Hints of what is hidden appear in annual reports published by IDA (from copies supplied by New York Regional Anti-war Faculty and Students):

1965 Report: areas of Jason interest..."counterinsurgency, including the problem of personnel detection."

1966 Report: "Increased Government attention to such problems as counterinsurgency, insurrection, and infiltration led to the suggestion that Jason members might be able to provide fresh insights into problems that are not entirely in the realm of physical science."

1967 Report: "Jason's work during 1966 related primarily to two of the larger current issues of national security: (1) antiballistic missile (ABM) systems for the United States; and (2) the war in Vietnam." ..."Jason continued work on technical problems of counterinsurgency warfare and system studies with relevance to Vietnam."

1970 Report: In 1969 IDA established an Office of Civil Programs to supervise its work in the "civil sector". Mr. Seymour J. Deitchman was appointed Director of this new office. (Deitchman has already been identified as deeply involved in the electronic battlefield development; and he was also identified, by Foster in earlier Congressional testimony, as director of ARPA's Project Agile, the organization which conducts world-wide counter-insurgency research. Thus, we may draw some parallel between IDA's expected role in the domestic civil sector and the well-known "civilian programs" executed by the United States in Vietnam.)

In some of these reports we can find listed titles of a few Jason research papers that seem to be relevant to Vietnam:

"A Study of Data Related to Viet Cong/ North Vietnamese Army Logistics and Manpower" (1966)

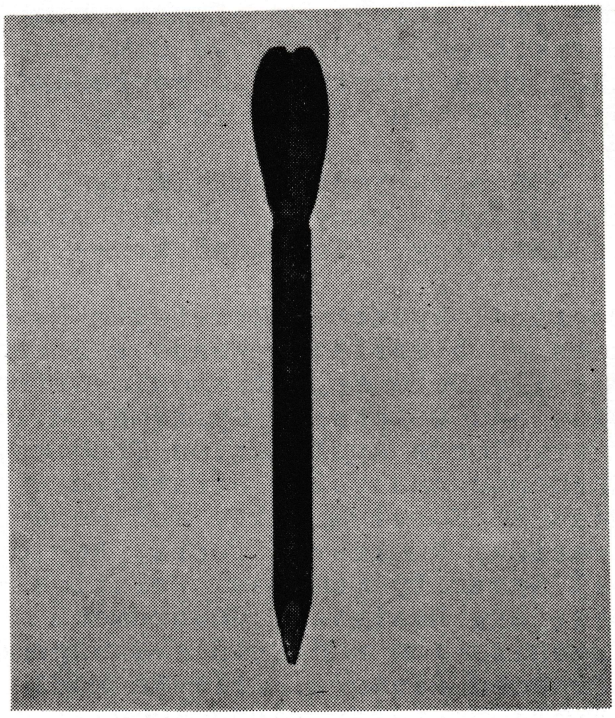
"Explosively Produced Flechettes" (1966)*

"Interdiction of Trucks from the Air at Night" (1966)

"Air Sown Mines for Specialized Purposes" (1967)

"Manned Barrier Systems -- A Preliminary Study" (1967)

Some studies with suggestive titles were: "Project SEESAW", "REDEYE Countermeasures", and "The M.A.D. Report" (1967)



*The flechette, or 'nail bomb', contains several hundred 1-inch barbed nails in each 3-inch bomblet. It is designed to enter the body, shredding muscles and body organs as it passes through the body.

A list of IDA (unclassified) seminars includes the following provocative titles:

"The Electronic Soldier; Concepts For The Future Infantryman" (1969)

"Operations of the D.C. Executive Command Center During the Inauguration Weekend" (1969)

"The Value of Life In Combat Risk Situations" (1969)

"Crime and Its Correction In D.C." (1969)

"Insurgency Patterns In India Today" (1969)

Since most Jason work is highly classified, and it is customary to keep secret the titles and even the very existence of most highly classified reports, we can conclude that this information represents only the tip of the iceberg.

IDA's current recruiting brochure lists many technical areas of activity. Included are--

Tactical Systems, Strategic Systems, Sea Warfare, Weapons Effects, Missile Defense, Strategic Offensive and Defensive Systems, Military Force Application Studies, Economic Analysis, Strategic Missile Survivability and Penetration, Nuclear Effects, Regional Security Studies, Political-Military Analyses, Government Organization and Crisis Management, Advanced Sensors, Climate Modification, Laser Technology, Advanced Avionics, ...

