THE VOICE OF SCIENCE ON CAPITOL HILL

F.A.S. PUBLIC INTEREST REPORT

Formerly the FAS Newsletter

THIS ISSUE:
PROLIFERATION

Vol. 29, No. 8 October, 1976

PROLIFERATION: WHAT CAN AND CAN'T BE DONE

The campaign against nuclear proliferation has passed through two stages and is organizing itself for a third and fourth. In the beginning, the campaign was based on keeping the "secret" of the bomb. When the secret no longer could be kept, a political bandwagon — the non-proliferation treaty — was developed to dissuade the undecided.

Now the momentum of the bandwagon is spent. Many not participating in the treaty presumably either see a potential security requirement for nuclear weapons (Taiwan, Pakistan, Israel) or anticipate a desire to exploit them for political purposes (Brazil, Argentina). Probably none of these can be persuaded to forego nuclear weapons by political sleight of hand. Indeed one worries about the ultimate intentions of such signatories or parties to the treaty as South Korea, Egypt, and Iran.

Nor can these countries be prevented or even seriously delayed from building nuclear weapons by embargoes of material or technical knowledge. For a fraction of the cost of building nuclear power reactors, they can, as did the Indians, construct a reactor designed to produce plutonium and a small reprocessing plant and gain, thereby, the means for a few bombs.

What card remains to be played? A possible key lies in observing that the proliferation of nuclear powers has been far slower than was anticipated in the fifties and sixties. Studies of that period focused on the technical capability to build a bomb and assessed correctly that tens of nations in the seventies could do so. But today only six or seven states have nuclear weapons. With the spread of nuclear reactors, the lead-time toward the building of a bomb is being still further reduced and the technical obstacles further diminished. But, as before, it remains true that a power must not only be able to do so but be determined to do so.

The influencible question therefore lies in what "determined" means. It is an error to continue to underestimate the political determination required because it leads to overlooking our ability to influence that motivation.

In the first place, nations must determine that nuclear weapons are relevant to their military and/or political needs. Few can make that determination. Since they are rarely going to build their weapons secretly — and never can assure such secrecy — they must anticipate bomb construction by neighbors. Will their situation be improved on balance? They must defend securely the bombs they build, not only against neighbors or military attack but against terrorists and political insurgents. Can they do so without lingering doubts? In principle, many nations should determine that, overall, the construction of a nuclear force will do them more harm than good.

America and like-minded nations can influence that calculation. They can attempt to deter new nuclear powers. In America's case, especially, we can threaten a review, with prejudice, of our economic aid and military security arrangements with any nation building nuclear weapons. The review is justifiable quite apart from its deterrent effect because each new nuclear power raises itself the issue of whether it continues to require security assurances. Indeed, providing security guarantees to nations that can precipitate nuclear wars can be dangerous to the guarantors. Providing economic help to nations embarked on an expensive program to main-

—Continued on page 2

— Reviewed and Approved by the FAS Council

PROLIFERATION PRESSURES: THE THREE SHOCKS

Thus far, all things considered, a remarkable success has been achieved. Thirty years after World War II revealed that atomic bombs could be made, only the Post-War Big Five are nuclearly armed, plus a device in India and possibly some weapons in Israel.

But three shocks are coming in rapid succession. On the whole, it should be possible to limit the first shock — commercial power reactors that burn nuclear fuel — to the spread of the reactors themselves without attendant enrichment plants and spent fuel reprocessing plants. But this is only because neither of the latter are really economic.

The second shock would occur if power reactors that bred nuclear fuel were to spread rapidly since they *require* the reprocessing of spent fuel and the accumulation of large amounts of plutonium.

The third and final shock would occur if cheap methods arise of creating bomb material without the use of reactors. Direct enrichment of uranium to bomb-grade levels of U-235 by lasers, for example, would eliminate the entire Rube Goldberg process of: a) slightly enriching uranium; b) burning it in a reactor and converting part of the U-238 to plutonium; and d) separating out the plutonium in a reprocessing plant and making plutonium bombs.

Time is running out; the world must get its house in order. □

tain a nuclear strike force raises serious questions also.

Can the United States justify vigorous efforts to prevent others from achieving its own nuclear status? We do not believe that the excessive American nuclear stockpile disqualifies America from pressuring others to desist. No organization has emphasized more often than FAS the importance of great power restraint in the arms race. But international order and security is only further imperiled by new nuclear powers.

To effectively deter nations from going nuclear, the United States will have to make credible the threat of an aroused reaction. On the practical level, this credibility would be increased by U.S. attention to the detail of problems of nuclear theft, to the strengthening of safeguards, and to such injunctions against the sale of reprocessing and enrichment plants as are embedded in the Symington amendment to the Foreign Assistance Act (See p. 4).

