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GORBACHEV AND THE INTERNATIONAL FOUNDATION

March 1988

On January 15, General-Secretary Mikhail Gorbachev met, for no less than three hours, with two dozen directors and advisers of a new international foundation "The International Foundation for the Survival and Development of Humanity."

The International Foundation (IF) had surfaced first at the Soviet Forum on Human Survival in February, 1987 where Gorbachev spoke to 1,500 guests. Through the indefatigable efforts of Academician E.P. Velikhov, a number of Western figures had been induced to take part in an organizing body and the group reached agreement on bylaws and initial operating procedures just in time to announce the result to the General-Secretary.

The occasion was the second anniversary of the Soviet leader's speech calling for zero nuclear weapons and it was followed, the next day, by a press conference at which Soviet Chief of Staff Akromeyev, Academician Roald Sagdeyev and Deputy Foreign Minister Petrovsky spoke about the issue of general disarmament.

The International Foundation plans to receive funds from individuals and foundations and to distribute it to worthy causes ranging from disarmament, ecology and development to bureaucracy. Because it has not yet large sums of money and is getting its procedures organized, it is not accepting unsolicited proposals but will, for the time being, deal with proposals suggested by its staff and Board of Directors.

Velikhov and Weisner

Velikhov will be Chairman with Jerome B. Weisner, former Presidential Science Adviser to President Kennedy, serving as Vice Chairman for an interim period. Other Americans on the Board include Robert McNamara, Susan Eisenhower (granddaughter of the late President and head of the Eisenhower World Affairs Institute), and FAS Fund Chairman Frank von Hippel.

Soviet Board members include Academician Andrei Sakharov, Academician Ligachev, the Metropolitan Petirium, and Academician Roald Sagdeyev.

A Council of Advisers to the Board includes, among Americans, Ruth Adams of the MacArthur Foundation, Wade Greene of the Rockefeller Family Office, FAS President Jeremy J. Stone, David Hamburg and Fritz Mosher of the Carnegie Foundation; it will grow to about 100 persons from around the world.

The Foundation plans to have offices in Moscow, Stockholm and Washington, D.C. and Rolf Bjornerstedt, a veteran of the U.N. Disarmament office and SIPRI will be the Chief Executive Officer.

As the Board met on January 14 to work on bylaws in the meeting room of the Presidium of the Soviet Academy of Sciences, Academy President Marchuk was ushered in to meet the Board. He announced the "pathbreaking" agreement between his Academy and the U.S. Academy on exchanges.

For those of us who had worked so hard on the Sakharov case, it was symbolic. Here was Sakharov—for whom we had all worked so hard and for whom the exchange agreement had been broken—back from Gorky sitting across from us at the Presidium table and here was Marchuk announcing new agreements.

Dramatic Moments: Sakharov Meets Gorbachev

Later as Gorbachev was introduced to Sakharov for the first time in the Kremlin, we heard Sakharov say, "It is nice to have freedom and responsibility again." Gorbachev's quick answer was, "It is good that you recognize that with freedom goes responsibility."

During the three hour meeting, the mood was very friendly and warm. As he had in Washington in December, at a meeting with scientists and intellectuals, Gorbachev spoke, then listened to the comments of guests and then spoke again.

Gorbachev said, among other things:

I don't want to be pessimistic or optimistic, but I don't think that any radical breakthroughs have happened. There is a fear of disarmament and a fear of confrontation. It is very important that scientists and artists have joined in this struggle.

For our part, we will do our utmost. But as Valentin Fallin has said in a recent meeting of Soviet press 'not everything depends on us (Continued on page 2)



Sakharov (left) meets Gorbachev (right); Frank von Hippel in background.

(Continued from page 1)

alone but also on the world we live in.'

We must remember our past when we consider democratizing our country. We have to 'restructure' our thinking as well as our economy.

