between any generous government budget officer and any straitened university counterpart. The difficulty is that the two come to the bargaining table with differing interests. Not so pleased with the Bureau of the Budget guidelines are the budget officers of a number of universities, especially smaller ones, who look upon the document as an accountant's nightmare.

On the generally recognized indirect costs such as heat, light, janitorial service, and procurement of help, there is little disagreement. From there on, however, the possible interpretations lead some government budget officials to the conclusion that the universities are seeking to milk them, and university officials to the conclusion that some government officials are ignorant of what makes a university tick.

In the University of Chicago negotiations with the AEC, one matter of contention was the question of how much the AEC should pay in indirect costs for the support which the university library provides for Argonne Laboratory, which is some 35 miles away from the campus. It was the AEC's contention that the university library is of little significance in the operation of the laboratory, which has its own local library facilities. This interpretation of the library's relationship to Argonne sends despair through university officials, who find it difficult to convince cost accountants that a university cannot be dissected.

On an even more subtle point, the intangible, unascertainable support that one element of a university lends to another simply through the informal personal relationships that develop among its people, there is no convincing the cost accountants.

"How," asked one official, "can you explain the value that's derived from having people on a physics project in a position where they can consult with people in the mathematics department? There's no dollars-and-cents value that can be assigned to that. But it's indirect support, if anything is indirect support. When pennies are pinched on the work that a university does for the government, the result is belt tightening that can subtly affect the government work."

In support of their case for the intangible benefits that research derives from a university environment, university officials point out that profit-making firms holding government contracts frequently develop formal as well as informal relationships with nearby universities. The benefits flow both ways, of course, and defy cost analysis, but they support the contention that the presence of the campus is a plus for the researcher carrying out a specific government project.

Some government officials feel that universities tend to exaggerate the overhead expense involved in carrying out federally financed research projects, especially at large-scale research facilities, such as the AEC's national laboratories. These, they point out, are frequently located some distance from the main campus, and they have developed into largely self-contained units that require little support from the parent institution. In regard to on-campus, small-scale research projects, those skeptical of the universities' pleas argue that government money has brought unparalleled prosperity into university science. Like Representative Fogarty, who is skeptical of the claim that HEW's 15 percent limit is inadequate, they say that they do not notice any significant number of universities declining the opportunity to undertake government work, despite the size of the overhead allowance.

The question of a fair allowance draws various figures. Fogarty's committee was told last spring that a limited survey of small institutions placed their average overhead costs at 42 percent; larger institutions reported theirs at 34 percent. The National Science Foundation is preparing a study that is expected to offer a broader consensus.

In the meantime, the views of the universities are being coordinated and pushed for the first time in Washington through the Committee on Governmental Relations of the National Federation of College and University Business Officers. This organization is trying to get across a message that so far has received little attention. Although the Administration has paid lip service to the universities' pleas, the case for enlarging HEW's 15-percent overhead allowance got lost on the crowded and noisy route between the White House and Capitol Hill. The funds sought by the Administration for the HEW overhead increase were paltry in relation to overall research expenditures. And in the Senate-House conference on the measure, the Senators who had backed an increase showed no willingness to fight for their point. A more forceful presentation of the universities' case might have made a difference in the outcome.—D.S.G.

Civil Defense: The Confusion Will Not Be Easily Dissipated

The Administration's desire to chart a civil defense program for the nation was bogged down this week in the vast uncertainties that bedevil any attempt to foresee and prepare for the havoc of a nuclear attack.

One element of the program—a survey of existing structures that would offer fallout protection—was reported to be moving along; but in its insistence on individual and family efforts for survival, the Administration found that it had sown considerable confusion. The details on just what each household should do in behalf of its own survival have not yet been put forth by the Administration. Into the breach has stepped an array of experts with advice ranging from nothing to prescriptions for elaborate shelters. *Life* magazine reports that 97 out of every 100 persons can be saved through proper preparation; Tom T. Stonier of the Rockefeller Institute, reporting on behalf of the Scientists' Committee for Radiation Information, estimated that the fire storm produced by a 20-megaton blast at New York's Columbus Circle would kill 6 million of the city's 8 million residents. Additional lives, he said, would be lost in the city's suburbs.

While the debate is being carried on by nongovernmental parties, the Administration's civil defense planners are cautiously picking their way toward what will be the "official" government policy on civil defense. Their difficulties are illustrated by the fact that a civil defense booklet which is to be sent to every family has now been in preparation for about 3 months; until recently, it was expected that it would be completed this month, but in the Office of Emergency Planning it is now estimated that the publication will not be ready until December, possibly later. OEP officials say that before the booklet is sent to every household in the United States, it will probably be subjected to a pilot testing, which may well result in further changes and delays.

Regardless of the date of distribution, it is unlikely that widespread harmony will be achieved by any official design for coping with the unknown. From some critics of the Administration's slowness has come the happy thought that a few well-chosen statements would end public confusion

in this area. Among the planners, however, there is the knowledge that no matter how much wisdom they compress into the civil defense booklet, the uncertainties are such that an honest approach will not produce anything resembling *Life's* conclusions. And if an attempt is made to downgrade the destructiveness of nuclear weapons, the inevitable confrontation of well-founded, conflicting views will undermine public confidence in the entire program.