In particular, we see no need and much possible harm in the sale of reprocessing plants to non-nuclear powers in the next decade. Reprocessing and recycling of spent fuel is not now economic even for nations with many nuclear reactors, much less for those with a few. It does not free reactor buyers from dependence upon a supply of new enriched material. And an ample supply of enriched material for export seems easily assured for the next two decades. We believe that no legitimate need for the proliferation of reprocessing and enrichment plants exists. Relevant requests are, instead, warnings of a likely intention to build nuclear weapons.

This is simply not the time to institutionalize, in our country, or abroad, methods for reprocessing and recycling plutonium. The worldwide reactor industry is having birth pains. And these are unrelated to plutonium recycle considerations. Why not wait until the dimensions of the need for uranium are clearer, and the prospects for the breeder are clarified? Without precluding the development of working demonstration plants by nuclear suppliers, we urge that, with regard to plutonium recycle, the world should "hang loose for a decade." In particular, the Nuclear Regulatory Commission (NRC), scheduled to reach a decision in 1977 on domestic recycling, should report adversely.

It is often argued that restraints on reprocessing and other relevant nuclear technology "buy time." In fact, their effect can be expressed more precisely and seen to have more significance still. The present goal of non-proliferation efforts is to preclude a self-fulfilling tendency in which many nations build weapons on the assumption that others are about to do so and, hence, that they themselves might as well do so too. If this mob psychology can be opposed and slowed, it is by no means impossible to imagine a largely non-nuclear world co-existing with the spread of nuclear-bomb-related technology. After all, our ultimate protection against such other means of mass destruction as biological and chemical weapons is not envisioned as a slowing of the relevant technology.

It is not quixotic to work for a world with ever fewer conflicts to which nuclear weapons are militarily relevant. Already today only a limited number of nations fear military destruction or military takeovers by their neighbors. Insulating these hard-core cases from nuclear threats, if not resolving the conflicts, is an entirely plausible strategy and hope. Other states may then ultimately lack the motivation to jump the non-nuclear traces.

Thus the present goal of non-proliferation efforts is to ensure that the shock waves produced by the current spread of nuclear reactors do not cause nuclear-tending nations to bolt into nuclear status. Slowing the dissemination of reprocessing, and pressuring nations not to go over the edge, may not succeed. But it provides prospects of success wholly ample to justify a serious effort. □

The FAS Public Interest Report is published monthly except July and August at 307 Mass. Ave., NE, Washington, D.C. 20002. Annual subscription $20/year. Second class postage paid at Washington, D.C.

PROLIFERATION REQUIRES A COORDINATED CAMPAIGN

What follows is a compilation of proposals and possibilities for forestalling proliferation arranged in nine categories.

Shaping the Political Context

Comprehensive Nuclear Test Ban: Nothing is more overdue in showing superpower restraint than fulfilling their oft ratified promise to complete the Partial Test Ban. The Threshold Nuclear Test Ban, now awaiting ratification, will not be taken up in the Senate this year. Governor Carter has called it a "wholly inadequate step" beyond the Partial Test Ban Treaty in recognition of the very high 150 kiloton threshold it envisages. He would seem likely to reopen negotiations were he elected. Hence this ill-considered Treaty, the result of President Nixon's last minute negotiations in Moscow, may never be enacted.

Avoiding Peaceful Nuclear Uses: Nothing is more counterproductive in the Threshold Test Ban Treaty than its treatment of peaceful nuclear tests. It is of the utmost importance that a major new effort be made to persuade the Soviet Union to give up its insistence on retaining the possibility of peaceful nuclear explosions. The emphasis on this concept makes it extremely difficult to organize political resistance to the detonation of nuclear bombs by states under the guise of their interest in peaceful nuclear explosions. America has found no good use for peaceful nuclear explosions despite decades of energetic effort by weapons manufacturers. There is very little likelihood that others will do so. And if they do, let them buy the necessary nuclear devices at cost from an existing nuclear power.

Pledges of Non-Use of Nuclear Weapons: It is generally believed in the arms control community that a pledge of non-use of nuclear weapons against non-nuclear powers by the nuclear powers would discourage proliferation. There would have to be an exception, some believe, for non-nuclear nations waging war in conjunction with nuclear armed states (e.g. we would not eschew nuclear use against North Korea if it made war on South Korea in conjunction with nuclear armed China).

This pledge has limited applicability, however, to the presently worrisome states. Brazil and Argentina are presumably little interested in the statements of nuclear states — but rather in each other. Egypt/Israel and India/Pakistan might be similarly unmotivated. Iran might welcome a pledge from the Soviet Union. But Taiwan confronts a nation, the People's Republic of China, which has already foresworn the first use of nuclear weapons against any nation. And South Korea is worried about being overrun by North Korea, not bombed by China anyway. Nevertheless, such a pledge might be useful in stemming the drift to nuclear weapons by other countries and in improving the atmosphere.