These topics cover applications of advanced technology to several areas of interest to military-government interests. These may be categorized as--

Strategic War (nuclear war, presumably with Russia);

Tactical or Limited War (such as Vietnam today);

Police Actions Abroad (counter-insurgency at lower levels);

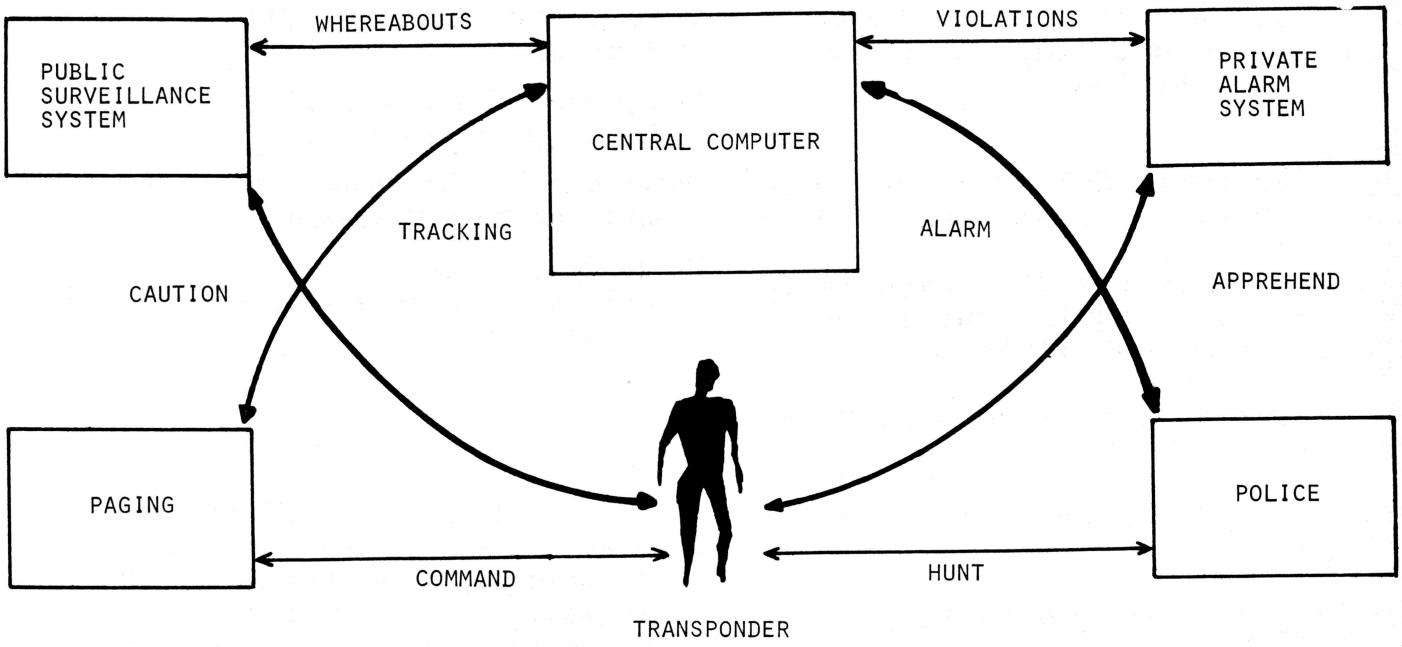
Domestic Policing, Surveillance and Control Methods;

Economic, Political and Social Analyses of domestic or foreign situations.

One of the distant branches of the sensor development has been described by Joseph A. Meyer, a computer specialist working for the National Security Agency and funded by the Department of Defense ("Crime Deterrence Transponder Systems", IEEE Transactions AES-7 no. 1, January 1971):

"A transponder surveillance system is based on three ideas. First, parolees, bailees, or recidivists will each carry a small radio transponder, which cannot be removed, as a condition of their release. This transponder will emit a radio signal which gives a positive and unique identification. Second, a network of surveillance transceivers will interrogate transponders in a neighborhood. Third, a real-time computer will receive the transponder reports, update location and tracking inventories for each subscriber, and control the surveillance process. Every subscriber must be accounted for at all times. ... For urban areas, a mesh of transceivers would scan the streets, communicating with central computers to provide a public surveillance network."

