examining weaknesses in the perspective of the total institutional environment, Meder noted. He observed, moreover, that difficulties will arise in defining which offenses are gross and which are not. (Agreeing that a problem of definitions will exist, an AAUP staff member said, "If there were a word more gross than *gross*, we'd buy it.")

The AAUP believes that, through further discussion, its draft statement can be put in acceptable form. The accrediting federation's present chairman, the Reverend E. J. Drummond, vice president for medical affairs of St. Louis University (a member of the North Central Association), told *Science* that, while he was not yet familiar with details of the AAUP draft, he shared AAUP's concern. Father Drummond suggested that, when major violations of academic freedom occur, the accrediting bodies should intervene at an early stage, provide consultant services, and do whatever they can to restore a healthy situation.

The AAUP draft is not, of course, a revolutionary document. Most members of regional accrediting commissions doubtless would contend that their bodies deeply appreciate the importance of academic freedom. Nevertheless, it seems clear that, had the Middle States commission been guided by the spirit and principles of the AAUP draft, it would have intervened in the St. John's case sooner than it did, and with less confusion about the legitimacy of its interest in the mass dismissals.

"Accrediting agencies across the country will be noticeably more watchful because of what happened at St. John's," said a member of one regional commission. "If the AAUP draft is adopted, I think they will be more alert still."

A new emphasis on academic freedom as a standard for accreditation seems especially timely now when higher education is in a state of rapid growth. New colleges and universities are springing up, and many small colleges are developing into sizable institutions. For example, St. John's, though founded in 1870 by the Vincentian Fathers, has achieved its present size (more than 12,000 students) and complexity largely since the mid-1950's, when its Jamaica campus, in Queens, was developed.

St. John's had undertaken an ambitious program of self-evaluation well before last year's crisis arose, and, indeed, it was partly because of tensions generated by that effort that the crisis occurred. Some persons familiar with the situation at St. John's believe that the university's growth has outstripped the administrative capacity of the Vincentian Order, which, with only a few hundred priests in its Eastern province, has undertaken to run two universities (St. John's and Niagara University), plus a number of seminaries, high schools, and mission houses. St. John's problem of reconciling its religious identity and purposes with the demands of academic freedom has been a further difficulty. In short, St. John's has been a prime example of an institution in need of expert advice, sometimes from a Dutch uncle.

The ability of accrediting agencies to intervene decisively when their standards are flouted has been demonstrated repeatedly. The Southern Association commission's success a few years ago in getting state officials to stop trying to force their segregationist policies on the University of Mississippi is but one example of such a body's showing its muscle. The power and influence of the accrediting agencies, though often constructively applied in the past, will be still better used in the future, many academicians believe, if the lessons of the St. John's crisis are well learned.

—LUTHER J. CARTER

The Space Treaty: A Step in Easing U.S.—Soviet Tensions

Like a department store Santa Claus too impatient to obey the rules prohibiting early disclosure of gifts, President Johnson confirmed on 8 December that the United States and the Soviet Union had agreed on a treaty insuring the peaceful uses of outer space. Initially, at least, the Soviet leaders were left speechless by President Johnson's quick disclosure.

The contents of the treaty came as no surprise; in effect, the treaty codified resolutions passed in previous years by the United Nations General Assembly which were supported by both the United States and the Soviet Union. What is significant is that the two superpowers are able to make a major agreement, despite the tensions produced by the war in Vietnam.

"It is the most important arms control development since the limited test ban treaty of 1963," the President euphorically stated. Since there has been little arms control progress since the treaty banning atmospheric tests in the Kennedy-Khrushchev era, no one is likely to dispute his analysis. Since early 1964, President Johnson has displayed a willingness to ease tensions with the Soviet Union in a number of areas. However, his initial efforts did not bear immediate fruit, partly because of the fall of Khrushchev in October 1964 and, even more importantly, because of the beginning of the bombing of North Vietnam in February 1965.

In the past few months, President Johnson has renewed his efforts to seek areas of agreement with the Soviet Union. In May, he instructed Arthur Goldberg, U.S. Ambassador to the United Nations, to take the issue of a space treaty before the United Nations Outer Space Committee. On 26 August and 7 October the President made significant speeches in Idaho and New York City stressing his desire for peaceful relations with the Soviet Union. In early October, the two nations achieved a long-delayed agreement permitting commercial air flights between New York and Moscow. On 9 October, the President met for 1 hour and 40 minutes with Soviet Foreign Minister Andrei A. Gromyko. The space treaty marks the most impressive achievement to date in the President's campaign for better relations between the two great powers.

To some extent, the Soviets and the Americans gain common dividends from their agreements—not only do they enhance their international prestige but they also help protect their flanks against the seeming belligerence of Communist China. Because of the widespread current distrust of the Chinese leadership, the Soviet Union is now better able to make such agreements with the United States without losing face in the Communist camp.

Basically, the new space treaty guarantees that the moon and the other celestial bodies will not be used for bases or other military purposes and

that no nuclear weapon or "any other kinds of weapon of mass destruction" will be placed on the moon or other celestial bodies or in space. The treaty provides for inspection of all installations and equipment on celestial bodies by other signatory nations given "reasonable advance notice of a projected visit." This part of the treaty was written to meet Soviet demand; the United States had desired stations to be open continually without notification of visit. The treaty does not deal with the question of inspection of orbiting vehicles; such inspection is neither specifically permitted nor prohibited. The treaty does not affect reconnaissance satellites, manned orbital laboratories, or intercontinental ballistic missiles.

