

complicate, or even prevent, the deployment there of advanced nerve gas artillery projectiles, the British government would be sought out to provide a safe haven.

She also observed that even should the new generation of binary howitzer shells be successfully stationed in West Germany, their limited range—20 miles—meant that chemical penetration, designed to impose a toxic environment deep behind enemy lines, would still have to be delivered by planes launched in Great Britain.

Hoeber has argued that vastly superior Soviet and Warsaw Pact capabilities, coupled with a "US paralysis resulting from arms control efforts" have created a dangerous chemical weapons gap. In earlier writings, Hoeber has suggested that the acquisition of a credible chemical warfare deterrent would reduce the possibility that during crisis, the United States might be backed into a cul-de-sac where the only option would be to employ tactical nuclear weapons.

Richard Burt, pointman in the State Department's campaign to indict the Soviets for conspiring to wage germ warfare in Southeast Asia, has also advocated a more varied and discreet chemical warfare arsenal. Writing that the existing NATO chemical warfare posture "fails to deter because it represents a capability that the alliance seems unwilling to threaten and unwilling to use," Burt recommends shifting nerve gas from its status outside the mainstream of military logistics and planning and more fully integrating chemicals into NATO responses.

While the Pentagon believes that the greatly improved safety and ease of handling of binaries will help the political marketing in Europe and increase the attractiveness of chemicals to military field commanders, critics see these features as ominous portents of a new chemical warfare arms race.

Writing in a publication of the Stockholm International Peace Research Institute (SIPRI), Julian Perry Robinson, a British scientist and an expert of 20 years standing on chemical weapons, said "binaries carry a real risk of promoting proliferation of nerve gas, a quasi-conventional weapon."

Since nerve gas is defined as a special ammunition whose shipment and deployment, like nuclear weapons, fall within narrow channels, outside of normal logistics and command and control apparatus, cumbersome security arrangements have posed an obstacle to rapid, flexible deployment.

Though the British disarmament movement has been preoccupied with theater nuclear weapons and has largely ignored chemicals, there are signs that the advent of binaries may widen the protests.

Fifteen hundred scientists have signed an appeal "calling on our colleagues not to participate in any research associated with the development and production of chemical weapons." The petition warns that an escalating chemical weapons competition "could impose new military directions and priorities on R&D (research and development) in the life sciences," and thus threaten to pervert "the bio-technology currently being made possible by increased understanding of basic cellular biochemistry and genetic mechanisms."

According to the sponsors of the petition, what started as an internal movement of scientists has now become a broad public education campaign which aims to put the threat of chemical weapons on the political agenda. Organizers have demanded a full open parliamentary debate prior to any arrangement that ties Britain to the US binary program.

In addition, a book to be published soon promises to deepen domestic interest in chemical warfare. Titled "A Higher Form of Killing," it recounts the secret history of British, US and Soviet chemical warfare planning.

The authors, Jeremy Paxman and Robert Harris are reporters whose acclaimed Panorama chemical warfare documentary appeared last year on the BBC.

"A Higher Form of Killing," which one of the authors said explores the military's search for "feasible lunacy," is expected to be widely promoted by its publishers. Chatto & Windus in Britain and Arthur Wang in America. What remains more uncertain is whether, following the precedent of the antinuclear movement, popular concern about chemical weapons will be imported from Britain to the US, and an arms control constituency mobilized.●

## INTERNATIONAL TRADE

● Mr. TSONGAS. Mr. President, I share with all of my colleagues some remarks I made before the Finance Committee this afternoon on the need to undertake strong and vigorous trade negotiations to encourage the competitiveness of U.S. business abroad.

The remarks follow:

### STATEMENT OF SENATOR PAUL E. TSONGAS

Mr. Chairman and Members of the Committee, thank you for permitting me to testify on the important subject of international trade. A few months ago we were all running around talking about reciprocity. Reciprocity is not the answer to our trade problems. Even if trade barriers are removed, our trade balance with Japan would not be righted. We must go beyond reciprocity.

If we focus on protectionism as the solution to our trade problems, we are missing the point. Protectionism is an opiate. It delays our coming to grips with the real enemy which is our own inability to compete with other industrial economies.

The Japanese in particular offer a challenge to us because they are gaining inroads into the markets of our leading economic growth area—high technology. During the past year the Japanese have captured 70% of the world market in the newest generation of semi-conductors—the 64K RAM. We will not gain back this market—or our market in automobiles, television sets, cameras, or other goods—by passing a trade bill.

The Japanese have obtained their successes by combining aggressive private business strategies with a supportive government. They also have a cooperative partnership between business and labor. Workers share not only the decision-making but also the profits of their companies. This system is in contrast to our own society where there are adversarial relationships between labor, management, and the government. This lack of cooperation results in such things as over-regulating; wage rate increases which exceed productivity gains in certain industries; anti-trust restrictions which prevent us from forming export trading companies; and other features of our economy which are counterproductive to our goal of greater productive efficiency.

These are not the only reasons Japan is a more efficient producer of industrial goods than we are. The Japanese are investing at a greater rate and they do more long-term planning than we do. American businesses are motivated to a greater extent by short-term profits. The Japanese government devotes a larger percentage of its GNP to civil research and development than we do. This

year, instead of increasing our research funds, we cut them further.

I think we should focus our attention on those aspects of our economy which are beginning to threaten our survival in the marketplace: The declining percentage of our GNP devoted to civilian Research and Development; insufficient capital investment; high interest rates; declining commitment to higher education, especially as it affects graduate education; over-regulation; over-reliance on short-term profit motivations; lack of re-training workers in the skills required in the growing areas of our economy—especially high technology industries; low savings rates; and wage increases exceeding productivity gains in certain industries.

Our country needs a productive partnership of business, labor, and government. I believe the work of this committee has demonstrated that government has an important contribution to make to such an American economic partnership. In addition to our own industrial difficulties, unfair trade practices do exist, and it is important that government take vigorous and forceful action on trade, while avoiding the dangers of protectionism. In formulating a legislative response to our trade problems, I hope this Committee will:

(1) Specifically address the growing number of international trading barriers presently encountered by the leading edges of our economic growth—high technology industries.

(2) Recognize the growing use of non-tariff barriers by foreign governments such as: Discriminatory public and private procurement; prohibitions on joint research opportunities; prejudicial financing; and obstacles to exchange of technology.

(3) Extend the trade negotiation framework to include new codes in the areas of investments and services.

(4) Call for a deliberate and in-depth monitoring of such foreign government action that creates barriers to U.S. industry.

(5) Call upon the President and our trade negotiators to seek equal national treatment by foreign governments of U.S. firms.

I hope the committee will avoid the dangers of automatic reciprocal tariff actions which can complicate the effort to negotiate the removal of trade barriers, and which might serve to erect barriers behind which the competitiveness of American industry might lag. We must not confuse the industrial problem—which is our own problem—with the trade problem which we share with Japan and other nations.

The sooner we acknowledge these distinct problems, and proceed to tackle them in a comprehensive fashion, the closer we will be to long term economic viability.●

## NOTICE OF DETERMINATION BY THE SELECT COMMITTEE ON ETHICS

● Mr. WALLOP. Mr. President, it is required by paragraph 4 of rule 35 that I place in the CONGRESSIONAL RECORD this notice of a Senate employee who proposes to participate in a program, the principal objective of which is educational, sponsored by a foreign educational or charitable organization involving travel to a foreign country paid for by that foreign organization.

The Select Committee on Ethics has received a request for a determination under rule 35 which would permit Graydon Forrer of the staff of Sena-