Security Guarantees

Korea, Taiwan: In the case of South Korea and Taiwan, there is a direct conflict between American interests in withdrawing troops and assurances, and its interests in forestalling proliferation. There can be little doubt but that the interest in a bomb in these states is rising with every indication of American withdrawal. We are here moving in the opposite direction from security guarantees.

Egypt - Israel: It has been argued in a detailed and sophisticated fashion by Alton Frye *(New York Times Magazine* section, January 11, 1976) that guarantees taking the form of putting nuclear weapons at the disposal of any nation attacked by nuclear weapons would remove the advantage of proliferation so as to discourage it. Since it is widely rumored that Israelis already have bombs, this approach to the mid-East would turn on the Soviets offering bombs to the Egyptians in case Egypt was attacked with nuclear weapons by the Israelis. Indeed, it is believed that precisely this happened during the Yom Kippur war — that Soviet ships with warheads for Egyptian Scud missiles had anchored in Alexandria. (See *Washington Post* 11/21/73, and *N. Y. Times* 11/22/73). Perhaps, in this conflict, the Frye approach exists in tacit form. Indeed, one report suggests that Soviet assurances have been made to four Arab countries — Syria, Iraq, Algeria, and Egypt — to give them nuclear weapons if the Israelis are proven to have them. *(New York Times,* December 5, 1974).

Pakistan - India: What about the Pakistan/India case? Here the Frye approach would amount to having one superpower or the other attempt to dissuade the Pakistanis from constructing nuclear weapons by guaranteeing to put nuclear weapons at their disposal were they attacked by India with nuclear weapons. Perhaps generalized guarantees to come to the aid of the Pakistanis, if they are attacked by India, might be more easily secured and comparably useful.

Brazil - Argentina: In the case of the Brazil/Argentina race for nuclear prestige, this method of nuclear guarantees is still more difficult. After all, one can, at least in principle, deter nuclear use by offering to give nuclear weapons to the nation attacked. But one can hardly give nuclear weapons to all neighbors of a new nuclear power to balance a *political* equation. In any case, nations building nuclear weapons must assume that their neighbors will, in due course, balance the political equation themselves, by constructing their own nuclear weapons. Perhaps, to the extent that political influence by nuclear imbalance can be deterred, it may thus already be deterred.

Other Means of Deterring Nuclear Possession

Our editorial on page one describes one method of

—Continued on page 4

CATALYTIC WAR THREAT

If Israel should ever fail to protect her own, she would cease to have meaning. We have been forced into aggressive defense and the stakes keep getting higher.

In the end, we may have to choose between action that might pull down the Temple of Humanity itself rather than surrender even a single member of the family to the executioners."

Yerucham Amitai, Former Deputy Chief, Israeli Air Force to William Stevenson Author of "90 Minutes at Entebbe"

Here we find, in real life rather than fiction, the obscene statement of the ultimate danger of proliferation: that a small nuclear power might deliberately trigger Armageddon.

(Asked to help confirm or deny this quotation, an Israeli Embassy press officer denied that Amitai, a pilot, had been Deputy Chief of the Air Force; at press time, the Embassy was investigating the quotation, which appears in a frontispiece of "90 Minutes at Entebbe".)

Continued from page 3

dissuading nations from nuclear bomb construction by threatening a review of economic and military assistance agreements. In many cases, however, a stronger punishment might fit the crime. Specifically, many nations will envision going nuclear through the violation of agreements and understandings concerning their use of nuclear materials provided them by nuclear suppliers. Should not the nuclear suppliers consider ways and means of enforcing their understanding by threatening boycotts of further nuclear material or even of other kinds of supplies? This is a matter worth discussing at meetings of exporting nations.

Nuclear Terrorism

Still stronger actions are suitable in case of nuclear terrorism; it is not too soon to begin thinking about cooperative international efforts in this regard. It seems clear that the Libyan Government is in close connection with international terrorism, financing operations against Israel, and even instigating operations against its Egyptian neighbor. The Libyans seem also to be interested in constructing a nuclear weapon. This combination foreshadows a serious problem: Governments with bombs linked to terrorists with grievances.

One possibility to consider (threatening and/or carrying out) in such cases is international ostracism: the refusal by nations to accept persons carrying passports of the nation in question, to do business with it, to permit its airplanes to land, and so on.

Avoiding Nuclear Subsidization

The nuclear exporters are increasingly interested in foreign sales as domestic sales of reactors lag. In 1975, only 4 new reactors were ordered domestically, far below the capacity of domestic suppliers. In Europe, newspaper reports quote industry representatives as asserting that export sales are necessary for the survival of the nuclear industry.

