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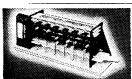
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The radio signals from both planets are similar. They both:

- are directed in a narrow cone;
- are intense, with intensity increasing very rapidly at lower frequencies:
 - occur in rapid but sporadic bursts.

It was thought that the radiation when first detected might be from a surface broadcasting station somehow leaking through the ionosphere, but a laboratory simulation showed this wasn't so. That, plus months of observation showing it occurs only over southern latitudes where there are no radio stations, convinced the project scientists that the origin was earth's magnetosphere.

The huge antennas carried by the 414-pound RAE satellite, also known as Explorer 38, are providing scientists with the most comprehensive and detailed measurements of cosmic radio noise yet available at frequencies ranging from 700 kilohertz to nine megahertz. The maps are far from completion but have yielded, among other things, the possibility of a new definition of the position of the solar system in the Milky Way.

Although only a conjecture at this stage of data analysis, Dr. Stone says the data suggest that the sun and its family of planets are farther from the plane of the Milky Way than had been thought. The solar system is believed to be about 70,000 light years from the center of the Milky Way, which is about 100,000 light years across. If the new position is confirmed, it would be vertically closer to the anti-center, which is above the plane.

This tentative suggestion is based on observations that most low-frequency radio radiation originates in the plane of the Milky Way, rather than its rarefied halo or in other galaxies.

HEADSTART

Second thoughts about a study

"We're not trying to do Headstart in," says John Price, assistant to President Nixon's urban affairs adviser Daniel Moynihan. "What we are trying to do is to give Headstart a bureaucratic lease on life."

The way the Administration wants to do this is by putting Headstart under the wing of the newly created Department of Child Development in Secretary Robert H. Finch's Department of Health, Education and Welfare. Headstart began as one of the major components of the Office of Economic Opportunity.

One of the rationalizations for transferring Headstart is a highly critical survev of its effectiveness conducted by the Westinghouse Learning Corporation and Ohio University (SN: 4/26, p. 400).

The report raked Headstart over the coals, concluding that, in the main, the children who went through the program came out no better for their experience than did those who never went near Headstart.

But an academic tempest began brewing soon after the report was made public; Dr. William G. Madow, a Stanford University statistician who had been a consultant to the study, refused payment for his work and asked to have his name stricken from the report. He considers both the research plan and the conclusions of the report to be incorrect.

And Dr. Madow's disenchantment has drawn sympathetic responses from Dr. Martin Deutsch, director of the New York University Institute for Developmental Studies; Dr. Alfred Yankauer of the Harvard School of Public Health, who was another consultant to the survey; and Dr. Edward F. Zigler, director of the Child Development Program at Yale University and a member of the original Headstart steering committee.

The critics have centered their attack on what they regard as the survey's shallow approach to Headstart, on its allegedly faulty evaluation of children's test scores, and on its statistical methodology.

Dr. Deutsch charges that the report has "created a situation in which many policymakers in the Federal establishment seem to misinterpret implications of the research and ignore the potential impact of well-ordered early childhood learning programs."

Dr. Deutsch adds that his studies show that the concept of Headstart can be successful if carefully planned and carried out without the frantic haste which has often marked Headstart efforts.

The study was defended by Dr. Verne S. Atwater, president of Westinghouse, and by Dr. Sheldon White of the Harvard School of Education, who served as a consultant. Dr. John W. Evans, head of evaluation for the Office of Economic Opportunity, which originally commissioned the inquiry, also upheld its findings.

UNIVERSITIES

Indignation and a wrist slap

"Our youth now loves luxury. They have bad manners and contempt for authority. They show disrespect for their elders. Children are now tyrants, not the servants of the household. They contradict their parents, chatter before company, gobble up their food and tyrannize their teachers."

-Socrates, 400 B.C.

Twenty-four hundred years later, the prestigious American Council on Education reflects some of the old philosopher's concerns in its "Declaration on Campus Unrest," a manifesto on how to cope with angry young men which has been distributed to its 1,538 member colleges and universities.

The declaration was hammered out at a meeting in a Chicago motel over the Easter vacation by a galaxy of academic luminaries that included the presidents of Harvard, Michigan, Minnesota and Illinois, and the chancellors of Berkeley, UCLA and Wisconsin.

It states that basic to the operation of any university, certain conditions must prevail. "Disruption and violence have no place on any campus. The academic community has the responsibility to deal promptly and directly with disruptions. If the universities will not govern themselves, they will be governed by others.

"The historic concern of the university community with academic freedom needs to be restated, reaffirmed and vigorously defended against all, within or without the university, who would obstruct the right of scholars to investigate, teachers to teach, or students to learn."

At the same time that the council's report was being released, university administrators were being chided by Secretary of Health, Education and Welfare Robert H. Finch.

"Academic institutions," the Secretary told a House subcommittee, "in attempting to serve many masters—Government and industry among them—have tended to serve none of them well."

He observed that the colleges had brought many of their current troubles upon themselves through failures of self-examination and self-renewal, and reminded the legislators that no one should mistake campus confrontations for mere conflict for conflict's sake. The strife, Finch believes, is often rooted in legitimate grievances.

The council and Finch were in agreement on one subject: The universities should have the major role in controlling their students, without the help of special laws.

"Violations of criminal law," says the council report, "must be dealt with through the ordinary processes of the law, and the universities must attempt to deal with disruptive situations firmly before they reach the stage of police



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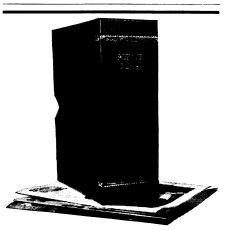
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