Letter, August 17, 1957

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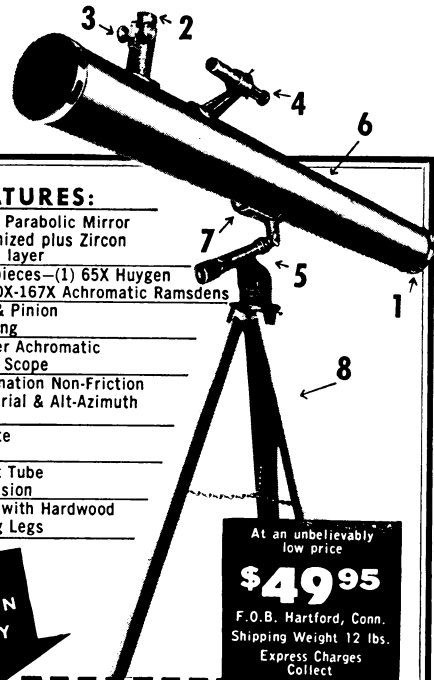
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TECHNOLOGY

## New Gasoline Plant Uses No Crude Oil

► A \$16,000,000 facility to produce gasoline and high-purity metallurgical coke from a newly exploited mineral has been opened in the Southwest.

Involving mines in Utah, a 72-mile pipeline over a high mountain pass and a refinery near Grand Junction, Colo., the new operation of American Gilsonite Company produces regular and high octane gasoline as well as coke from Uintaite, a solid hydrocarbon found in deposits around Bonanza, Utah.

Renamed "Gilsonite" in honor of an early explorer of the area, the brittle black ore, resembling both coal and asphalt, is crushed, slurried with water and pumped over mountains to the refinery.

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