> "How to keep the nuclear industry alive is the dilemma our industrial strategy must solve. It is not easy, and the only solution may be that . . . industry must export or die in the next decade."
>
> *—Dr. Walter Marshall, Deputy Chairman of the British Atomic Energy Authority*

In this context, suppliers are obviously ready to give generous terms, to say the least. And the capital shortages of the developing countries make them eager to accept. In short, the reactor sales themselves are likely to be highly subsidized in terms of credits extended and related terms.

Governments concerned with non-proliferation should ask themselves whether they wish to permit subsidized sales. If the original reactors need "loss-leader" subsidies, the likelihood of a healthy reactor-based energy economy in the recipient country is low. The only result may be to put the recipient firmly on the track of nuclear status. But quite apart from that consideration, we do recipient countries a disservice to mislead them about the economic viability of nuclear energy. We try not to distort our own energy prices; why should we distort the prices of others through subsidization?

Technical Fixes

Too little attention has been given to technical solutions to various problems. Could plutonium be spiked so as to make it usable for nuclear fuel but unusable for nuclear bombs without strenuous cleansing?

Is a thorium cycle much less likely to permit nuclear theft and terroristic uses? Should we be studying such a cycle more closely as a possible substitute for the plutonium economy that might result from breeders? (See H. A. Feiveson and T. B. Taylor at Princeton University). Could devices be constructed for detecting plutonium at substantial distances so as to assist in monitoring and preventing possible thefts?

And should not all owners of reactors have an international forum for sharing technical ideas about safeguarding their plants?

Preventing Catalytic War

The greatest threat to human civilization remains the ever-ready, absurdly exaggerated, nuclear armories of the superpowers. No effort must be overlooked to preclude the possibility that nuclear terrorists, new nuclear powers, or local nuclear wars, could ignite the nuclear tinderbox in Europe, America, or the Soviet Union. This is a joint threat to human civilization which the Soviet and U.S. authorities should discuss periodically, in conjunction with Britain, France, and the People's Republic of China. If government studies do not exist on this matter, they should be commissioned.

Proliferation and National Security

In general, the Defense Department should start taking the security problems posed by proliferation at least as seriously as it takes every marginal (and irrelevant) increase in Soviet weaponry. A recent report of the Committee for Economic Development (CED) put it well:

> "The security implications of these global trends [toward a worldwide nuclear economy] are enormous and deserve careful attention. They are of a magnitude that might be expected to command an increased part of the resources the United States puts into its national defense structure, but there is no sign yet that they do."
>
> *—Nuclear Energy and National Security, Sept. 1976*

Intelligence and Non-Proliferation

Indicators of bomb-seeking should be constructed that would permit regular reappraisal of the intentions of

—Continued on page 5

PROLIFERATION OF REPROCESSING AND ENRICHMENT FACILITIES EVOKES U.S. AID CUTOFF

The single most important effort to control proliferation to date is embodied in the Symington Amendment to the Foreign Assistance Act of 1961. It threatens and requires an aid cutoff to both buyers and sellers of reprocessing and/or enrichment facilities unless their agreement includes provision to place the facilities under multinational management as soon as such management becomes available. Recipient nations must also have reached agreement with IAFE to place all their nuclear facilities under IAEA safeguards.

There is a saving clause which permits the President to avoid the aid cutoff if he has received "reliable assurances" that the country in question will not develop nuclear weapons and if the termination would have a "serious adverse effect on vital United States interests."

POWER REACTORS OPERATING OR ON ORDER IN NUCLEAR TENDING NATIONS

(January 1, 1976)

ARGENTINA	2
BRAZIL	3
IRAN	4
SOUTH KOREA	3
TAIWAN	6

Egypt, Israel and South Africa have reactors, but not commercial power reactors.

Continued from page 4

nuclear-tending nations. And the intelligence community should report, as appropriate, to the public to permit public pressure to rise in response. A good example of the usefulness of this course was the *Washington Post* report of August 29 that Taiwan was secretly reprocessing spent uranium fuel. Few know at present what factions exist in favor of nuclear weapons in which Governments. How should the public interpret conflicting statements of the Shah of Iran? Does the desire of the South Koreans for a CANDU reactor and its effort (which the Department of State prevented) to gain a reprocessing plant mean that it has secretly taken a decision to build a bomb? More, rather than less, release of relevant information would be useful.

The Scientific Old-Boy Network

The scientific community should be alert to signs of interest in all nations of the construction of nuclear weapons (and, for that matter, of other methods of mass destruction). In particular, FAS members are asked to advise the Washington office if they discover teams of foreign scientists studying questionable subjects at American universities. The U.S. Government cannot monitor such things, but it is interested and there are relevant American laws. When the Department of State was alerted that a team of Taiwanese scientists were studying inertial guidance (presumably for missile construction), its Munitions Control Board ruled that certain lab work was a prohibited "oral or visual" export of technology.