In a response, Jerome Weisner emphasized "our support for his dream and vision." Armand Hammer said he was delighted to be a member of the Board and hoped to work with it outside government. Academician Ligachev called for scientists to have an oath not to, among other things, "rig experiments."

Andrei Sakharov said he liked the "freedom of the foundation from government" and said it should advance the understanding of bureaucracy, and should advise the politicians on disarmament, environment and human rights. With regard to disarmament, he urged a reduction in the time required for service in the Soviet Army and mentioned race difficulties in the military. He appealed for legislation that would ban imprisonment for beliefs and expressed his confidence that the Foundation would work on a great variety of problems.

Susan Eisenhower said it was important for the Board to have a balance. (She meant more conservatives.) Jose Goldemberg, President of the University of Sao Paulo in Brazil said, "I'm from a developing nation. For us, poverty kills more people than war will. The Foundation has to address itself to ways to get technology to pursue the needs of the people." Rolf Bjornerstedt said the organization should not work on only "basic research" but real issues.

Jeremy J. Stone said that, over the last 200 years, there had been a dozen other arms races and that, not uncommonly, there had been proposals for complete defenses toward the end of them. Accordingly, the Star Wars proposal should be viewed as a symptom of the end of the arms race and of its readiness to collapse if real disarmament began. The General-Secretary should treat Star Wars not so much as a real issue, but as a political problem that could be finessed. Frank von Hippel and he represented the oldest organization in the world devoted to nuclear issues and we had been waiting for 42 years for the present era and moment to see the beginning of the end of the arms race.

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From left: Anatoly Dobrynin, Mikhail Gorbachev, E.P. Velikhov, Federico Mayor Zaragosa, Jeremy J. Stone

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The Federation of American Scientists (FAS), founded October 31, 1945 as the Federation of Atomic Scientists (FAS) is the oldest organization in the world devoted to ending the nuclear arms race.

Democratically organized, FAS is currently composed of 5,000 natural and social scientists and engineers interested in problems of science and society.

FAS's four decades of work as a conscience of the scientific community has attracted the support of the distinguished Sponsors listed below.

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Dr. Federico Mayor, the new head of UNESCO, said that the issue was not "Star Wars but starvation." Academician Roald Sagdeyev said that the main priority was removing the stimulus for new weapons and that we should look for new organizational methods in disarmament.

Frank von Hippel talked about the disarmament projects being studied in the Joint Disarmament Study with the Committee of Soviet Scientists for Peace and Against the Nuclear Threat and about the new U.S.-Soviet journal which he is editing to provide scientific reports on such issues.

Peter Durr of West Germany said that we "have to create visions that we are all in the same boat" and not remain a group of experts. Rabbi Sheir called on Gorbachev to challenge the religious community to do more and blessed him and all that worked in this direction. Jerome B. Weisner urged Gorbachev to "have no small idea."

Gorbachev Responds

Gorbachev commended the Foundation for improving on the old name by introducing the word "cooperation." (In fact, he had been misinformed by the Deputy Director of the Foundation; the votes on names of the Foundation had been so frequent and confusing that even the staff was unclear which name had been finally agreed and the last name did not, in fact, use the term "cooperation.")

His reason was that: "If no process of restructuring occurs in international relations, the Foundation can't succeed. The Foundation will need politicians with ideas who can link the entire world community. It will be useful if it is not 'ivory tower.' "Disarmament, he felt, should be a "priority task" for the Foundation. The Foundation should not permit one government or more to interfere with it.

"You can expect new ideas in disarmament. And we believe in the advancement of 50% cuts. But we oppose resolutely the fact that when the proposals take real shape people try to find ways to circumvent their provisions. Thus when we propose 'zero' levels in Europe, somebody thinks it means that the Navy should build up with cruise missiles. What difference would it make to people if they were killed by cruise missiles rather than by intermediate range missiles? We made a clear point on this in Washington.