Meyer goes on to discuss special problems: Harlem -- "a high crime area"; group actions and large-scale confrontations; juveniles; etc.



TRANSPONDER SURVEILLANCE COMMAND SYSTEM

Among the references cited by Meyer to back up his ideas are several IDA reports.

Jason people have often stressed that Jason does non-military as well as military work, mentioning studies on air traffic control and the SST. However, since they will not tell us about current military projects there is no fair way for us to assess the balance.

The following assessment was given in 1969 in a magazine interview by Dr. Alexander H. Flax, then IDA's vice-president for research and presently president of IDA: "'We don't expect to divert the forces of IDA into civilian projects. That would be inappropriate.' Nor will the think tank cultivate more basic research. 'That is not IDA's cup of tea,' said Flax...'I doubt this year if funding from other than DOD will get up to $1 million,' said Flax. The Institute's overall budget is about $13 million a year. 'Probably, in the future, we'll have greater flexibility in seeking out new horizons,' Flax added. But those horizons do not presently encompass a time when civilian work will outweigh IDA's military commitment." (Scientific Research, 8/18/69, p. 29 ff.)

In the fall of 1971, Professor Watson gave a seminar in Berkeley (at the Rad Lab) on the results of the Jason summer study project that he had just finished working on. This was an overall review of the national research and development work in the field of lasers. Watson reviewed for his audience the academic and industrial areas of interest in laser research covered in the unclassified part of the Jason report. His figures indicated, however, that of the government's $100 million annual outlay for laser work 90% was directed to military projects. Watson could not discuss the military part of Jason's report because it is all classified.

According to IDA's 1970 report, 90 % of their government income comes from the Department of Defense.

Chapter 2.
Jason People

Jason people are "insiders". They have access to secret information from many government offices and they expect their advice to be at least seriously considered, if not followed, by top-level policy-makers. Those who engage in criticism of government policies without the benefit of such inside access are termed "outsiders". SESPA people are outsiders, along with plenty of other people.

When a debate arises between insiders and outsiders, invariably the argument is used that only the insiders know the true facts and that therefore the outsiders' positions should not be taken seriously.

In our efforts to learn as much as possible about the work of Jason, we have not only gone over various published sources of information, but we also personally interviewed as many Jason people as we could find locally. What we learned was hardly anything new and concrete about Jason projects (the interviewees were very secretive about anything that might conceivably be classified information), but a great deal about the attitudes and perspectives these men hold toward their service to the government and the military.

In May, June and July, 1972, several Berkeley SESPA people arranged interviews with U.C. physics Professors Kenneth Watson and Charles Townes, molecular biology and physics Professor Donald Glaser, and Princeton physics Professor Marvin Goldberger, who was visiting in Berkeley; Professor Luis Alvarez (Berkeley physics) would not agree to a meeting but did engage in some individual conversations; Stanford physics Professor Sidney Drell was confronted with some questions during an October visit to this campus. The following is a summary of these encounters.

KENNETH WATSON
(Professor of Physics, UC, Berkeley)

Watson was one of the group that founded Jason in 1959. At first they were thinking of forming their own private consulting company, but they finally decided to let IDA be their business manager; this avoided the problem of profits (taxes). There is usually a 6-week summer study session and then a couple of long weekend meetings during the school year. Government people come and outline problems they would like Jason to solve. Most of the work is for the Defense Department. The purpose of Jason is to supply purely technical information for the government; it is non-political. Jason has never taken a position on any subject, as an organization: We are just a group of individuals.

When asked what projects Jason had worked on, he would consistently refuse to comment on any specifics, because of official secrecy of their work. He would even refuse to comment on those things about Jason which have already appeared in public (through the Pentagon Papers).

