because of the trait. "Some teachers equate sickle cell trait with central nervous system disease and learning and behavior disorders," says Jackson. "We know of no reason why this should be so and we must educate the public about this." Another serious burden that allegedly falls on trait carriers is either an inability to get health or life insurance or an ability to get it only at grossly inflated premiums.

Careful, controlled studies of carriers of sickle cell trait are few and far between, so the matter is clouded by a slew of impressions and, many physicians believe, erroneous notions. Persons with the trait, who have some sickle hemoglobin, or hemoglobin S, in their blood, can get into trouble in circumstances where the oxygen supply is diminished. Thus, trait carriers are cautioned against such activities as sky diving, deep-sea diving, and the like, and the military generally bans carriers from flight and diving duty, as well as duty in the Special Forces. At present, the military screens for sickle cell trait only those blacks who are applying for such potentially dangerous duty. A committee of the National Academy of Sciences (NAS) is currently looking into the advisability of routine screening of all black military personnel and will report its opinion to the Department of Defense by the end of the year. Other than these few precautions, according to Jackson, Robert Murray of Howard, head of the NAS study, and others, there is no reason to treat trait carriers in any special fashion. Warnings that they spurn strenuous exercise or avoid anesthesia, for example, are, in their opinion, silly.

At the Indiana University School of Medicine in Indianapolis, Joseph Christian and his colleagues are concentrating their efforts on research on trait carriers. (Indianapolis is one of the ten comprehensive sickle cell centers.) "We have no evidence that trait carriers have a higher risk of disease or a shorter than normal life-span,' Christian asserts. Among his main interest at the moment is the matter of trait carrier being discriminated against by insurance companies. For the last year or so, Christian has been working with an actuarial firm. "We know of several firms that have a special rating for trait carriers on the books," he says. "Some of them charge as much as 150 percent of the usual premium, some added 30 percent. For a company to rate you at an increased risk of 30 percent for obesity, you'd have to weigh 300 pounds and be 5 feet tall. We'd like to know the medical basis of their

rating system for sickle cell trait." Christian would like to conduct a survey of insurance companies and is hoping to gain their cooperation in sorting fact from fancy. Admitting that it may be a bit naive, he says he would like to try to get the companies to voluntarily drop their ratings for trait carriers rather than instigate an adversary situation, and he adds that he'd welcome any information or help he can get. (Persons with sickle cell anemia itself are not at issue here—with their acknowledgedly short life span, they are uninsurable.)

Screening for sickle cell trait raises other thorny questions as well. Experience thus far, with screening and with the national effort to combat sickle cell anemia on the whole, makes it apparent that things are not as simple as one might like and, that by plunging into such an expansive program, one can stir up new issues by the score.

Sickle cell anemia has risen from relative obscurity to national prominence in just 2 years. Today the sickle cell program has a life of its own. How it is working, with respect to the law, community relations, medical science, and the private lives of the individuals it touches will be discussed in a second article.

-BARBARA J. CULLITON

Nader's Congress Project: Political Scientists Intrigued but Fretful

Who Runs Congress?, the finger-pointing title of a \$1.95 paperback published last week, is the opening salvo of a grandly conceived campaign, the purpose of which is to refashion the U.S. Congress. The campaign, announced by Ralph Nader not quite a year ago at a National Press Club luncheon, has begun on schedule and will culminate some 3 months hence after the publication of an encyclopedic volume of material about Capitol Hill, its denizens, and their way of doing business.

Congress, Nader says in his introduction to the paperback, is "the great American default." It has fallen under

the domination of the White House and "relentless special interests" because citizens have failed to involve themselves in its activities. It has "shackled itself with inadequate political campaign laws, archaic rules, the seniority system, secrecy, understaffing, and grossly deficient ways to obtain crucial information."

The findings of the Nader project, while they cannot be anticipated in detail, will presumably point to reforms along these lines. Their persuasiveness is harder to gauge, but among academic political scientists, who will be one of the many determinants of the project's impact, enthusiasm for the project

ect's general aims and the wealth of data it will produce is tempered with certain misgivings about the way the study has been conducted.