Moreover, as the Director of the Arms Control and Disarmament Agency, Dr. Fred Iklé, put it recently:

> "There is nothing inappropriate about an American university concluding that it should not assist foreign nationals who seem to be training to build nuclear weapons . . ."

FAS will counsel members concerned about relevant problems and bring them to the attention of relevant government agencies if violation of law are likely.

Safeguards

One can ask that IAEA Safeguards be applied by a recipient to all nuclear plants in the recipient's possession, not only the one sold. One can preclude retransfer of sensitive technology without the permission of the original exporter. One can preclude use of assistance for "peaceful" nuclear explosions. One can require physical security measures of specific kinds. One can, above all, preclude the export of enrichment plants or reprocessing plants except under multinational auspices.

GAO PRODS NCI

Federal efforts to protect the public from cancer-causing chemicals have not been too successful . . .

The Director of the National Cancer Institute is responsible for the overall direction of Federal efforts. He should establish a Federal policy on carcinogens with the cooperation, advice, and support of other Federal agencies. The policy should address the scientific issues that have hampered effective public protection for carcinogens.

—June 16, 1976 report of GAO: "Federal Efforts to Protect the Public From Cancer-Causing Chemicals Are Not Very Effective"

GAO WANTS NCI TO PROVIDE CANCER POLICY LEADERSHIP

HEW thinks that its National Cancer Institute should be "developing a procedural framework" for combating chemical carcinogens. But GAO thinks that NCI should go further and "be the focal point for seeing that a policy is established and that it more actively coordinates all Federal policies dealing with carcinogens."

GAO said that NCI's legally required efforts to develop a cancer program coordinate with other programs had been useful but had failed to "bring about a uniform Federal policy" or to give all segments of the population a consistent protection from carcinogens.

HEW took the view that this would require its NCI Director to engage in "setting regulatory policies" which should be left to the regulatory agencies.

GAO wants NCI to resolve a number of current issues: to decide what information is needed, to determine what chemicals should be tested and how, and to figure out how to use and evaluate the results.

HEW said it agreed partly and, to the extent that it agreed, gave evidence that NCI was already engaged in such activities; it insisted, however, that NCI could not tell the regulatory agencies what to do.

One possible way to finesse this impasse would be for NCI to ask the various regulatory agencies for a statement of the recurring scientific issues each faces, and the guidelines each is using or developing to cope with them. By giving an opinion on the various problems it could try to bring the guidelines into some kind of consistency with one another and with the scientific evidence simply by giving its advice — advice which the regulatory agencies could accept or reject as they wished. □

MAIL OPENING, PHYSICAL SURVEILLANCE AND ASSASSINATION PROHIBITED

FAS examined a White House order of February 18, 1976 and found several reforms worthy of note. The intelligence community was instructed to refrain from mail opening and examination of Federal tax returns (except under applicable statutes and regulations) and to refrain from engaging in or conspiring to engage in political assassination.

Physical surveillance of U.S. citizens was precluded except when a U.S. citizen is found with a foreign citizen under surveillance. In this case, it is permitted to follow the U.S. citizen sufficiently to find out who he is. □

WORLD FOOD RESERVES

RESERVES EXTREMELY PROFITABLE

If after a period of above normal production with world grain stocks restored to normal levels, a true internationally managed stock of, say 30 million tons would be accumulated and held firmly until any recurrence of significant world shortfall, its timely release would be extremely profitable in terms of social opportunity cost."

Consultant Study on Alternative Approaches (FAO), Feb. 1975

The September Report discussed the importance of World Food Reserves. An excellent analysis substantiating the value of such reserves was prepared by a group of three consultants to FAO.* They observe that in 1974, after reserves were depleted, a 10 percent decline in corn crop prospects had resulted in a 60% increase in prices. In 1970, in the presence of reserves, a decline in production expectations of 11% had resulted in only a 25% increase in prices.

They conclude that the value of about 500,000,000 bushels of corn in holding down windfall weather prices was several times the commercial costs of such a supply. In short, the stabilizing effect of the reserve was far in excess of its value as food.

Furthermore, the consultants suggest that the costs of maintaining the reserve might well be recouped. If one assumes that the selling price was about double the accumulation price, and estimating that costs of storage are about 20% of the purchase price, one would break even if the reserve was turned over only about every ten or eleven years.

In short, the existence of a reserve tends to preclude prices from going through the roof. In answer to USDA's concern that such a reserve might hurt farmers' desire to produce grain, they ask:

> If U.S. corn farmers in 1974 had sufficient incentive to produce — and a reasonable expectation of producing — 5.85 billion bushels for U.S. @ $2.30 per bushel; and if consumers would be reasonably content with the food price implications of this outcome, why should a spell of bad weather occasion a transfer of more than $7 billion from consumers' pockets to producers' pockets?

What follows are graphs FAS collected revealing related effects of having the food stocks decline. These amply bear out the phenomenon these analysts describe.