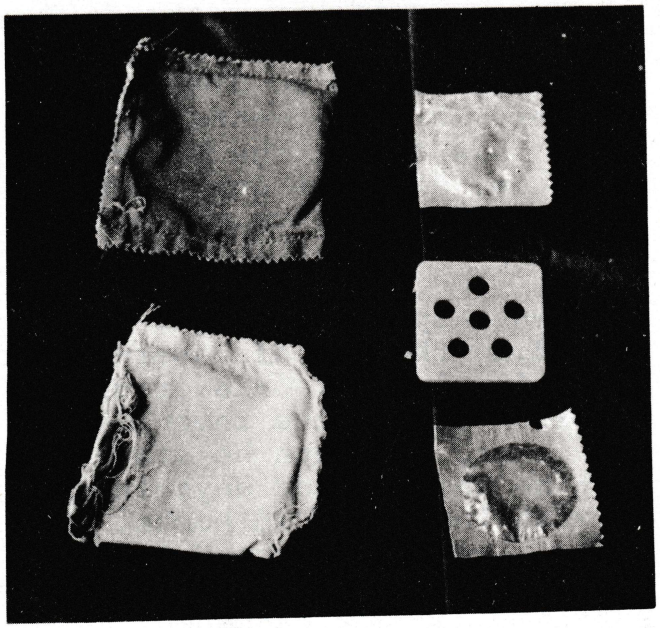
As to his personal attitude about the military, he said that since it is an $80 billion budget he couldn't make a blanket statement. When pressed to give some averaged evaluation, he said, "If I felt very strongly against [the military], I wouldn't

be in Jason. It's a thousand-dimensional space. It's much more complicated than to give a simple answer to such a complicated question."

At a faculty meeting during the time of the Cambodian invasion, 1970, Watson was heard to comment, "Why is everyone getting so upset about such a little war?"

It is generally believed that Watson is heavily involved in military-related outside consulting work beyond Jason, but no detailed information on this is available.

During our interview he said that there was often a close continuity between the problems he worked on for Jason and the pure research he carried out in the University; and he pointed out that therefore there was often no clear-cut separation between the time he spent on one thing and the time he spent on the other.



JASON RECOMMENDED "RAPID DEVELOPMENT OF ... MORE EFFECTIVELY CAMOUFLAGED GRAVEL" MINES. THIS IS AN EARLY VERSION OF THE GRAVEL MINE SHOWING ITS INNER PARTS.

CHARLES TOWNES
(Professor of Physics, UC, Berkeley. Nobel Prize, 1964, for work leading to invention of the maser and the laser.)

Townes is undoubtedly the most involved and the most influential of the science advisers we have spoken with. In addition to his original and continuing association with Jason and IDA, he has served on PSAC and on special advisory committees for the President, has consulted for the AEC and the State Department, planned NASA policy, and helps direct affairs of the National Academy of Sciences. He also accepted a position as chairman of a new top-level science advisory committee for General Motors Corporation.

As vice-president for research of IDA, Townes helped set up the entire IDA service, as well as its Jason division. He felt that the in-group of scientists who had been influential in the government during World War II were getting rather old and some new blood was needed; so Jason was formed, with some of the country's best young physicists, in the expectation that they could have an influence from inside the government.

In an earlier discussion, Townes described the government science advising business generally. He said that there was a good deal of incest, in that people with the most experience would be re-used; and there was a practise of bringing younger people into subsidiary committees where they could learn by experience how to handle things, then gradually move up if their performance was found satisfactory. He listed the criteria as: talent, objectivity and willingness to work; it is also basic that the adviser accept the idea that he works privately for the agency or the person whom he is advising, complete secrecy is required even though the scientific recommendations given are often not followed. He stated that the human element -- the personal relations between the adviser and the advisee -- is very important to the success of the advising process; yet he continually stressed that the advising was strictly objective, non-political, and related only to technical evaluations. He measured the success of IDA and Jason by the fact that several of its people were advanced to serve on PSAC.

Regarding Jason's major work on questions of strategic weapons, Townes saw their role as working effectively between the two rivals: the Defense Department and the State Department. Defense, concerned primarily with the security of the U.S., was usually in favor of more weapons; State, concerned with keeping other countries happy, was more interested in arms control. Jason's job was to transfer information between the two while making both parties feel that you were helpful to them.

