

PHYSICS AND GOVERNMENT

Flap at IUPAP

Members of the US national commission to the International Union of Pure and Applied Physics, long dissatisfied with the small part that IUPAP plays in international physics activities, are currently mounting a strong effort to put new vigor into the world organization. It is believed that the American delegation to IUPAP's twelfth general assembly at Basel this fall may urge formation of an IUPAP committee on meetings and advance the name of a dynamic American for a key post in the organization.

Potentially an important organization on the world physics scene, IUPAP is already of real significance to the American Physical Society since its sponsorship of certain conferences facilitates the meeting of distinguished Eastern-bloc physicists with their American colleagues. It is also felt that the union, through its Commission for Symbols, Units and Nomenclature (SUN) has done a job of great service for the physics community. Created in Brussels in 1922, this nongovernmental union of physicists from 35 countries seeks to create and encourage international cooperation in physics, to coordinate the work of preparing and publishing abstracts, papers and tables of physical constants, to secure international agreement on constants, and to encourage useful research.

In actuality, however, the operation of IUPAP is somewhat less effective than its stated objectives. Critics of the organization point out that IUPAP general assemblies (occurring at three-year intervals) are largely given over to ceremonies and procedural niceties, that the union provides little support to its many topical meetings other than the IUPAP name and token financial aid, and that such meetings are poorly planned and too numerous. A further complaint is that IUPAP engages in no publishing activities, but only lends its name to some conference proceedings.

American representatives to IUPAP cite with admiring envy such organizations as the International Astro-

RESONANCES

The higher education bill, providing \$4.4 billion over three years for college construction and aid to developing institutions, has been approved by the Senate Education Subcommittee. The sum, which is about \$1.5 billion more than a similar measure passed by the House, has been sharply criticized as too large by some Appropriations Committee members. Subcommittee chairman Wayne Morse replied that American education would not be sacrificed to finance the war in Vietnam.

The metric system study bill, already passed by the Senate, is still in doubt as the House Rules Committee has refused a second time to allow the measure to come to the House floor. Sponsors of the bill, who indicate they have the backing of House speaker John McCormack, intend to bypass the Rules Committee and bring the measure before the full House. Prospects, they say, still look good for passage this session.

Duty-free apparatus for educational and scientific purposes came closer to realization as the House passed bills to implement the Florence and Beirut Agreements. The Senate Finance Committee subsequently followed suit and passage by the full Senate is expected in this session.

Brookhaven was allotted \$47.8 million, the largest lump sum in the laboratory's history, by the House Appropriations Committee and approval by the full House is expected shortly. The funds, provided they are left intact by the Senate and Budget Bureau cost cutters, will be used for converting the AGS to higher intensity and for expanded experimental programs.

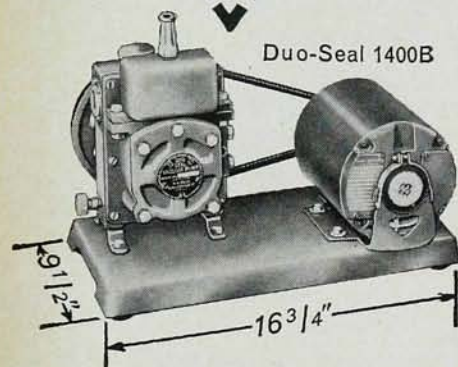
Physicists can now become astronauts. The National Academy of Sciences is again recruiting scientists for NASA's manned space flight program. Scientist-astronauts will plan and conduct experiments from satellites and study the lunar surface. They will also have an opportunity to do research at NASA or university laboratories. Recruits must have the doctorate, be no taller than six feet and be born after 1 Aug. 1930. Applicants should write to the Scientist as Astronaut program at NAS.

nomical Union and the International Mathematical Union, which hold significant meetings at regular intervals and have powerful committee structures that contribute importantly to research. The mathematical union in particular issues a volume every few years that reflects the current world of mathematics and the most recent developments. IUPAP, say the Americans, has a long way to go before it occupies a place on the scientific scene

or is as useful as these organizations.

Many and various reasons are put forward to explain the backward state of IUPAP. Most agree that the union is fraught with seniority problems and claims of competing national groups. They also point out that the higher offices of IUPAP are largely honorific and are involved mainly with social amenities. It had been hoped over the years that the leadership would evolve into a dynamic and ef-

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fective administration, but such hopes have been defeated. A further reason, according to others, lies in the rather minimal concern of American physicists for international interdisciplinary scientific activities. Physicists who have been active in the International Geophysical Year and other such undertakings have mainly served as representatives of other unions and not directly with those projects. Bringing about greater US participation in these areas, they say, will require dynamic leadership in the US national commission to IUPAP as well as the union.

They also suggest that the IUPAP leadership is restricted in its scope by the very modest budgets (approximately \$30 000 yearly) provided IUPAP through the membership and UNESCO. And low budget levels have persisted over the last two decades. But without adequate support, IUPAP cannot organize effective meetings; conversely, without effective meetings, more funds are not likely to be forthcoming from UNESCO and the membership. "IUPAP never had sufficient vitality behind it," says one observer, "to gain more support from the physics community and put a request in for any substantial increase in its budget."

This is why the principal suggestion offered by members of the American commission concerns the immediate strengthening of the union's meetings structure. To this end, the US delegates to the IUPAP general assembly in Basel (Robert F. Bacher, Walter H. Brattain, William W. Havens Jr, William V. Houston, Hugh C. Wolfe) may urge formation of an IUPAP committee on meetings, preferably with an American chairman. But there is a difference of opinion among the Americans on the kinds of IUPAP meetings such a committee would strengthen. Some would transform the big general congresses into scientific meetings and improve the programming of the small topical meetings. Others believe that organizing gigantic congresses for all of physics would be of questionable value. They point out that the International Union of Pure and Applied Chemistry and other unions are beginning to doubt the usefulness of their big general congresses and to wonder how they could be altered. Thus IUPAP, through its executive committee, could

be much more effective in limiting its concern to topical meeting programs.

If the name of an American is advanced for IUPAP first vice-president, the move would be somewhat unusual. The American, if elected, would then be in line to succeed the current IUPAP president Dimitri I. Blokhintsev of the USSR in 1969 rather than having to work his way slowly up the ladder of IUPAP officialdom as is general for future union presidents. But with a dynamic American as president, the US delegation believes that IUPAP would have a very good chance to become a vigorous organization. The US delegation would also like to offer the names of other Americans to posts within the executive committee but they will probably defer such action rather than be accused of "packing" the organization.

In any event, the US will have to achieve its objectives in IUPAP with a great measure of patience and discretion. As one physicist close to the US delegation says, "In such organizations, the wheels of the gods grind slowly and any attempt to introduce a step function may trigger a reaction ... gradual moves are often the most effective moves."

Urge education department

Representative Gale Schisler (D-Ill.) is the most recent of many congressmen to offer a bill calling for establishment of an independent department of education. While total federal spending on education during the last fiscal year amounted to some \$7 billion distributed by over 40 agencies and departments, only \$1.5 billion was administered by the US Office of Education. Many in Congress agree with Sen. Abraham Ribicoff (another education department partisan) that the USOE "simply does not have the status, authority, or responsibility to deal with the multifaceted federal education program. And that program is multiplying every day." But Health, Education and Welfare secretary John W. Gardner believes that the broad responsibilities of his department are inseparably related. Gardner has made it clear that he will not tolerate dismemberment of HEW. Washington observers suggest that a compromise be-