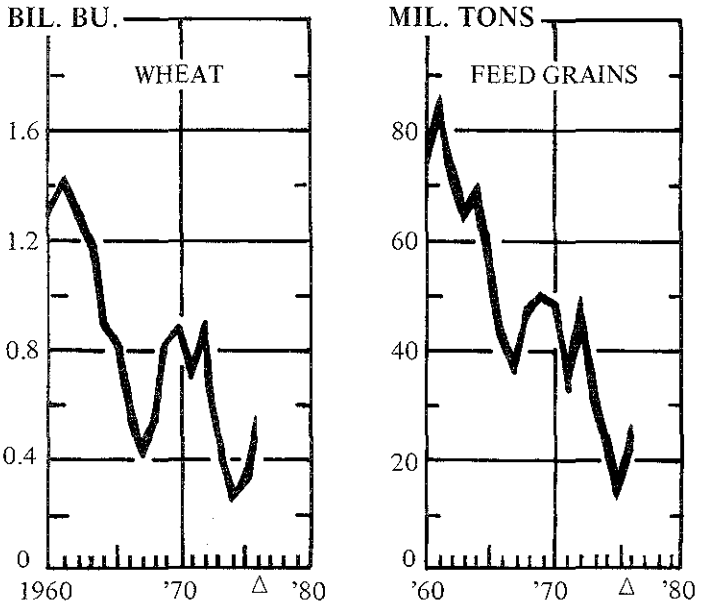
1) This graph reveals the decline in stocks measured in carryover of wheat and feed grains from one year to the next.

2) As the carryover declined, wheat prices in constant dollars soared to the highest level in this century.

3) With the rise in wheat prices, disposable personal income of the farm population suddenly rose to meet that of the nonfarm population. □

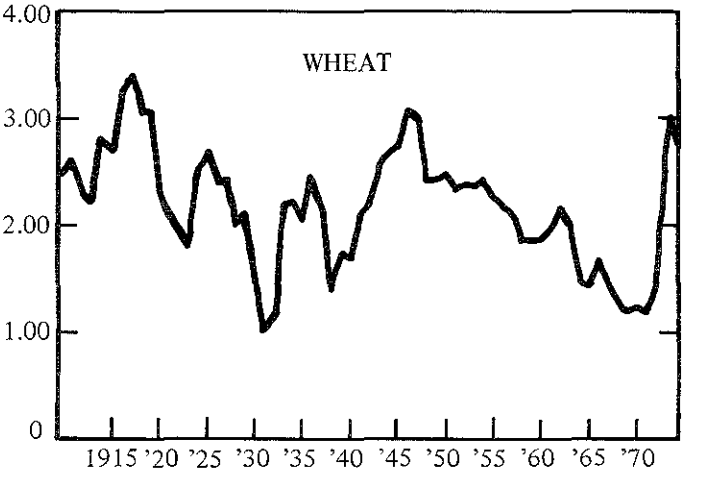
*February, 1975 Food Reserve Policies for World Food Security: A Consultant Study on Alternative Approaches ESC: CSP/75/2, Jimmye Hillman, D. Gale Johnson, Roger Gray.

RESERVES FALL



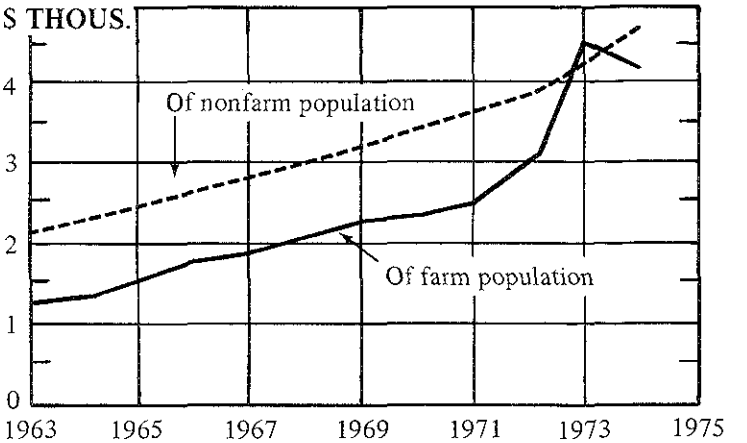
CARRYOVER OF MAJOR FARM COMMODITIES

PRICES RISE



FARM PRICES OF WHEAT IN CONSTANT DOLLARS

FARMER INCOME RISES



DISPOSABLE PERSONAL INCOME PER CAPITA

SAKHAROV APPEALS TO FAS

Nobel Peace Prize winner Academician Andrei Sakharov sent a special message to FAS which arrived on August 4, 1976, asking assistance for his close associate in the Soviet human rights movement, Sergei Kovalev, who was sentenced in Lithuania last year to five years in prison and three in exile.