Townes was involved in Vietnam war issues more through PSAC than through Jason. He claims that the Jason 1966 report recommending an end to the bombing of North Vietnam was not followed by the Administration because it had certain flaws -- some of the statements in that report came "from the depth of the heart" rather than from objective analysis. PSAC later did another study of this same problem and was more careful in its evaluation of the effectiveness of the bombing. Their report was delivered to President Johnson just a few months before the bombing was stopped (1968). When asked what he thought about Nixon's present bombing campaign in North Vietnam, Townes replied that the situation is different now and he is not in close touch with all the facts. His personal feeling is that he is against the bombing, but he would not make a public statement against Nixon's bombing policy because he is not well informed technically.

Philosophizing broadly, Townes said he thought the world would be better off if we didn't have military establishments; but, since this is not the way the world is, since we don't like to be kicked around, we do need a military.

Townes spoke about his feelings regarding the use of laser-guided bombs in Vietnam. His original research led to the invention of the laser, although he states that he has not had anything to do with laser-guided bombs. He would like to see the U.S. get out of Vietnam or arrange a truce. But this has not happened, and one has to accept the fact that a bombing policy is in effect. Laser-guided bombs allow one to pinpoint on the target rather than scattering bombs all over the countryside. Thus, although

it is a difficult decision, Townes felt that laser-guided bombs were a good and humane contribution.

In his office, on campus, Townes has a heavy steel file cabinet with a dial-combination safe lock. The nameplate reads, "General Services Administration Approved Security Container, Mosler". Another sticker reads, "Institute for Defense Analyses - IDA #1998; P.O. 14425". Another notice on the safe asks that anyone discovering this cabinet to be open should immediately contact Townes, giving his home address and phone number. Townes told us he thinks it is important to have a classified safe here on campus so that he can work with classified documents. In this way, he explained, the University makes useful contributions to the government.

DONALD GLASER
(Professor of Physics and Molecular Biology, UC, Berkeley. Nobel Prize, 1960, for the invention of the bubble chamber.)

Glaser joined Jason about 1960; there were ten or fifteen members at that time, and he was recruited by Ken Watson. He joined because he wanted to be more effective in helping the government; also, through IDA they could be paid higher consulting fees than the government was allowed to pay directly. An important motivation for scientists participating in Jason was the view that the Pentagon was often irresponsible in proposing large new weapons systems that would be very wasteful of money and/or would escalate the arms race, and Jason could hope to argue convincingly against such programs. Jason had extremely high levels of clearance to government information: Top Secret is a low level of clearance.

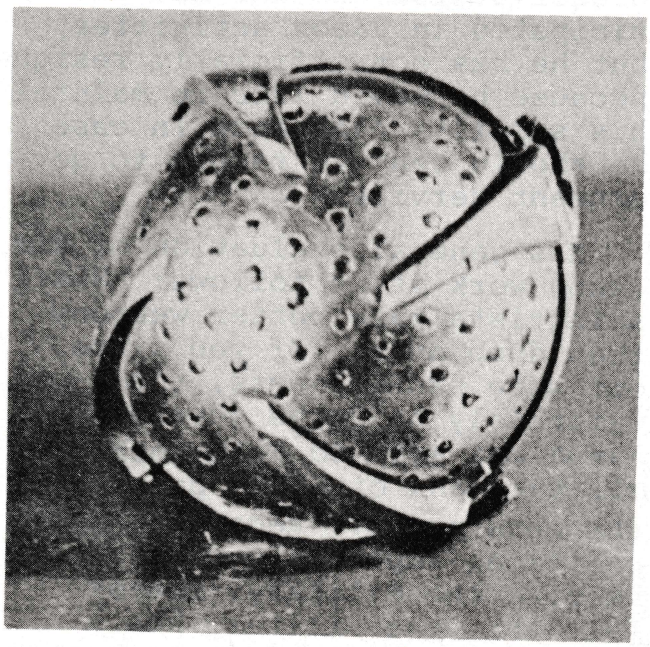
Among Jason members there were a variety of political points of view, and one could also see considerable changes in individual political outlooks over the years, according to Glaser. He admits that politics was not a small and incidental part of their considerations, and at various stages social and political scientists, economists, and others joined the conversations in an attempt to balance as many of the recognized factors in decision-making as they could deal with.