The "Ralph Nader Congress Project/ Citizens Look At Congress," to give the project its official title, is by far the most ambitious task that Nader has undertaken. At its height, the project commanded the services of more than 1000 volunteer researchers working in the home districts of all 535 representatives and senators, as well as an editorial and research staff, about 200 strong, which worked in Washington, D.C., during the summer. According to a National Journal article, the project is expected to cost \$200,000, all of it put up by Nader from his own earnings, and to produce some 21,000 pages of printed material. The director of the project, Robert C. Fellmeth, is a 27-year-old graduate of Stanford University (where he helped organize for Barry Goldwater's 1964 presidential campaign) and the author of three previous Nader studies. The principal staff members are mostly academics, many of them political scientists, or full-time Nader associates. The project's output is planned in six parts:

► Who Runs Congress?, a nonacademic appetizer designed to reach a

mass audience and create interest in the more detailed studies. Although the first to appear, the paperback was apparently conceived late in the life of the project and was written in 6 weeks by three Nader associates, Mark J. Green, James M. Fallows, and David R. Zwick.

► A set of 490 profiles, each some 30 pages in length, covering all except retiring or already defeated members of Congress. Due to be published in mid-

East-West Think Tank Born

A charter-signing ceremony in London on 4 October marked the culmination of a plan, 6 years in gestation, for the creation of an East-West, nongovernmental institute devoted to research on the problems of industrialized societies.

The International Institute of Applied Systems Analysis, to be located near Vienna, will be run by scholarly organizations from 12 countries—five communist, seven capitalist—headed by the United States and the U.S.S.R. The other ten are the United Kingdom, Canada, France, Italy, Japan, West Germany, the German Democratic Republic, Czechoslovakia, Poland, and Bulgaria.

Chairman of the 12-member council of the institute is Jerman M. Gvishiani, a management expert who is chairman of the Soviet State Committee for Science and Technology. The two vice chairmen are Maurice Levy from France and H. Koziolek from East Germany. The director is Howard Raiffa, professor of managerial economics at Harvard University.

The institute will eventually have a professional staff of about 100 and will start with an annual budget of \$3.5 million. The Soviet Academy of Sciences and the National Academy of Sciences (NAS) will contribute \$1 million each, with the American money coming from the National Science Foundation.*

Quiet negotiations have been going on in various European capitals since 1966, when McGeorge Bundy, then President Johnson's special assistant for national security affairs, opened discussions with the Russians. Bundy, who soon afterward assumed the presidency of the Ford Foundation, continued to handle the American side until 1969, when NAS President Philip Handler took over.

Although it has taken years to iron out the logistics and decide on a location for the institute (Paris was a top contender, but neutral Austria was finally settled upon), the basic concept appears to have remained the same—that of using systems analysis and computer technology to work on problems common to highly developed nations.

Raiffa, at a press conference called at NAS, said research will fall into two categories. At first, emphasis will be on methodological studies—mathematical modeling optimization and decision theory; organizational theory and management, and computer science. As the institute matures, it will go more deeply into applied studies—environmental systems, particularly as related to energy research; biology and medical systems;



municipal systems; and large-scale engineering design systems.

The institute, says Raiffa, will resemble a combination of Rand Corporation, the Princeton Institute for Advanced Study. and the Stanford Center for Advanced Study in the Behavioral Sciences. All research will be strictly peaceful, and all scholarly output will be available to the public.

Raiffa will select research projects within financial and conceptual guidelines set down by the council. He acknowledged that it is difficult to select from the huge "menu" of available areas, but said that he has been seeking a consensus on appropriate areas for research, which he will submit to the council.

Gvishiani was apparently a natural choice for the chairmanship. The son-in-law of Soviet Premier Kosygin, he has been a central figure in the negotiations. He wrote his doctoral thesis on management in the United States, and, as one NAS official put it, he is "familiar with the Western mind"—which, if true, should be beneficial in bridging the gap between communist and capitalist logic.