Someone says that SDI is for the future. But I think he will agree that we should not allow the arms race into outer space. And the comparison methods we work out on land will be quite undermined if we move into outer space. We can't stop the arms race in one area and let it go up in another. So this is our approach.

More flexibility will be required for strategic weapons than was needed for intermediate weapons. Verification is more complicated. And the trust that is beginning should not be undermined by circumvention.

Soon we will be able to eliminate chemical weapons and work on European conventional weapons. We are prepared to heed your considerations and ideas.

We lost 4 billion rubles immediately and another 4 billion indirectly in Chernobyl. I used to think that only

Russians crossed themselves when there was a rumble of thunder. But Chernobyl made everyone cross themselves.

Perestroika is our own internal affair. But in this world everything becomes known to everyone else. And so perestroika affects everything. We are confident that we are on the right track.

I view Academician Sakharov's desire to jump over stages simply as a way of encouraging the process. [Sakharov says something but since he fails to use the microphone, it is not translated.] We aren't aspiring to a cultural revolution in the Chinese style.

(To Weisner) You are right that Perestroika is a way to cleanse forces in our society.

A.D. Sakharov is criticizing our legislation. We know the legislation has lacuna. Legislation always lags behind life. But we can't change the laws every day. We are preparing for the future conference as a way to democratize the party and to reform the legislative and judicial sphere based on socialist democracy."

Jerome B. Weisner: [Speaking at length urges Gorbachev to disarm by 50% unilaterally.]

Gorbachev: "We share the view that 50% is enough. And secondly, I share your view that someone has to set the example. And we did set an example in the two year nuclear test moratorium. Therefore, since we are dealing with realities, what to do next? Shall we base our policies on illusions? Morally, I agree with you. But as a practical matter we should go along the road we are. You scientists are shifting the responsibility to the politicians. Practice shows that unilateral reductions produce little in the way of results."

Jerome B. Weisner: "Strike out on your own."

Gorbachev: "The world does not need sermons—with all apologies to the Metropolitan Petirium. As I told Reagan, 'If you make accusations against me, I will make two sets of accusations against you.' I asked Reagan to declare a moratorium and he said 'no.'"

The meeting closed on a very friendly note.



Mikhail Gorbachev (left) and Susan Eisenhower (right)

U.S.-SOVIET KEY WEST CONFERENCE

The Joint Disarmament Project, co-chaired by Frank von Hippel and Academician Roald Sagdeyev, held its annual U.S. conference in Key West Florida from February 3 to February 9.

This was the first bi-lateral meeting under the five year agreement to study verification issues signed by Academician E.P. Velikhov, von Hippel, and Jeremy J. Stone in February 1987.

Among the issues being studied are: de-MIRVing, warhead dismantlement, and a fissionable material cut-off. The emphasis in the studies lies in co-operative means and in using non-intrusive physical measures.

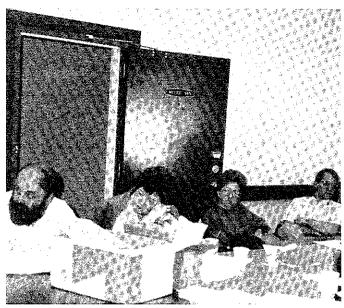
The Soviet delegation was led by Andrei Kokoshin, Deputy Chairman of the Soviet Scientists for Peace and Against the Nuclear Threat. It included the Soviet Committee Secretary Elena Lauschenkov, Stanislav Rodionov and Alex Prelutski of the Space Research Institute, and Sergei Oznobishchev and Mikhail Gerasev of the Institute of U.S. and Canada Studies.

The U.S. delegation included Frank von Hippel, FAS staffers David Albright, Thomas Longstreth, Robert Mozley, Jeremy J. Stone and Theodore Taylor. FAS Council Members who attended included Christopher Paine, Thomas Cochran, Steve Fetter of the Kennedy School at Harvard, Marvin Miller of MIT, Daniel Hirsch of University of California Santa Cruz, and Valerie Thomas of Carnegie Mellon University.