Glaser himself took part in the Jason 1966 summer study analysing the effectiveness of the U.S. bombing in North Vietnam. Their report, which recommended a halt in the bombing, was greeted with favor by McNamara, but President Johnson did not follow that advice. In such cases when Jason's advice was not taken, Glaser explained, the government felt that "non-technical factors" deserved overriding consideration. In a more relaxed moment he expressed his feeling, "I now think it was a con job -- they used us technically but didn't listen to us." Since that time (1966), Glaser stated, he has not participated in Jason activities, but he has not officially resigned because he would like to maintain his security clearance in case he should want to return to government service.

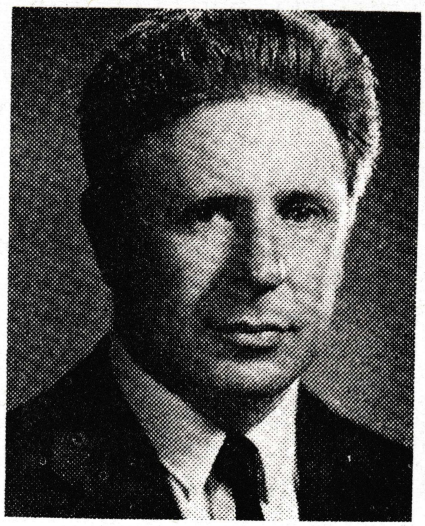
His general evaluation of his Jason work is as follows: Smart scientists make better weapons than dumb ones. If you prune out some bad projects, you definitely help the government: Jason was able to help both the military and civilian parts of the government. Regarding the political implications of helping the military, Glaser felt that the military has a legitimate role and it is better

if that role is done well. He is not in favor of enormous nuclear overkill but he is in favor of effective weapons serving purposes such as those in World War II, the defense of western Europe after that war, blocking nuclear missiles from Cuba, and supplying fighter planes to Israel. He disagrees with U.S. policies in Vietnam and in Greece but overall he supports the idea that the U.S. carries a responsibility for development of much of the world.

His current scientific research is in bacterial genetics. This could very well lead to some form of biological warfare but you can't foresee the applications of science. You need the government to control this. Certainly science can be used for dangerous purposes. On the whole, as Glaser saw it, our society is successful, people don't want revolution. And it is necessary that we constantly improve our weapons to be prepared to defend ourselves against the next Hitler. When asked if the next Hitler might arise in America, he expressed confidence that it would more likely be in China or Russia.



ANTIPERSONNEL FRAGMENTATION BOMB



MARVIN GOLDBERGER
(Professor of Physics,
Princeton University)

Goldberger was chairman of Jason's steering committee from 1959 through 1966. He was appointed to PSAC in 1965 and his last full-time participation with Jason was the summer study of 1967. He is at present not a member but is an Advisor to the steering committee. While chairman, he had a major responsibility for choosing topics of Jason summer study programs, including the 1966 study and report on the Vietnam war. Jason had been concerned about the war in Southeast Asia for a number of years and had an informal study group during the summer of 1964. Prior to 1966, however, there was no actual involvement in specific war-related areas. By mid-1965, Goldberger himself was becoming disillusioned about the U.S. involvement in the war. In early 1966, the steering committee decided that Jason should become involved more deeply and joined forces with the "Charles River Gang" (Kaysen, Kistiakowsky, Wiesner and Zacharias) who had independently proposed an involvement by the scientific community. The combined group met for three weeks briefing on the war at Wellesley and two major study areas were identified: (1) An analysis of the effectiveness of the bombing

of North Vietnam, and (2) The feasibility of construction of an anti-infiltration barrier, an idea originally suggested by Roger Fisher. It was this latter topic that was pursued by the true Jason group at Santa Barbara. The whole effort was attributed to Jason, but this is incorrect.

Goldberger regarded the barrier project as a serious attempt to end U.S. involvement in Vietnam. The bombing campaign was a failure and a military victory by ground forces was impossible. By this time, Goldberger regarded the U.S. role in the war as completely immoral and was trying in some realistic way to work towards U.S. withdrawal.

With regard to the part of the study dealing with the air war, Goldberger stated that the conclusions reached were obvious at the outset. It simply was an ineffective method, militarily, of achieving the military objective of cutting off the flow of men and materiel. The problem was the reluctance on the part of the military to give it up. Even if it contributed 1 or 2% effectiveness to the total war effort, the military saw it as worthwhile.