While the institute is strictly a venture for industrialized countries, its members see new methodologies as being invaluable for underdeveloped countries as they enter their own industrialized, technologized, high-pollution eras.

Scientists from noncharter nations will also be able to participate—up to one-third of the staff can be selected from nonparticipating nations.

Other nations will eventually join. Hungary, for example, is a likely candidate. Last year the United States was hoping that Hungary, which is sophisticated in systems analysis, would be invited in, but the U.S.S.R. chose Bulgaria instead. At present the 13th nation to join is expected to be Austria, the host. The Austrian government is pouring about \$4 million into renovation and preparation of Laxenburg Palace, 10 miles outside of Vienna, which should be ready for its first institute occupants in about 6 months—C.H.

^{*} In addition to the NAS and the Soviet Academy, participating institutions are the Committee for the Czechoslovakian Socialist Republic; the Canadian Committee for the Institute of Applied Systems Analysis; the Committee for the Peoples' Republic of Bulgaria; the French Association for the Development of Systems Analysis; the German Academy of Sciences (East Germany); the Japanese Committee for the Institute of Applied Systems Analysis; the Max Planck Society (West Germany); the National Research Council of Italy; the Polish Academy of Sciences; and the Royal Society of London.

October, the profiles are based on personal interviews and a 633-item questionnaire submitted to each congressman, plus data gathered in the congressman's district or state.

- ► Separate, book-length studies of House and Senate committees, grouped according to 13 major areas of jurisdiction.
- ► Eleven book-length studies of particular topics relevant to the congressional process, such as campaign fundraising techniques, conflicts of interest, and the factors affecting incumbency. Both the committee studies and the

topics studies are the work of small research teams, most of them chaired by a political scientist or Nader associate, who spent 3 months this summer interviewing and gathering data. Both sets of studies are scheduled for release when Congress reconvenes in January.

Two handbooks—one for the citizen, informing him how to find out about, influence, or electorally challenge his representative or senator, and

► A collection of computer print-

the legislative process.

one for the congressman, showing new members how to find their way about outs listing such data as voting records, campaign contributors, and congressmen's corporate holdings.

This is no ordinary undertaking, nor is its methodology—a fact that has perturbed some political scientists both inside and outside the project. No one expects the Nader project to be a factory of academic monographs, yet by its scale alone—Nader has said it would be "probably the most comprehensive and detailed study of the Congress since its establishment"—the study has claims on academic attention and will be judged by academic

Briefing

U.K. Environment Minister Deplores Rule by Decree

A keen doctrinal difference is evident in the attitudes of the present British and U.S. administrations toward the problems of the environment. The breadth of the schism was apparent in remarks made by Peter Walker, British Minister for the Environment, during a visit to Washington last week. Walker does not believe in legislating arbitrary standards for polluters to meet. Rather, he says, his approach is to ensure that manufacturers are using the best antipollution devices currently available.

What did the minister think of the exhaust emission standards set by Congress for 1975 automobiles? "We haven't applied these standards in Britain because there is no certainty that they are feasible." How were these things managed in Britain? A manufacturer would be asked to do the best he could and a schedule of improvements agreed with a government inspector. If the manufacturer failed to meet the schedule, he could, in theory, be sued. But in practice it almost never happened that prosecution was needed. "One does sometimes wonder," said the minister, a trifle contentedly, "if some antipollution laws are not designed to make a country fit for lawyers to live in." In Britain, persuasion, not law, was the way of doing business, and there was "no great struggle between government and industry."

This hunky-dory state of affairs was too much for one reporter. "I fail to understand it in political terms," he muttered. Changing in a trice from Pangloss to Panjandrum, the Minister for the Environment explained the not inconsiderable powers invested in his office—he is the only court of appeals against his own decisions, and his ministry combines the functions equivalent to those of the Environmental Protection Agency (EPA), the Department of Transportation, and the Department of Housing and Urban Development. Which prompted an inquiry as to what independent scrutiny there was over his department. Well, the minister said unblinkingly, national newspapers in Britain have full-time environmental correspondents. there were conservation societies and things of that sort.

