**Technical Notes**

- GE is completing an automatic data reduction system to aid in the design of a worldwide navigational and communications satellite system for ships and aircraft. The proposed system will consist of a series of satellites in synchronous orbit, with each serving as a relay station for communications among ships, aircraft, and submarines.

- Raytheon has developed a new method to detect and localize underground uranium ore deposits. The method uses two-dimensional laser interferometry to measure distance, flatness, and angle. It is therefore the first laser interferometer to measure geometry and enables a single instrument to calibrate a machine tool as a measuring machine. Accuracy is 0.4 micrometers per meter and is unaffected by air turbulence or mechanical shock.

- Raytheon has developed a doughnut-shaped antenna array to receive microwave energy beamed to earth from orbiting satellites as part of a NASA-funded study program into the development of the solar power potential. Solar cells absorb a satellite's signal in position above the earth and high enough to be far from the continuous sunlight which would cause solar energy to distort current electricity. This would be converted to microwave energy and beamed to earth above your arrays, like the model produced by Raytheon, would receive the energy and reconvert it into usable electric power. The scheme employs proven components. Although not presently economically competitive with contemporary electrical generating systems, the solar power proposal has the advantage of conserving fuel resources and avoiding pollution. The system could eventually serve many of our energy problems but present difficulties lie in satellite launch and maintenance, development of high voltage (megavolt) microwave beams, and the ability to work through the variety of atmospheric conditions without adverse effects on efficiency and environmental quality.

**GSC urges Congress to impeach Nixon**

By Bill Conklin

The Graduate Student Council recently passed a resolution urging Congress to impeach President Nixon. The text of the statement appears below.

In a meeting which followed the passing of this resolution, Karel Kowalski, vice-president of the GSC, and Mike Postavsky, secretary-treasurer, laid out the reasons for impeachment.

The Graduate Student Council of Massachusetts Institute of Technology strongly urges the immediate impeachment of President Nixon. This would benefit the nation as a whole, and especially graduate education in particular. (By the illegal embezzlement of federal funds for education, he has caused a crisis in MIT graduate student financing.) We call on the members of Congress quickly and effectively to bring Mr. Nixon to trial before the Senate, and to convict and remove him from office. Mr. Nixon's crimes against the American people, the people of Southeast Asia, and the rest of the world must be stopped and not allowed to recur. He has violated his "mandate from the people."