A number of observers and participants pronounced this conference the most scientific conference on disarmament which they had ever attended; tough-going for non-physicists, it showed the extent to which real technical problems could and should be isolated and discussed. And it revealed the growing professionalization of the public interest work in this area.



Soviet delegation from left to right: Elena Lauschenkov, Stanislav Rodionov, Andrei Kokoshin, Alex Prelutski, Sergei Oznobishchev, Mikhail Gerasev



American and Soviet delegates during a session of the Key West conference

FAS & WARHEAD DISMANTLEMENT

FAS sought, on February 16, to set the record straight on warhead dismantlement. Seizing the opportunity provided by Senator Jesse Helm's complaints that the INF agreement did not dismantle the warheads—but only the missiles and launchers involved—FAS Fund Chairman Frank von Hippel and consultant Theodore Taylor released the following press release at the National Press Club.

The Federation of American Scientists (FAS) strongly supports the prompt ratification of the INF Treaty which abolishes a class of nuclear-weapons delivery vehicles and establishes a precedent for a verification regime involving extensive on-site inspection.

We are concerned, however, that, during the INF ratification hearings, Administration spokesmen repeatedly put forward the view that the verifiable dismantlement of nuclear warheads is not a practical goal for nuclear arms control. In fact, researchers affiliated with the FAS have developed a practical approach to this problem and recently discussed it with a prominent group of Soviet scientists.

The following specific misconceptions were propagated in the testimony of the U.S. INF negotiators and Secretary of Defense Carlucci:

1) Verification of nuclear warhead dismantlement would expose the secrets of U.S. warhead design to Soviet inspectors.

In fact, the inspectors would only have to verify that a batch of nuclear warheads had entered a U.S. dismantlement facility and that, after all the warheads had been dismantled and their components destroyed beyond recognition, no intact nuclear warheads remained inside.

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2) The only way to dispose of weapons plutonium would be to mix it into fresh nuclear reactor fuel — an activity that the U.S. rejected in the 1970s out of concern that the fuel might be stolen by terrorists.

In fact, if the plutonium from dismantled nuclear weapons was mixed with some of the fission products from which it was originally separated, it could be made as inaccessible as the plutonium which is routinely being discharged in the spent fuel of U.S. nuclear-power reactors. Furthermore, if the highly-enriched uranium in U.S. nuclear weapons was diluted to the lowenriched grade used in civilian power reactors, tens of billions of dollars could be recovered.

3) There would be nothing to prevent the Soviet Union from making new fissile material to replace that which had been destroyed.

In fact, in 1982, the Soviet Union expressed its willingness to enter into a U.S.-proposed agreement to end the production of new fissile materials for nuclear weapons and also apparently accepted U.S. demands for on-site verification of the agreement. The Reagan Administration has successfully ignored this important development which would make it unnecessary to continue to operate the dangerously run-down U.S. plutonium production complex.

Verifiable agreements to dismantle nuclear warheads should be put on the post-INF arms control agenda. Otherwise, nuclear arms agreements may continue to primarily reshape rather than reduce the nuclear arsenals.

DIRECT MAILING FOULUP

Through a mistake at our mailers, FAS members who had renewed their dues received a "Challenge grant" mailing that indicated on the cover of the envelope, erroneously, that they had not yet renewed their dues. (They were not, however, we believe, dunned for dues inside the mailing.)

At the same time, members who had not renewed their dues—while they did receive a renewal card encouraging their dues renewal—were not sent a challenge gift card.

We believe that no serious harm was done and the April Council Member election mailing will be used to straighten everything out.



Frank von Hippel, Jeremy J. Stone and Ted Taylor answer questions at press conference

INTERNATIONAL SYMPOSIUM ON SCIENTISTS, PEACE AND DISARMAMENT

An International Symposium on Scientists, Peace and Disarmament will be held in Buenos Aires from April 11-15, 1988.