Walker's dislike of legislative solutions falls solidly within the pragmatic tradition of the Conservative party, to which he belongs, and is perhaps unsurprising in view of his business background. Until his appointment as Minister for the Environment 2 years ago, Walker was the latter half of Slater-Walker Securities, a highly successful investment firm that he cofounded. (Slater is better known among chess fans for the \$130,000 sweetener he put up to lure Bobby Fischer to Reykjavik.) EPA Administrator William D. Ruckelshaus, whom Walker is here to see on undisclosed business (airport landing certificates for the Anglo-French SST?), may find himself viewed as something of a Marxist by his guest. Asked last week what he thought of the Club of Rome's Limits to Growth report, Walker replied that the problems it cites could and were being solved, "in capitalist countries by penalties or incentives, in socialist systems by decree."-N.W.

Weather Watch

Two developments of recent weeks may bring the issue of rainmaking in the Vietnam war again to the fore. One is a United Press International (UPI) report calling into question Secretary of Defense Melvin R. Laird's claim that the United States has not engaged in weather modification "over North Vietnam." The other is a lawsuit which may force the government to reveal in court the extent of alleged weather modification activities in the war.

An unofficial military newspaper, Stars and Stripes, published a UPI listing of military capabilities at eight U.S. air bases in Thailand, which included the following description of C130 transport planes based in Korat. The planes, said UPI, "serve in a variety of roles, from airborne command posts, to cloud-seeding operations over North Vietnam, to dropping of reconnaisance drones, to weather reporting missions." Although the report was published on 29 August, it was virtually overlooked until it was brought to the attention of Senator Gaylord Nelson (D-Wis.), who has been concerned with Vietnam environmental issues.

The UPI statement challenges previous claims by Laird that there have been no weather modification activities "over North Vietnam." Asked to comment on the UPI statement, Pentagon spokesmen repeated Laird's denials. One spokesman said that the Laird statements meant that "obviously" the UPI report was "untrue." Both the Pentagon Papers and the New York

standards. Although each part of the study can only be judged on its own merits, the apprehensions that are already being voiced by some political scientists suggest a mixed reception for the project in academe. That, maybe, is not unexpected; on the other hand, some participants say, it was not inevitable.

Attitudes of political scientists involved in the project vary considerably. "All things considered—the shortage of time, inexperienced people—it worked incredibly well," says Lester Salamon, a political scientist at Vanderbilt Uni-

versity who led the team studying the banking and urban affairs committees. Mark Nadel, a political science fellow at the Brookings Institution and team leader of the science and astronautics committee study, says of the project: "It came close to being optimal, but fell short in a very crucial area—the intellectual underpinning—and it needn't have, because they consulted the top people. The output may still salvage the project," he adds.

The reservations of Nadel and other team leaders center on the questionnaire to which congressmen were submitted, the publication of Who Runs Congress?, and the effort invested in the profiles at the seeming expense of other parts of the project. Because of Nader's clout on Capitol Hill, the questionnaire offered a golden opportunity to gather information from members; instead, according to Nadel, the questions were so numerous and time-consuming that the response rate will probably be too low to be meaningful.

The questionnaire has also been criticized for including unnecessary or adversary-type questions. "The part-time committee team leaders were unanimous

Briefing

Times have made assertions of cloudseeding over Laos and South Vietnam, but the UPI report is the first indicating that cloud-seeding has taken place over North Vietnam. (There have been rumors, however, that the unusually heavy flooding of North Vietnam's Red River in October 1971 was augmented by U.S. rainmaking.)

In addition, on 8 September a commercial weather modification firm, Weather Engineering Corporation of Canada, Ltd., filed a suit for \$95 million in Washington claiming that the government has used a cloud-seeding device called "weathercord" in Southeast Asia in violation of the firm's patent rights. Bernard A. Power, president of the firm, alleges that he and a colleague, in January 1967, unveiled the device to a defense department official, Col. Robert N. Ginsburgh, and discussed its possible application to muddy the infiltration routes in Indochina. Power has been quoted as saying, "Any government has the right to use a patent, with or without permission. But eventually they have to compensate you. That's why we're going to court."

