

Japan feels, as Germany has, that the treaty might cut it out of basic peaceful industry. She sent an ambassador to Washington to talk with William C. Foster, director of the U.S. Arms Control and Disarmament Agency. A German and an Indian emissary also flew in.

**One result** of Mr. Humphrey's trip was the apparent loosening of the bind caused by the inspection section of the treaty. Germany and Italy, among others, have objected to inspection of their nuclear plants by representatives of the International Atomic Energy Agency, which might include Russians. They prefer inspection by their own international organization, Euratom. But Euratom has softened its stand, and might agree to "external verification" of the results of its inspections. The IAEA, on its part, declared that if a nation objected to any given inspector in its plants, it could simply turn him away.

**While the diplomats buzzed** and the problems seemingly softened, members of Mr. Humphrey's entourage reported opening new channels of communication with science ministers and oceanographers in the seven nations visited.

The "technology gap" a standard bugaboo in Europe, is Europe's own fault, they said, and it may get worse, particularly in oceanography, where the U.S. is mounting a major effort. They offered support to European oceanographic efforts—perhaps the gift of mothballed U.S. ships for research, or low-level funding of experiments.

The Humphrey party negotiated only one firm agreement during its tour. By trans-Atlantic telephone, it arranged for an extended lease for the prime Italian oceanographic vessel, a former U.S. Navy fleet tug remade by the Italians. The lease was almost up, and the Italians feared the U.S. Navy would want the vessel back.

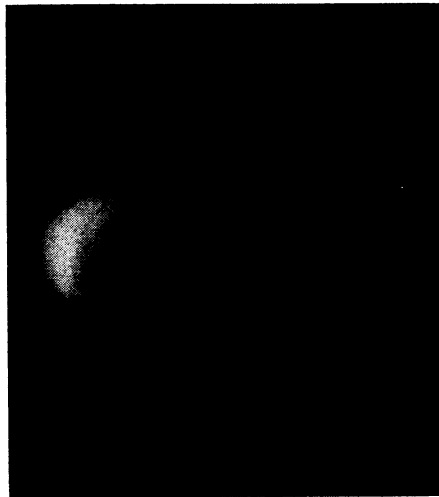
## Comets Simulated

One widely accepted theory of the formation of comets is that they are frosty conglomerations of debris from the solar system fused by frozen water, ammonia and methane, with carbon dioxide as one of several minor constituents.

**Experimental support** for this model of what constitutes a comet was reported last week to the American Geophysical Union meeting in Washington, D.C. by two scientists from Advanced Kinetics, Inc., Costa Mesa, Calif., who have created artificial comets in their laboratory.

The synthetic comets have the same general features as the natural objects.

They are made by bombarding, in a vacuum, a small piece of solid carbon dioxide with a stream of hydrogen gas accelerated to a speed of 200 kilometers a second.



Synthetic comet: dry ice and a tail.

The hydrogen plasma simulates the solar wind, an overall neutral stream of protons and electrons hurled from the sun. The wind heats a natural comet, ionizing a part of it which streams away to form the tail.

Carbon dioxide is used as the comet's nucleus in the laboratory model because it is easy to handle. When the simulated solar wind strikes the solid carbon dioxide, a tail resembling that seen in the sky is formed.

## Games for the Slums

A pinball machine can and has been used to teach mathematics painlessly to young slum dwellers.

Painless education, or rather educational fun, is what delinquent slum children need to bridge the gaps between themselves and middle class society—at least in the view of Bertram M. Beck, director of New York's Mobilization for Youth, Inc.

Last week at a Harvard symposium on child guidance, Beck gave his reasons why most rehabilitation programs fail.

**Until now, recreation** has existed for its own sake, and has amounted to "importing wood lore, cookie sales and basketball to the slums," as part of social workers' efforts to pass on middle class values.

But what the child too often needs is basic intellectual repair, help in mastering concepts middle class children learn when they are still playing with dolls and trunks.

Many slum youngsters lack a grasp of time, health and training as ideas; they don't understand duty, responsi-

bility, or even self-betterment, said Beck. Their level of abstraction is insufficient to allow them to function successfully in society.

Most social work has had only an accidental effect on this intellectual dysfunction. But Beck believes games with an educational hook can help develop these functions, and Mobilization for Youth hopes to stock its four adolescent centers with gaming devices. "If we could get the money, we would equip an entire center with pinball machines," said Dr. Harold Weissman, a Mobilization social worker. Besides pinball, computerized teaching machines can be used to entice delinquents into playing, and in the process, learning.

**If educational games** are new to social work, they are not new to education. "There is a tremendous move toward applying games to teaching," explained Dr. Alan Cohen, formerly a Mobilization worker, now a psychologist at Yeshiva University. Johns Hopkins University, Columbia and Yeshiva all have work in progress on game teaching.

Dr. Cohen himself has developed games for use in a New York reform school. Homework is sent home in coded riddles; problem-solving is taught by means of a naval battle, each child with his own fleet of ships.

The first five months brought a tremendous change, said Dr. Cohen. From a state of total illiteracy, the children, aged 10 to 14, had begun to read words. They clamored for homework, and the improvement in behavior was phenomenal, he said.

## Miltown Contest

Formal objections to the FDA's tentative order to place special restrictions on the tranquilizer Miltown and other brands of meprobamate are being filed by the manufacturer.

Kirby Peake, president of Carter-Wallace Inc., which holds exclusive rights to marketing meprobamate, says FDA failed to prove that the drug has a potential for abuse as defined by the Drug Abuse Control Amendments of 1965.

FDA says evidence presented during a four-month hearing last year showed that the prescription tranquilizer has been abused and its abuse is likely to increase unless it is controlled under the 1965 amendments.

Following the formal objections, due by May 13, FDA allows 90 more days before making a final formal order. Officials of Carter-Wallace say the company will probably take the case to the Court of Appeals in Washington, D.C., if FDA carries out its restriction plans.