Kovalev needs an operation for hemorrhoids which, under prison conditions, can only be given in the Central Prison Hospital in Leningrad. Appeals to permit his transfer there for the operation and subsequent convalescence have met with an attitude on behalf of the prison administration that, Sakharov noted "further strengthens our anxiety". He went on to say:

> "It cannot be excluded also that the administration has fixed instructions with respect to Dr. Kovalev and that his situation will constantly deteriorate".

Sakharov's letter related Kovalev's most recent tribulations (a summary of the case of this neurophysiologist is given in the January, FAS Report).

> "In the month of March, Dr. Kovalev was subjected twice to confinement in the lockup (dungeon) (the official name of the lockup, CHIZO, means penalty isolation cell for solitary confinement) for periods of 10 and 7 days. The first time Kovalev was confined as a punishment for drinking tea in someone else's section of the barracks (apparently on his own birthday). During his stay in solitary confinement, he refused to go to work, which served as the cause of his second punishment. This time Kovalev went to work, but he conducted a five-day hunger strike in protest. Evidently it was at that time that Dr. Kovalev was deprived of his regular [family] meeting, one of three a year provided by the regime. In June, according to information in our possession, Dr. Kovalev was again placed in solitary confinement. A prisoner in a camp "under strict regime" has the right to mail two letters a month. However, part of Dr. Kovalev's letters were confiscated by the prison censors, and at the time of solitary confinement he was deprived of the right of correspondence.
>
> "There are reasons to suppose he will soon be transferred to Vladimir Prison. Such a measure of punishment is provided for prisoners 'guilty of disturbing order.' If this happens — an even more serious threat to his life will emerge."

Scientists are encouraged to inquire periodically about the health of Dr. Kovalev to the Medical Administration Board of the Soviet Ministry of Internal Affairs and to the Soviet Minister of Internal Affairs, Nikolai Shchelokov. Specialists in cell communication and cellular physiology could send materials to Kovalev at this address: Sergei Kovalev, P/Ya 5110/I-VC Moscow, USSR.

Lyubarsky Appeals to Prevent Loss of Doctorate

In August, also, FAS received from the Soviet Union a statement by Kronid Lyubarsky observing that efforts were being made by the Soviet certifying commission (VAK) to deprive him of his academic degree: candidate in physical-mathematical sciences (the equivalent of the U.S. Ph.D.).

Lyubarsky, an astronomer who specializes in such questions as Mars and its exploration, was punished originally for human rights activities: distributing the Chronicle, journal of the Soviet human rights movement. The effort to deprive him of his degree may have resulted from his continuation of these activities while in prison. He and a few other prisoners were earlier bold enough to put their name to a petition about prison conditions which, when smuggled out, was widely quoted in an Amnesty International Report on "Soviet Prisoners of Conscience."

Lyubarsky's case earlier aroused the compassion of a very significant percentage of the members of the American Astronomical Association. Lyubarsky and this most recent problem were the subject of an in-depth article in *Science Magazine,* September 3. (Kronid Lyubarsky: The Soviet State Tries to Unmake a Scientist, Nicholas Wade).

FAS PLANS RESPONSE TO MAIL EMBARGO

More than two hundred FAS members have been writing to blacklisted Soviet scientists with little indication that these letters have been received. Return receipts more often than not have failed to return. Few replies have been obtained.

What can be done? The Universal Postal Union (UPU) has a convention that requires postal administrators to be liable "for the loss of registered items" to the extent of 40 gold francs (or $15.76). Article 44, par. 2 observes:

> "This payment shall be made as soon as possible and at the latest within a period of six months from the day following the day of inquiry."

The inquiry can be made up to a year after the item was posted and the sender need not prove that the item was not delivered or give any reason for making his inquiry. On the contrary, the postal administration must establish that the item *was* delivered or pay the indemnity. If, as usually happens, it is unclear which postal administration is at fault, the administration of origin — the U.S. Postal authorities — must pay the indemnity subject to passing the claim along if it wishes.

In 1973, Leonid Rigerman, representing the International League for the Rights of Man, presented a report on his experience in invoking these regulations to the Brussels Symposium on the 50th Anniversary of the Founding of the USSR. He found that return receipts were a surprisingly reliable indication of whether items had been delivered or not. But as he increased the number of items he posted to the Soviet Human Rights Committee, the overall percentage delivered dropped dramatically from 34% to 8%. The U.S. Postal Office was reluctant to pay the indemnities until the investigation was completed; it argued that the Soviet postal administration was not cooperating, and that the number of inquiries was greater than it could process. When Mr. Rigerman invoked the six month limitation, he did receive $1,002.34 for 76 letters, after which 95% of his letters began to arrive.

The Soviet authorities are permitted to confiscate material sent through the mails which violates Soviet regulations and, in their case, this includes:

> "printed matter, pictures, films, recordings, etc., which are contrary to the interests of the U.S.S.R."