The "weathercord" device causes silver iodide to be distributed upon release from airplanes, after a brief (10-second) delay. Powers has said that he was not told by military officials whether they had used his invention, and that he might not get any response officially "until after the war was over." If the case comes to a trial, the Department of Defense will have to reveal whether or not it used the devices in Indochina, and thus possibly indicate the actual scope of alleged weather modification missions there.—D.S.

COPEP to Rock RANN's Boat

The National Academy of Engineering (NAE) has entered the debate over national priorities by undertaking a sweeping \$280,000 study of the National Science Foundation's program of Research Applied to National Needs (RANN). NAE's Committee on Public Engineering Policy (COPEP), which is making the review, already has a draft interim report ready to advise NSF on policy options for the fiscal 1974 RANN budget. Edward Wenk, Jr., an old government hand formerly with the Office of Science and Technology, who is chairman of both COPEP and the NAE study, has indicated that it will "not just legitimize what they are already doing" in RANN.

The COPEP study will include RANN past, present, and future, as well as the sensitive issue of the program's administration, which apparently NSF was eager to have examined. A steering committee of COPEP—and including the RANN advisory committee —will put the report together, aided by six panels, each with about 15 members, who are looking into individual priority areas: energy, human resources, community development, natural hazards and disasters, growth and environment, and something termed "targets of opportunity," which is billed as a "wild card" panel meant to cross-examine other possibilities and proffer fresh viewpoints. The panels' reports will be published separately, but they will also contribute to two major reports, one on long-term RANN goals and one on administration. Both are due by September 1973.

The RANN program is less than 2 years old and hence somewhat young for a major academy review. Therefore NFS's initiation of the study could indicate that even the program's sponsors feel that RANN's growth rate may have been too precipitous.

There is also said to be "wide-spread dissatisfaction with RANN" in the academic community, and the COPEP study panels, in a most politic manner, include a number of prominent university figures. In fact, there is even disagreement about where RANN ought to be going among the 70-odd people taking part in the study. They apparently aired their disagreements last month when they sat in one room together for a week-long session at Port Ludlow, Washington, which one observer described as "lively as hell."

Among the participants are Raymond Bauer, of Harvard Business School, who is vice chairman of the study; Wilbur Cohen, former Secretary of Health, Education, and Welfare; James R. Killian, Jr., former science adviser to President Eisenhower: William D. Carey, of Arthur D. Little, Inc.; J. Herbert Holloman, former president of the University of Oklahoma; and William Stewart, former Surgeon General. One other reason suggested for NSF's hasty commissioning of a sweeping but fast review of RANN may be that the politically popular program, now with a budget of about \$70 million, may get significantly more funds during the coming budget cycle, and NSF needs advice on how to spend all that money.—D.S.

in thinking the questionnaire was bad," says Nadel, "and I also think it hurt the project a lot by creating hostility among congressmen." A draft of the questionnaire was shown to Donald Matthews, a congressional scholar at the Brookings Institution, but his advice that it be changed was not followed. "I don't expect they are going to get responses that will be usable," Matthews says. "Also I get no sense at all that they knew what they were going to do with the data. Clearly the questionnaire was a fishing expedition."

According to Fellmeth, director of the Congress project, the design and purpose of the questionnaire have been misunderstood, Several congressional experts were shown a draft, and although Matthews was one who suggested changes, other scholars approved it. The questionnaire was not intended to produce a high enough response rate to be amenable to statistical analysis, but rather to provide an opportunity for members to express their views on matters that concerned them. Fellmeth says the questionnaire would be fruitful even if answered by only 10 per cent. (So far "between a third and a half" of the members have returned their questionnaires.)

Another congressional scholar who has seen (but was not consulted on) the questionnaire, Nelson W. Polsby of the University of California at Berkeley, remarks that there seems to be a simple rationale behind the 633 questions; "that if you knew where a congressman's money was coming from you knew virtually all you needed to know about his behavior." This theory may have some validity, but is not the entire picture, Polsby opines.