It will be organized by the Astrophysic's Commission CECEN and the Secretaria de Extension Universitaria both belonging to the Faculty of Exact and Natural Sciences of the University of Buenos Aires. It will be sponsored by the Secretaria de Ciencia y Technica de la Nacion y la Asociacion Fisica Argentina.

Some of the subjects on the agenda are:

- · Atmospheric consequences of nuclear holocaust.
- · Generation of nuclear winter.
- · Biomedical consequences.
- The scientist's responsibility in the face of armamentism.
- Historical background, social and political changes necessary to overcome armamentism.
- Proposal in favor of the non-militarization of extraterrestrial space.
- · Studies of the arms race influences on the world

macro-economy.

- Studies of the proposals to develop an International Survey System to prevent nuclear tests.
- A project to engage scientists ethically on their graduation (similar to the Hippocratic oath by medical doctors) will be labled, binding themselves to apply their knowledge only to the benefit of humanity.

For further information, please contact:

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CIRCUMVENTING THE INF TREATY WITH NEW NUCLEAR WEAPONS

FAS designated Thomas K. Longstreth to prepare testimony for the record during Senate Foreign Relations Committee hearings on ratification of the INF Treaty, and asked him to deal with two issues which had received too little attention: effective circumvention of the Treaty by excessive modernization; and warhead dismantlement (see page 4). What follows is drawn from his testimony of circumvention.

During ratification hearings on the INF Treaty, Reagan Administration officials and military leaders have been asserting that NATO must now undertake a massive, across-the-board build-up of new tactical and theater nuclear weapons in Europe in order to "compensate" for the removal of Pershing IIs and GLCMs under INF.

All sorts of reasons have been put forward for this new requirement: the need to follow through on the 1983 NATO Ministers' "Montebello" decision; the impending obsolescence of existing systems; and the alleged dramatic build-up in Soviet tactical nuclear systems are, but a few that have been mentioned.

In order to implement this new build-up, the Reagan Administration is now discussing with our NATO allies within the High-Level Group (HLG) and other planning forums a number of programs. Modernization efforts now being undertaken or contemplated include:

- lifting the 925 ceiling on production of new 155mm and 8 inch nuclear artillery shells (including possible renewed production of enhanced radiation [ER] weapons);
- developing a new longer-range, land-based nuclear missile to replace the Lance missile now deployed in several NATO countries:
- developing a new nuclear air-to-surface missile for deployment on U.S. and other NATO nuclear attack aircraft;
- the continued production and deployment of new airdelivered nuclear gravity bombs (B-61, etc.);
- the allocation of Navy sea-launched cruise missiles (SLCMs) to SACEUR;
- and the continued production and deployment of new anti-submarine warfare (ASW) nuclear bombs.

But the political climate within which this new round of the arms race would begin has changed dramatically as a result of the INF Treaty. This Administration is kidding itself by pretending that it will have an easy time of it continuing to spout rhetoric to American and European publics about "eliminating an entire class of nuclear weapons" if, instead, it tries to circumvent the INF Treaty by deploying an entirely new generation of nuclear weapons outside of the treaty's narrow constraints. The days are over when such nuclear programs could be carried through quietly. They now must pass the scrutiny of a newly sensitized and aroused public.

Each of the proposed modernization programs has shortcomings both politically and militarily.

Lifting the Production Ceiling on Nuclear Artillery

Currently, according to unclassified figures, the U.S. has about 1,500 nuclear artillery shells in Europe, down slight-

ly during the past seven years and expected to decrease below 1,000 by the early 1990s. The principal reason for this predicted decline is an ongoing Congressional restriction, first imposed in the 1985 Defense Authorization Act, that the combined production of new 155mm and 8 inch nuclear Artillery Fired Atomic Projectiles (AFAPs) could not exceed 925, for all theaters. Production of new 8 inch AFAPs has been completed, but production of the new 155mm AFAP is just beginning.