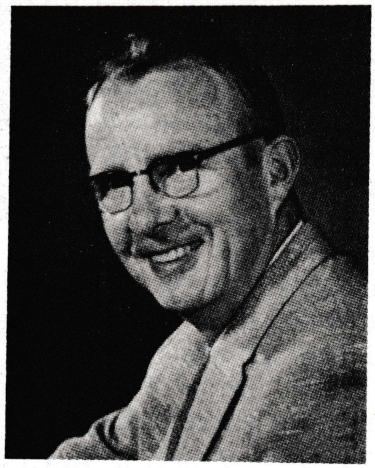
Goldberger saw the barrier idea as something that could be substituted for the air war which would drastically reduce civilian casualties and which might lower the overall temperature of the war. McNamara like the idea and in the wake of the Jason report, set up a large project in the Pentagon to develop and implement it. The current electronic battlefield is a much more sophisticated evolution from the Jason barrier concept. The original Jason outline used only "state of the art" devices consisting of existing mines, sensors, and anti-truck, anti-personnel weapons designed to be deployed in the shortest possible time. The idea was to block the truck supply routes and to make travel over the Ho Chi Minh trail system sufficiently hazardous to slow down infiltration.

Goldberger and others hoped that the barrier, if successful, would lead to some sort of reasonable resolution of the war. This might take various forms, one of which would have been the withdrawal of U.S. ground forces either totally or into enclaves around the populated areas but disengaged from offensive actions with a reduction of the fighting to a level that it would be reported only on page 34 of the New York Times. That is, barring a political solution, the war might just peter out.

With regard to the Jason group more generally, Goldberger feels that overall it is a good thing. Since it is unfortunately necessary for the U.S. to maintain a defense establishment to deter strategic wars, we should have the benefit of the best technical advice. In addition, it is valuable to have an impartial critical group familiar with defense problems to counterbalance technically absurd military proposals. Jason members are and have been the most effective and vocal opponents of the Safeguard ABM system and their credentials have made their opposition credible. (However, when asked about their failure to stop the U.S. deployment of MIRV - the multiple warhead nuclear missile - Goldberger said, "It (our advising) is a one percent effect; we're not very important.") The group is currently involved in projects on behalf of the Arms Control and Disarmament Agency as well as in many other unclassified

civilian activities (such as air traffic control).

Goldberger is currently not working for the government except as a consultant to the Arms Control and Disarmament Agency. He and many others would probably be willing (and in some cases anxious) to return to Washington if McGovern were elected. He said that working at high levels of the government is "very seductive" in many ways. But it is often much harder to try to work constructively within the system than to be an outside critic. Good people are needed for both jobs.



LUIS ALVAREZ
(Professor of Physics, U.C. Berkeley; Nobel Prize, 1968, for contributions to elementary particle physics)

Alvarez has repeatedly refused to meet with SESPA people to discuss his involvement with Jason, although he has engaged in conversations with three of us individually. He states that his position in Jason is as one of the eight-man group of "Jason Advisors", along with Herbert York, W.K.H. Panofsky and Marvin Goldberger. Alvarez feels that Jason is a young man's organization and he can help it best by keeping in touch with their activities and offering advice based upon his World War II experiences.

He has acknowledged his contribution to the development of "star-light viewing devices" that have been widely used by the U.S. military in Vietnam. As a member of a government advisory committee in the early sixties, he urged the government to push the development of this technology because he saw that it would be an important weapon to use against guerrilla soldiers, who often use the night-time darkness to cover their movements.

President Nixon has recently appointed Alvarez to serve on PSAC.

When SESPA started compiling its material on Jason for this publication, we wrote to each of the above five Jason professors, saying, "Enclosed is a draft version of our summary of discussions that were held with you. We invite you to comment on this draft; and we would be interested in any additions or corrections that you think should be made to this draft."

From Professors Alvarez, Glaser and Goldberger we received cooperative replies; and a number of their comments have been incorporated into the final versions we have presented.

From Professor Watson, we have received the following letter (dated October 10, 1972):

"This is in reply to your request for comments on your SESPA report following our conversation. This report contains several misrepresentations and/or quotations out of context. More significantly, it violates the conditions under which I agreed to meet with SESPA, which were that I would listen and you people would talk.