Another part of the project opposed by at least some of its academic members was the publication of Who Runs Congress?, which they feared would follow the form of a sensationalist exposé and be taken or represented as a summary of the project's entire output. "The political scientists on the project were not consulted about the publication of the book, and there's a danger it will confirm the academic community's worst expectations of the project," says David E. Price, a political scientist at Yale who headed the commerce committee study. The source matter of Who Runs Congress? was apparently drawn mainly from the public record and from the profiles, and less or not at all from the committee or topics material. The book's preface describes the other project publications

as "later elaborations," but makes no claim to summarize or be based on them. Fellmeth says he, no more than the academics, wishes the book to preempt the committee and topics studies and he is confident that this will not happen.

A third criticism made by the academic insiders is that the project should have placed more emphasis on the topics and committee studies and less on the profiles. The former, it is argued, are more important for understanding Congress than are the foibles of individual congressmen. According to Price, preparation of the profiles consumed much of the project leadership's time, while rather little attention was given to coordinating the committee studies or formulating a uniform approach. Fellmeth believes the studies received appropriate resources but the profiles may have seemed to have had greater priority because of their earlier publication date.

Despite reservations about other parts of the project, political scientists involved in it seem generally satisfied that their own pieces of the action will be academically respectable studies. According to Salamon, the main difference between his committee study and academic research is that the study "is explicitly concerned with the link between process and outcome whereas political scientists tend to focus on the process alone." Price says his committee study is more case-oriented but otherwise differs little in approach from an academic study. According to Nadel, the main difference is in the question of assessing influence, a "thorny question which political scientists try to dodge" but which will be addressed in his committee study.

Among political scientists outside the Congress project apprehensions range from doubts as to the wisdom of trying to change Congress before properly understanding it, to narrower concerns that the project will antagonize congressmen and close doors to all students of Congress. John F. Bibby, a congressional scholar at the University of Wisconsin at Milwaukee, fears that the project has a preordained purpose, to force change on Congress, and that the data will be made to fit. But some of the reforms Nader seems to have in mind may produce the reverse of the effect intended. Bibby comments that "many of the present critics of Congress were those who 10 years ago didn't want Congress to be involved in foreign policy because they thought all good things flowed from the White House."

Matthews, of the Brookings Institution, expects that the committee studies will come reasonably close to meeting academic standards but that other parts of the project may fall short. "It is pretty clear what the leadership of the project wants. It may be beside the point to criticize them for not doing an academic study. As far as they're concerned the point may be not to understand the world but to change it —though they had better not attribute that quote."

Fellmeth, however, is confident that the methodology of the project will satisfy academic standards and that political scientists-"except those with a problem of territorial imperative"will like the results when they see them. As examples of the project's robustness, he cites the design of the field surveys, the data analysis and support services, the screening of researchers for political bias, and the system for having material reviewed by experts and, in the case of the profiles, by the congressmen themselves. "There is more academic rigor in what we are doing than in any academic research I know of," Fellmeth says.

From an academic standpoint, the most unorthodox aspects of the project are its speed of execution and the use of inexperienced researchers. Far from being severe handicaps, these features seem to have been in some ways an advantage. Even if parts of the project do fall below academic standards, the results of Nader's huge undertaking seem certain to influence the future study of Congress, if not Congress itself.—NICHOLAS WADE

APPOINTMENTS

James H. Gillespie, professor of veterinary bacteriology, New York State Veterinary College, Cornell University, to chairman, veterinary microbiology department at the college. . . . James H. Copp, chief, human resources branch, economic research service, U.S. Department of Agriculture, to head, sociology and anthropology department, Texas A & M University. . . . Irving Shulman, head, pediatrics department, University of Illinois College of Medicine, to head, pediatrics department, Stanford University School of Medicine. . . . Raymond E. Untrauer, professor of civil engineering, Iowa State University, to chairman,

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