From a political standpoint, any decision to renew nuclear artillery production is likely to send the wrong message to the West German people. Whereas one can at least plausibly argue that air-delivered weapons might explode on Soviet territory, no such argument with respect to nuclear artillery holds water — it is intended and has sufficient range for use in only one place, West Germany. These are the weapons, so thoroughly integrated into NATO's strategy, training and force structure, that the West German government and people really have in mind when they speak of "singularity."

Lifting the production ceiling, particularly if it involves renewed production of ER weapons, will send absolutely the wrong message to the Germans and the rest of Europe and probably bring about the kind of crisis that threatened NATO solidarity in the early 1980s over the INF deployments.

From a military standpoint, most military commanders, when pressed, agree that nuclear artillery encourages preemptive attack because of its peacetime vulnerability and uselessness militarily.

Follow-on to Lance

The Pentagon is also moving forward on a replacement for the existing Lance surface-to-surface missile, called "follow-on-to-Lance" or FOTL. The replacement would have increased range (250 kilometers versus a nominal range of about 115 kilometers for the existing system) and accuracy.

FOTL is being justified because Lance is "obsolete," doesn't have sufficient range to hit important Warsaw Pact targets, and is deployed in insufficient numbers to counter the large number of Soviet SS-21, Scud and FROG-7 missiles deployed in Western USSR and Eastern Europe.

Military commanders testifying about the small number of Lance missiles in Europe have played games with the numbers. While the total number of Lance launchers in Europe is relatively small (about 88 launchers with U.S. and five other allied forces), the total number of nuclear warheads and missiles deployed which could actually be fired from these launchers is much higher—about 700, according to unclassified figures.

In looking to a follow-on to Lance, the Army has examined a number of candidate missiles. The leading contender at this point is a nuclear version of the Army Tactical Missile System (ATACMS) now under development. ATACMS was intended originally to be a highly accurate

(Continued on page 7)

semi-ballistic missile, armed with a high explosive warhead, that would improve NATO's conventional force posture by being able to strike high value Warsaw Pact targets well behind enemy lines. The Army would like to have nuclear and conventional versions of ATACMS/FOTL to be virtually interchangeable and capable of being fired from the same MLRS launchers.

Such a deployment has a number of undesirable implications. First, it reverses the trend that ATACMS was supposed to initiate: moving NATO away from reliance on the early use of nuclear weapons and towards a more robust conventional defense posture. Deploying ATACMS in both nuclear and conventional modes does little to raise the nuclear threshold in Europe which was the expressed purpose of ATACMS.

Second, it would complicate the prospects for any future arms agreement that sought to limit shorter-range missiles; for the same reason that verification of SLCMs is proving to be such a difficult issue in the START negotiations. It is also true, however, that this verification problem probably would not be any more severe than for Lance which is also dual-capable and deployed in both nuclear and conventional versions.

"For example . . . NATO should propose that each side eliminate all ground-launched missiles with ranges below 500 kilometers and their launchers."

Third, as is already apparent, FOTL would face severe political opposition in West Germany. Not surprisingly, West Germans are extremely sensitive to the prospect—with the ink not yet dry on the INF Treaty—of deploying a new, ground-based nuclear missile that, unlike Pershing II and GLCM, could only land on their soil or that of their immediate neighbors.

Over the past several years, Congress has wisely prevented the Defense Department from spending funds to develop ATACMS as a new nuclear missile; a restriction that the Pentagon is now pressing to have lifted. The Congress should resist this pressure and retain legislation preventing the nuclearization of ATACMS.

Air-Delivered Munitions

In addition to the above examples, there are a number of new air-delivered nuclear weapons and delivery systems being developed or deployed. The tactical air-to-surface missile (TASM), B-61 bombs, new F-15E, Tornado and F-16 attack aircraft are all being deployed to build up NATO's already formidable ability to drop thousands of nuclear bombs on Warsaw Pact targets in Europe.

