

the SALT agreement on ABM systems—and Mr Averell Harriman, former US Ambassador to the USSR and chief negotiator for the partial test ban treaty a decade ago, added that he believes the USSR would not sign an agreement which it intends to violate.

Those who argued in favour of the senate resolution suggested that the advantages of stopping nuclear tests would be outweighed by the disadvantages that may result from possible violations. One key question in such a determination is the military significance of small nuclear tests, and that, of course is classified. But Dr Panofsky suggests that the arms race is paced more by non-nuclear developments—delivery systems and so on—than by nuclear developments, and thus a ban on testing would not threaten US security. But Dr Philip J. Farley, Acting Director of the Arms Control and Disarmament Agency, said that “while seismic capability has improved, so has our understanding of the military potential of nuclear tests of lower yields”. And Dr Foster said that there are some cases in which nuclear tests involving an explosive yield of a half or a quarter of a kiloton would be militarily important. But if that is the official position of the Department of Defense, it would be a serious blow to chances of ever securing a test ban treaty because such small events could never be detected by seismic means.

The Administration witnesses all reaffirmed the US government's commitment to achieving a comprehensive test ban, provided it could be adequately verified. But, unless their unwavering insistence on on-site inspection is simply an initial bargaining position for the next round of the Conference of the Committee on Disarmament to be held in Geneva next month—which some observers are suggesting—the chances seem dim that a comprehensive test ban treaty will be signed before the tenth anniversary of the partial test ban treaty.

COMMISSION

How to Run Universities

THE Carnegie Commission on Higher Education has now turned its attention to the problems of how to strike a balance between the conflicting interests in higher education (*Governance of Higher Education*, McGraw-Hill, April 1973) and has in particular blessed the continuation of the institution of academic tenure. The report says that the issue is more of a challenge now than ever, partly because of the past growth and increasing diversity of universities and colleges, the pressures generated by the slackened pace of growth now in prospect, the demands of students and the conflicting views among the faculties of universities and colleges about the

function of higher education. The commission also includes enhanced public interest and reduced willingness to “accept authority” among the pressures on higher education. The problem, it says, is how to ensure a “reasonable” degree of independence from federal and state governments, separation from party politics, freedom for faculty members and faculty influence on academic affairs.

Among the commission's recommendations are the following:

- Where universities derive their support from public funds, there should be a general understanding between donors and recipients about the need that financial control should extend only to the outlines of academic policy. Budgets, for example, should not be defined in line-by-line items.
- Governing boards of publicly supported institutions should not include elected officials, especially those with financial powers, while the members of boards appointed, for example, by state governors should be screened in advance for suitability. At least some board members should be nominated for service by faculty, students and alumni.
- The commission has found that a majority of teachers in higher education

is now in favour of collective bargaining and almost half of a representative sample considers that strikes may now be legitimate in certain circumstances. It asks that all colleges should conform to the standards defined by the American Association of University Professors in 1972, which assert the importance of collective bargaining in higher education but which also draw attention to the special needs of universities and colleges. Those colleges in which collective bargaining is at present outlawed should be reformed.

SPACE

Skylab in Trouble

THE entire future of the Skylab project hangs in the balance this weekend with the failure on Monday of this week of the solar panels on the space station. These panels, which should produce in all about 21 kilowatts of electricity, failed to open when signals were sent from Earth although four other solar wings which provide power for controlling the optical telescope attached to Skylab are working satisfactorily.

The Skylab crew was due to begin work in the laboratory on Tuesday, but following the failure of the power system the launch of their Saturn 1B was put off until next Sunday (May 20). This allowed the mission planners time to assess whether there was any point in sending up a crew to a spacecraft with only half power. One question which was asked was whether the crew could reactivate the solar panels once they had arrived. But Mr Walter J. Kapryan, launch director at Cape Kennedy, said on Monday that the astronauts could do nothing to correct any malfunction in the solar panels. In particular Mr Kapryan emphasized that the panels could not be made operational by a space walk.

There are no firm plans for any Skylab missions after the present one and it is unlikely that Congress will feel generous enough to provide NASA with increased funds if the present mission has to be aborted.

Partly because of this, there seems a good chance that NASA will proceed with a more limited Skylab mission even if the power fault is not rectified.

There are four chief objectives of the Skylab mission. First, it is meant to determine the ability of people to live and work in conditions of weightlessness for extended periods. Second, the mission is to make observations with the optical telescope which are not possible from Earth. Third, to develop improved techniques for surveying the resources of Earth from space. Fourth, other experiments which are of particular interest if carried out in zero gravity and outside the atmosphere.

Alice in Eco-land Again

“THE Sierra Club magazine *Bonanza*,” said Alice, “wants no more sheep to be raised because the sheep farmers are killing coyotes.”

“Quite right,” said the Mad Hatter. “The sheep must go. The coyotes are native Americans. They lived on the range land before the sheep came.”

“But don't coyotes eat sheep?” asked Alice.

“They do,” said the Hatter, “but mutton fat is very high in cholesterol. It is not healthy for elderly coyotes who are subject to coronary disease. They should eat deer and rabbits, which are rich in essential unsaturated fatty acids.”

“What did you say?” asked the March Hare.

“I didn't mean you,” said the Hatter “You are too tough.”

“Where shall I be able to get wool to knit sweaters?” asked Alice.

“You might try shearing a coyote,” said the Hatter. “They will become very tame when the sheep leave.”

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