

mittee action. Opponents of the school bill introduced bills to extend the impacted areas program separately from general school aid. Chairman Powell of the Education and Labor Committee announced that his committee was not going to report such a bill. The opposition filed what is called a "discharge petition" to bring an impacted areas bill to the floor of the House without action by the Education Committee. This will require the signatures of 219 members, a majority of the House. The aim of the Administration will be to try to keep members who are supporters of both general aid and aid to impacted areas from signing the discharge petition, at least until the Administration is ready to deal with the question.

Supporters of the school bill hold an advantage in tactical position that is normally held by their opponents. Congressional procedure makes it far easier to delay something controversial than to speed it up, and in this case it is the liberals rather than the conservatives who are in no rush to act. If the discharge petition succeeds and a separate impacted areas bill is put through the House, a showdown can still be delayed until it is convenient for the Administration. In the Senate, supporters of school aid appear to be in full control. This makes it unlikely that a bill covering only impacted areas would get through the Senate. The House could then ask for a conference to work out a compromise between the House bill and the bill the Senate has already passed, which includes the controversial general aid as well as impacted areas aid. But the conference could then be stalled for whatever supporters of school aid feel is an appropriate length of time, at which time the conferees could report a compromise bill embodying most of what the Administration wants.

The real problem of supporters of the school bill is to get the House to accept a conference report containing the Administration proposals. This will be a difficult task, as everyone has known it would be all along. The Rules Committee action last week added a bit more flavor to the elaborate game of high politics that will decide the fate of this bill, but it never was likely to be decisive. For if, with the leverage available through the impacted areas program, the Administration lacked the strength to force a bill to a vote despite the Rules Committee, it almost certainly

would have lacked the strength to push the bill through the House even if the Rules Committee had cooperated. Indeed the Rules Committee may even have helped a bit, for now if the bill does reach the floor, it will not do so as part of a widely publicized and widely criticized bargain with the parochial school bloc.

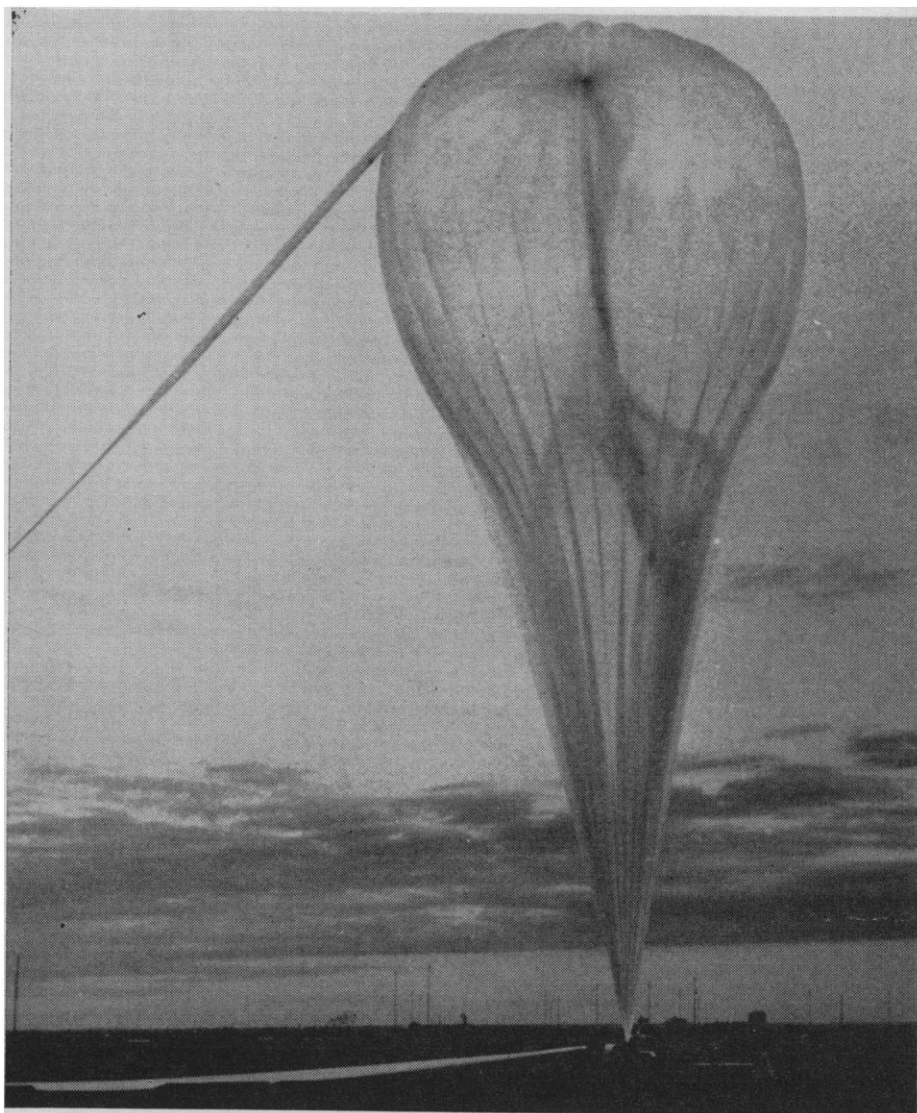
As for the outcome, a great deal depends, as has been widely noted, on what the President is prepared to do. What the President does depends a good deal on what the general political situation will be in September and, to a large extent, on whether he feels that anything he could do would be enough to carry the day. At this point it is the critics of general school aid who are glowing with optimism, and it may turn out that their optimism is justified.—H.M.

News Notes

Project Banshee

Weather and winds finally permitted this week the first in a series of 10 firings in Project Banshee, the Department of Defense research program to study the blast-wave effects of explosives detonated from balloons at 38,000 to 115,000 feet. The way was cleared for the actual firings to begin when, after five tries, the second dry run was successfully made last week.