To the extent that these systems have the range to strike targets inside the USSR, they will undoubtedly complicate the START negotiations or, at the very least, make it more difficult to move beyond START towards any further strategic arms reductions. The Soviet Union can certainly be expected to question vigorously why an FB-111 bomber



Thomas K. Longstreth

carrying SRAMs based in the United States should be included as a strategic system, but an F-111 carrying TASMs based in the United Kingdom should not be considered a strategic threat.

An Arms Control Alternative

Far better alternatives exist from a political, military and economic standpoint to the massive modernization of theater nuclear forces than those the Pentagon would like to implement.

For example, instead of proceeding with the Lance follow-on, NATO should propose that each side eliminate *all* ground-launched missiles, with ranges below 500 kilometers, and their launchers. Such a simple and dramatic proposal, coming on the heels of the INF Treaty, has a number of selling points.

First, it would eliminate one of the chief disparities left over after INF: that between Warsaw Pact and NATO ballistic missiles below 500 kilometers. Soviet SS-21, SCUD and FROG-7 missiles armed with nuclear, chemical or conventional warheads constitute the principal current and future threat against critical, time-urgent targets such as nuclear storage sites and other weapons depots, air bases, command and control facilities, transhipment points, etc.

Banning these systems would also eliminate the need for a large and costly anti-tactical ballistic missile (ATBM) system which some have advocated to protect important targets from short-range ballistic missiles.

Finally, such a proposal would help NATO regain the arms control initiative in the post-INF era. Without some similarly innovative proposal, the alliance will most likely suffer additional public relations defeats at the hands of Gorbachev and his advisers.

FAS AND SCIENCE POLICY

FAS has embarked on efforts to ensure that the next Administration treats scientific advice with more respect than recent Administrations, and issues involving science policy get more attention in the campaign.

The first step was to send the questions below to all of the Presidential candidates and to induce AAAS to hold a press conference in Boston on February 13th, where relevant issues could be discussed.

At this press conference, among other things, FAS circulated the responses it had in-hand from Richard Gephardt, Albert Gore, Jack Kemp and Paul Simon. In due course, when the other responses arrive, FAS will print and distribute all of them. Members are encouraged to raise these and related questions with the candidates and the campaigns.

Other actions are planned to raise science policy issues; and members and others interested in cooperation with us should contact, at the FAS office, Ellis Mottur, former Science/Technology Adviser to Senator Edward M. Kennedy, who has been retained as a consultant for this purpose for the next several months.

- 1. In selecting a Science/Technology Adviser, would you impose a litmus test on his or her support or opposition to particular positions or programs; and if so, which positions or programs?
- 2. To what extent would you require that your Science/ Technology Adviser be someone of broad, top-level experience and stature within the scientific community?
- 3. Would you plan to appoint your Science/Technology Adviser promptly at the start of your Administration with

a view toward having the Adviser play a significant part in the selection of the subcabinet undersecretaries and assistant secretaries who have major Science/Technology related responsibilities?

- 4. To what extent do you consider it essential that the Science/Technology Adviser report directly to the President, rather than through some intermediary?
- 5. Do you intend to have the Science/Technology Adviser play a significant role in the development of the Federal Budget?
- 6. As you may know, Presidents Eisenhower, Kennedy, and Johnson utilized a President's Science Advisory Committee (PSAC), made up of distinguished leaders from a wide range of scientific disciplines, who periodically met to provide independent, objective advice to the President. This committee was discontinued during the Nixon Administration and has not been reconstituted since (although the current Administration does make use of a White House Science Council of advisers to the Director of the Office of Science and Technology Policy). In your Presidency, would you envisage reestablishing PSAC or a similar high-level body that could provide independent, objective advice directly to the President?
- 7. Do you currently draw on the scientific community for significant inputs to your positions on major issues? Feel free to indicate examples of issues on which their inputs have played a significant role; and, if you wish, to identify leading scientific advisers you have consulted and in whom you have confidence.

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