The Soviet desire to gain entry to all space-tracking installations was not fulfilled by the treaty. Such an agreement would have given Soviet scientists automatic access to the vast U.S. space-tracking network. The treaty now reads that requests for observation shall be considered "on a basis of equality" with those of other signatory states and "shall be determined by agreement between the states concerned."

The treaty establishes the right of exploration for all countries and prohibits nations from claiming sovereignty over any part of outer space. It guarantees "freedom of scientific investigation" and enjoins states to "facilitate and encourage international cooperation." Countries are to inform the U.N. Secretary-General "as well as the public and the international scientific community, to the greatest extent feasible" of the nature of their space activitites. Astronauts of all nations are to be regarded as "envoys of mankind" and to be rendered assistance in the event of accident. The treaty orders signatory states to conduct space exploration so as to avoid harmful contamination of celestial bodies "and also adverse changes in the environment of the Earth resulting from the introduction of extraterrestrial matter."

The treaty will go into effect after the ratification of five nations which must include the United States, the Soviet Union, and the United Kingdom. As in the case of the 1963 test-ban treaty, the space agreement can be signed at any of the capitals of these three countries. A nation can withdraw from the treaty by giving notice anytime after it has been in effect for a year; such a withdrawal would take effect a year after the notice was given.

Having been negotiated and approved by the 28-member United Nations Outer Space Committee, the treaty is to be appended to a General Assembly resolution urging adoption. The resolution is expected to be overwhelmingly adopted by the General Assembly in mid-December, thus prompting member nations to quickly ratify the space treaty.

Senate Ratification

President Johnson has expressed his hope that the United States "will be one of the first countries" to ratify the treaty. As in the case of all international treaties, the space agreement must be considered by the Senate Foreign Relations Committee and must then receive the votes of two-thirds of the members of the Senate to gain approval. In discussions earlier this year, most members of the Committee seemed sympathetic to the treaty, and it would be surprising if it did not eventually receive Senate approval. U.S. officials are hopeful that most nations, including France, will sign the space treaty, but are not sanguine about acquiring Peking's signature.

In terms of existing military conditions and costs, it is not terribly remarkable that the United States and the Soviet Union were able to reach agreement on the first treaty to assure the peaceful uses of space. At present, the costs of using space for military purposes are too high to make it an attractive option. However, the treaty will stand as a guard against military exploitation of space at a future time when improved technology might make such utilization more feasible.

On earth, President Johnson must still deal with mounting military expenditures—not only in Vietnam, but those vast sums contemplated to match the Soviet deployment of an antimissile missile system and a reported Soviet increase in offensive missiles. It is little wonder that he eagerly seized upon the news that one area would be freed from military spending.

Although some U.S. officials attach no great significance to the contents of the space treaty, they do emphasize the importance of achieving *any* Washington-Moscow accord. With wary optimism, they speculate that the United States and the Soviet Union will agree early next year on the next major item on their bilateral agenda—a nuclear nonproliferation treaty.—BRYCE NELSON

Announcements

The winners of AAAS-Westinghouse science writing awards in three categories were announced today. Each award carries a $1000 cash prize.

John Kolesar, of the Trenton, New Jersey, *Evening Times*, is the first winner of the new award for writers on newspapers with daily circulations of under 100,000, for his article "The C Stellarator. It's As Hot As The Sun." The article, which appeared in the *Evening Times* on 16 May, concerns the goal of creating electric power through controlled nuclear fusion.

Evert Clark, science correspondent for the New York *Times* Washington bureau, is the winner of the award for writers on newspapers with a circulation of more than 100,000. His entry was a nine-part series about the moon-landing of Surveyor I; the articles were published between 31 May and 14 July.

The award for magazine writing will go to *Life*'s Albert Rosenfeld for his article, "The New Man—What Will He Be Like?" which appeared 1 October 1965. This article is part four of his "Control of Life" series and explores the implications to man of new scientific breakthroughs in biology and medicine.

A six-part series, "Our Human Beginnings," earned an honorable mention for Harry S. Pease, of the Milwaukee *Journal*. The series, about recent fossil studies, ran daily between 25 and 30 September.

The Minneapolis *Tribune* will receive a special citation for its "Science Reading" series, articles published each Monday during the school year and written by nationally known scientists and science writers.

Scientist in the News

Gardner Lindzey, chairman of the psychology department, University of Texas, has been elected president of the American Psychological Association. He will serve a 1-year term as head of the 25,000-member organization.

Erratum: In "Immunization of normal mouse spleen cell suspensions in vitro" (26 Aug., p. 1004) by R. I. Mishell and R. W. Dutton, the nutritional cocktail in reference 9 should have included 2.5 ml of 200 m*M* glutamine.

Erratum: In the article "Interpretation of some organic photochemistry" by H. E. Zimmerman (19 Aug., p. 837), line 6, paragraph 4, column 1, page 843, should read "that of . . . drawing a circle of *radius* 2" (not diameter). Line 6 from the bottom, column 2, page 843, should read "system . . . favors a *conrotatory* opening."