Further complicating the task of the planners is the fact that it must be conceded at the outset that for a vast number of people—those in an immediate target area—no preparation can be beneficial; while for those outside the target area, survival is predicated on a number of highly optimistic assumptions, including that of no follow-up attacks.

The caution with which the President is approaching the overall subject is illustrated by what he said at his news conference last week. In reply to a question on what could be done to dispel public confusion on civil defense, he stated that "it's very difficult in a large country, with varying problems of geography, with 180 million people, to suddenly organize a civil defense program. . . . I stated in July that we were going to send a book giving the latest information that we had to every household. . . . We are very conscious of the difficulties. We are very conscious of the desire of people to have accurate and precise information."

Whatever accuracy and precision may be achieved by the planners, confusion is, unfortunately, an inevitable by-product of any attempt to prepare the civilian population for the unknowns of nuclear warfare. The confusion is likely to be with us long after the booklet and the policy have been delivered.—D.S.G.

Last year the Supreme Court refused to judge Connecticut's birth-control law on the grounds that the law was not being enforced, and that nobody's rights were being infringed upon. The ruling followed well-established precedents intended to discourage unnecessary litigation. This month the law was invoked, for the first time in this century, against a birth-control clinic in New Haven, and a court ruling on the constitutional question now becomes almost inevitable.—H.M.

Announcements

A **dental clinic for emotionally disturbed patients**, or for individuals who have fears so severe that they are unable to undergo usual dental treatment, opened this month as an affiliate of the Columbia University School of Dental and Oral Surgery. The staff, in an effort to reduce unfavorable dental associations, will work in street clothes and use amnesic drugs, general anesthetics, and specialized equipment. (Dental Clinic, Grand Central Hospital, 321 E. 42 St., New York 17)

An installation for ground-based scatter radar explorations of **upper atmosphere and outer space** is being constructed by the National Bureau of Standards and the Peruvian Instituto Geofisico de Huancayo. The new Jicamarca Observatory will have a 6-million watt pulse transmitter and a 22-acre antenna, and will be used to measure the intensity of the earth's magnetic field, to observe radar echoes from the sun's corona and from solar gas clouds, to study small-scale irregularities in the outer atmosphere, and to search for radio stars one magnitude weaker than those observed to date. The observatory, located at a site 17 miles east of Lima, Peru, is expected to be operational in December 1961.

Training and career development opportunities in the U.S. Public Health Service's **mental health program** are outlined in *Careers in Psychiatry*, recently published by the National Institutes of Health. The booklet includes descriptions of locations, types, and major phases of the programs; methods of candidate selection; and the pay scale and residencies available. (NIH, Office of Research Information, Bethesda 14, Md.)

Iodine-125, a relatively new radioisotope previously available only in research quantities, is currently being produced at Oak Ridge National Laboratory for $1 per millicurie on a production basis. (ORNL, P.O. Box X, Oak Ridge, Tenn.)

A curriculum guide on establishing **electronics training programs** in secondary schools has been published by the Radio Corporation of America. The volume contains outlines of sample courses, a checklist of considerations in launching such a program, laboratory equipment requirements, and a description of available training devices. (RCA Audio Products, Meadow Lands, Pa. $2)

Grants, Fellowships, and Awards

Applications are being accepted for the 1962 Organization for Economic Cooperation and Development (OECD) **senior visiting fellowships in science and technology** (excluding social science, economics, psychology, pharmacy, and medicine). Candidates, to be nominated by scientific or technical institutions in the United States, its territories, or possessions, must be senior staff scientists, engineers, or mathematicians who (i) are citizens or nationals of the U.S. as of 2 April 1962; (ii) have full professional standing in the field with which the fellowship is to be concerned; and (iii) have at least 5 years of professional research or teaching experience. Recipients will spend from 8 weeks to 6 months studying new techniques and developments at research institutions, primarily in countries that are members of, or cooperating with, the OECD (Austria, Belgium, Canada, Denmark, France, West Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Switzerland, Turkey, the United Kingdom, and Yugoslavia). Deadline: *5 January 1962*. (Fellowship Office, National Academy of Sciences, Washington 25, D.C.)

Applications are now being accepted for graduate research fellowships, assistantships, and scholarships in **forestry** for 1962–63. Research fellowships carry minimum annual stipends of $2100; 9-month assistantships, $1700–$2000; scholarships, $300. Deadline: *1 March 1962*. (Associate Dean for Graduate Studies, New York State University College of Forestry, Syracuse 10)

Applications are now being accepted for the 1962 Lalor Foundation awards given for research on **fertility** and the basic phenomena involved in the fundamental biochemical and physiological mechanisms that are concerned with the early stages of reproduction in various forms of life. The awards, ranging up to $8000 per year, will be given to members of university and college faculty and staff, with preference to