But even in such cases the indemnity would have to be paid unless the material was returned to origin or the U.S. authorities were told "exactly how they have been dealt with" (article 29.4 of the Universal Postal Code). This seems to be rarely, if ever, done.

This history suggests that FAS should begin to keep

—Continued on page 8

Continued from page 7

careful track of letters mailed by its correspondents, and to apply for indemnity in the cases in which return receipts or other indication of delivery are not received. Plans are being drawn up to take action along these lines. □

SURREPTITIOUS ENTRY WITH OR WITHOUT WARRANTS?

News stories would lead the unwary reader to believe that the FBI in particular, and the government in general, were planning to discontinue surreptitious entry. The FBI Director, Mr. Kelley, had been alternatively apologizing for past such abuses and then discovering that the abuses were less "past" than he had been led to believe.

In fact, an exchange of letters between Mr. Kelley and FAS reveal that the Department of Justice does not consider warrantless violations of citizens' homes to be illegal *per se* and continues to assert their right to continue in certain cases.

FAS wrote Mr. Kelley on May 10, observing that Federal District Judge Gerhard Gesell had seemed to rule decisively against such methods:

> "The Government must comply with the strict constitutional and statutory limitations on trespassory searches and arrests even when known foreign agents are involved . . . To hold otherwise, except under the most exigent circumstances, would be to abandon the Fourth Amendment to the whim of the Executive in total disregard of the Amendment's history and purpose."

On May 26, Mr. Kelley responded that the Judge's opinion (in the Ehrlichman case) had not involved either a known foreign agent or a direct authorization of surreptitious entry by the President or Attorney General. The Department of Justice felt that no ruling by a court "on facts before it" had occurred. The FBI planned to be guided by the Department of Justice opinion.

Catch-22

The Kafkaesque quality of this reasoning is clear. The Department insists that breaking secretly into a man's home is not illegal until a court so rules; and because the break-ins are secret, a court is unlikely to get the opportunity.

The easily predictable Congressional response is to authorize surreptitious entry and electronic surveillance under conditions requiring court warrants. For example, in the 1960s, after liberals raised the issue of wiretapping, in an effort to ban it, Congress instead legalized domestic wiretapping but made it subject to court order. (See FAS Newsletter, February, 1971). That law, the Safe Streets Act, specifically omitted national security wiretapping from its requirement for court warrants.

Subsequently, the courts held that in *domestic* national security cases (i.e. internal security cases) wiretapping could not be authorized without a court order. The present Congressional legislation will therefore complete an evolution toward providing a judicial check on possible excesses in all kinds of police surveillance.

Surveillance Without Crime

A key question for civil libertarians has long been the right of the police to place under surveillance persons not suspected of criminal activity. The version of the S.3197 reported out by the Select Committee on Intelligence does permit such surveillance in, however, a very tightly circumscribed case, viz.

> "(E) a person who, acting pursuant to the direction of an intelligence service or intelligence network which engages in intelligence activities in the United States on behalf of foreign power knowingly or transmits information or material to such service or network in a manner intended to conceal the nature of such information or material or the fact of such transmission under circumstances which would lead a reasonable man to believe that the information or material will be used to harm the security of the United States, or that lack of knowledge by the Government of the United States of such transmission will harm the security of the United States."

All other cases in which surveillance is permitted do involve crimes. The ACLU opposes this exception to its general rule but the exception is obviously quite limited.

Because electronic surveillance includes bugs as well as wiretapping, the court-ordered warrants would include the right of surreptitious entry into homes with a view to place the bugs. Hence courts would be ordering legal break-ins. Unlike the court ordered wiretapping in the domestic and criminal cases falling under the Safe Streets Act, persons tapped would not be advised, subsequently, that they had been overheard. □

FAS PUBLIC INTEREST REPORT (202) 546-3300
307 Mass. Ave., N.E., Washington, D.C. 20002
September 1976, Vol. 29, No. 7

☐ I wish to renew membership for calendar year 1976.

☐ I wish to join FAS and receive the newsletter as a full member.
Enclosed is my check for 1976 calendar year dues. (☐ I am not a natural or social scientist, lawyer, doctor or engineer, but wish to become a non-voting associate member.)

☐ $20 Member ☐ $50 Supporting ☐ $100 Patron ☐ $500 Life ☐ $10 Under $10,000

☐ Subscription only: I do not wish to become a member but would like a subscription to:
☐ FAS Public Interest Report — $20 for calendar year

☐ Enclosed is my tax deductible contribution of _____ to the FAS Fund.

NAME AND TITLE _____
Please Print

ADDRESS _____

CITY AND STATE _____
Zip

PRIMARY PROFESSIONAL DISCIPLINE: _____

Second Class Postage Paid at Washington, D. C.

Return Postage Guaranteed