

# Russians Test Failures

Russian scientists and educators engaged in research on the care of handicapped children routinely examine those who fail twice in school

➤ RUSSIAN school children who fail a subject a second time after repeating it for a year are automatically tested for brain damage, a team of British educators reported.

Four members of the Guild of Teachers of Backward Children, the first British delegation ever to visit the Russian Department of Special Education which cares for backward children, found that in the Soviet Union more than 100 scientists and 17 professors are engaged in research on the care of handicapped children. (Britain's first unit has been granted a site at Manchester University, but so far has no money.)

The Research Institute of Defectology is supported by faculties in Moscow, Kiev, Leningrad and other cities where teachers have been trained to care for handicapped children since 1920. Pay is 25% above that of ordinary teachers and incentives are given to those who teach in remote areas.

Staffing ratios are far better than in Britain, the Guild members reported. A. B. Boom, who visited establishments for severely subnormal children, said: "I saw one school which had 590 children and 329 staff, including eight full-time doctors."

The Russians classify only one percent of their children as "backward," compared with the British figure of at least 10%. But this is largely because of their different system of classification.

They estimate that eight percent of the total population have speech defects. Great attention is paid to remedial treatment for this. Slow learners cannot slip through the net (Russians find unbelievable the British accounts of children leaving school at 15 only semiliterate). Russian children must pass one standard before they go on to another: those who fail have lessons repeated. If they fail for two years running, they are automatically tested for brain damage.

The Guild is acutely concerned by the number of British children who should be receiving special help, but are not. Some 10,000 have been recognized as educationally subnormal and are waiting to join the 40,000 already in special schools. But about 5,000 at least, the Guild estimates, are struggling to keep afloat even in the shallow waters of primary schools or deteriorating in the isolation of home.

Some 7,000 severely subnormal children having IQ's below 50 attend junior

training centers. Staff members there receive much lower salaries than recognized teachers, however, and many are untrained. For their sake the Guild would like to see the centers taken over by the Department of Science and Education. Although parents already call the centers "schools," the staff "teachers," the stigma of mental illness unfortunately persists.

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## SPACE

### MTA Augurs Man's Travel on Moon Surface

➤ A GIANT metal skeleton is being used to develop test data on mobility on the lunar surface.

The vehicle, known as a Mobility Test Article (MTA), was built by the Bendix Systems Division for the National Aeronautics and Space Administration's Marshall Space Flight Center, Huntsville, Ala.

Test data to be developed through use of the MTA is to be used in the future in designing a Local Scientific Survey Module (LSSM), a vehicle astronauts will use in traveling about the moon's surface on exploration missions.

The MTA is designed to have a basic mobility system but not such items as life support systems, cabin and communications equipment.

The MTA consists of a chassis, wheels, suspension systems, drive mechanisms with electric motors, steering mechanism and a driver station.

Power for the test article is furnished either by batteries on board or by an umbilical cable.

In its stripped-down configuration, the MTA weighs only about one-sixth as much as the lunar vehicle it was designed to represent. This permits a simulation of the load which would be on the wheels of the complete vehicle on the moon where gravity is one-sixth that of the earth.

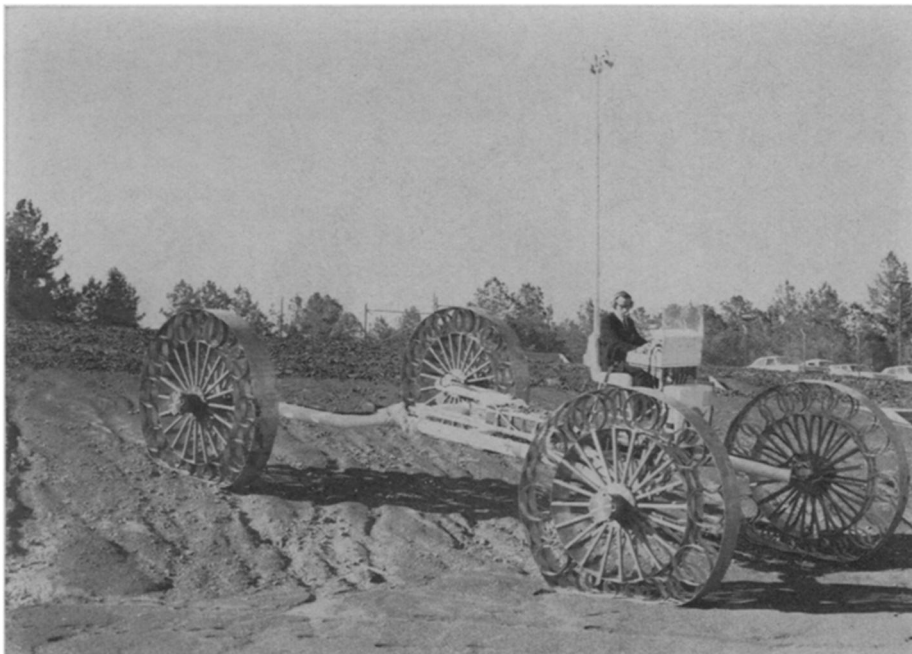
The Bendix MTA weighs about 1,760 pounds, including the weight of a 170-pound driver. It is 24 feet three inches long, 12 feet five inches wide and 10 feet eight inches high.

The wheels are made up of small spring titanium circles arranged around a larger ring with another even larger ring serving as the "tread" on the outside perimeter. The spokes are aluminum. The wheels are 80 inches in outside diameter and are on a 211-inch wheelbase.

Each wheel has its own drive motor. This lets the driver turn the vehicle around "on the spot" by making the wheels on the right side turn in one direction and the other two wheels turn in the opposite direction.

This maneuver was demonstrated, as was the vehicle's ability to travel forward, backward, up steep inclines, over obstacles and down hills at a steep lateral angle.

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NASA

**RUGGED TRAVELER**—As presently planned the LSSM would have no enclosed cabin. The astronaut would sit in the open wearing a space unit and using back-pack life-support equipment while exploring the moon's surface. Trips up to five miles from a base shelter would be possible with the LSSM.