The balloon (see cut) was launched into a high-altitude wind stream that carried it and its 200-foot train of instruments and 500 pounds of conventional high explosives over the 4000-square mile White Sands Missile Range in the New Mexico desert. Air Force planes



Banshee balloon: the plastic balloons vary in size according to altitude desired. Some are as long as a football field. [Department of Defense]

flew a safety chase on the balloon while ground-based tracking instruments also kept it under surveillance until it was in position for safe detonation. The charge was exploded at a signal from the ground, and the package of instruments dropped back to earth via a standard 64-foot orange and white cargo parachute.

After the series of firings has been completed, another set of these balloons will be used as targets for Nike-Hercules ground-to-air missiles with high-explosive warheads, in place of the nuclear warheads that would be used in combat.

The measurements obtained from both phases of Project Banshee will make it possible to estimate the possible damaging effects from nuclear explosions at high altitudes.

Drinking Water Standards

The first major revision by the Public Health Service of Drinking Water Standards for the United States since 1946 includes, for the first time, limits on concentrations of radioactivity and certain chemical pollutants.

Radioactivity in water, on the basis of recommendations by the Federal Radiation Council, the National Committee on Radiation Protection, and the International Commission on Radiological Protection, is now limited to 3 micromicrocuries per liter for radium-226, 10 micromicrocuries per liter for strontium-90, and 1000 micromicrocuries per liter for gross beta activity. The recommended maximum daily intake for Ra^{226} is 7.3 micromicrocuries, and for Sr^{90} it is 73 micromicrocuries.

In setting the relatively high limits for Ra^{226} and the lower limits for Sr^{90} , consideration was given to the fact that most radiation from Ra^{226} is in water and most radiation from Sr^{90} is in food. The gross beta activity is relied on only when alpha (in this instance Ra^{226}) content and Sr^{90} content are low enough to be insignificant. The PHS also took into account high levels of naturally occurring radioactivity in some water sources. If in some instances these should show higher radiation levels than those recommended, an evaluation of total intake would be made of radiation from food and air. Should this prove to be too high, the water source might have to be condemned and less-radioactive water would have to be imported by the communities involved. However, in the absence of above-ground nuclear testing

and the substantial increase in Sr^{90} that might result, it is unlikely that water will be condemned for excessive radiation.

Chemical pollutants not previously limited in water include alkyl benzene sulfonate (detergents), barium, cadmium, carbon, chloroform extractables, cyanide, nitrate, and silver. The growing problem of potentially harmful chemicals in sources of drinking water is recognized, but PHS does not find it necessary at this time to include limits for all potentially toxic chemicals.

Drinking Water Standards originally were set in 1914 and have provided the basis for legally regulating drinking water used on trains, airplanes, buses, and vessels in interstate commerce. They have served as guides for control of water supplies generally throughout the country, affecting more than 125 million people.

Tariff exemption for electron microscopes and medical equipment in which a radiation source is used went into effect last week. Exemptions for this equipment have been commonly granted in the past, in the form of special laws allowing duty-free import of a specific piece of equipment. Confronted with half a dozen requests for special exemptions, the House Ways and Means Committee decided there was no need to review each new request separately. The committee recommended writing a general exemption into the tariff law, applicable to imports by nonprofit organizations. The bill passed both houses of Congress without opposition and took effect immediately after it was signed by the President last week. Without the exemption the tariff would add 50 percent to the price of an imported electron microscope.

The special presidential panel which is studying the possibility that the Russians have been or could be engaged in **secret testing of nuclear weapons** is chaired by Wolfgang Panofsky, professor of physics at Stanford. The White House announced the membership of the committee last week. The panel was appointed about a month ago. Panofsky, a member of the President's Science Advisory Committee, has been in the news recently as chief scientist on the \$114 million Stanford electron accelerator, construction of which is expected to be authorized by Congress next week. The panel met with the President last Friday to give a report on its findings, but the White House

said that Kennedy had asked for further details and that the study probably would not be completed for several more weeks.

Kennedy's request for an **accelerated space program** has received top-heavy endorsement from Congress, which authorized \$1.7 billion for the current fiscal year, the full amount Kennedy requested. This is about 60 percent more than Eisenhower had recommended and about double what was spent last year. The Administration had warned that it would be wasteful for Congress to authorize the full amount unless it was prepared to follow through and vote the even larger sums, over \$2 billion a year, that would be required in the future. The actual appropriations will be made in a later bill, but the lopsided votes (354 to 59 in the more conservative House) suggested that the appropriation bill would come quite close to the full authorization.

On the **communications satellite program**, Kennedy issued a policy statement announcing that "private ownership and operation of the U.S. portion of the system is favored, provided that such operation meets [certain] requirements." Among these requirements are that the system must be world wide and that access to shares in the ownership and use of the system must be available to all countries. Kennedy also said that "to date, no arrangements between the government and private industry contain any commitments as to an operations system" and that he was "anxious that development . . . proceed with all possible promptness." Background on this statement appeared in *Science* and the *News* last week.

The orbiting of American **reconnaissance satellites** constitutes an "act of aggression," according to *Red Star*, the Soviet army newspaper. The paper included in its complaint the Tiros weather satellites as well as the Midas and Samos military reconnaissance satellites. The paper compared the satellites with the U-2 flights: "It does not matter how high they fly, they are still spies," the paper asserted. "Flying a sputnik over foreign territory is an act of aggression." Under current international law, a nation's sovereignty over its air space extends indefinitely. Whether this theory can be sensibly applied to satellites outside the earth's atmosphere has never had occasion to be adjudicated. The American position is that it can not.