

F. A. S. NEWSLETTER

FEDERATION OF AMERICAN SCIENTISTS
February 17, 1952

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52 - 2

FAS ASKS NEW STUDY OF ATOMIC CONTROL

COUNCIL ACTS *****

The FAS Council, meeting in New York on February 2, re-affirmed its belief that re-study of US atomic control proposals is now required in the light of current realities. It directed FAS officers to use all means available to obtain such a re-study at the highest possible level, preferably within government but, if necessary, by a group of eminent private citizens willing to devote considerable time to quiet, concentrated study of the problems involved. Council discussion indicated that means must be found at least to stay the A-arms race before the mounting of stockpiles on both sides makes control impossible. Cautious hope was expressed that the opposing points of view have now converged sufficiently, at least on paper, to open possibilities for limited agreement.

BACKGROUND

Thus FAS, created during the turbulent post-war debates on atomic control, again turned a spotlight on the international atomic weapons control problem. Those who recall the birth of the Acheson-Lillenthal plan in 1946 remember the enthusiasm which these idealistic proposals aroused in the war-weary American public. The UN debates soon shattered any illusion of quick acceptance by the USSR and many people were left with a "what can we do?" attitude.

Much has transpired in the past six years to make the necessity for control of atomic weapons even more pressing. The USSR has demonstrated its ability to produce atomic bombs and presumably is stockpiling them. Spurred on by this knowledge, the US has expanded its program many-fold and by now has an atomic stockpile acknowledged to be of sufficient magnitude to incinerate every sizeable Russian city. Meanwhile, debate in the UN has continued in spurts, with both sides making modifications in their respective proposals as events and the propaganda war appeared to dictate. And in the US, influential voices, most recently that of former Secretary of State James Byrnes, have been calling for use of atomic weapons in the Korean conflict.

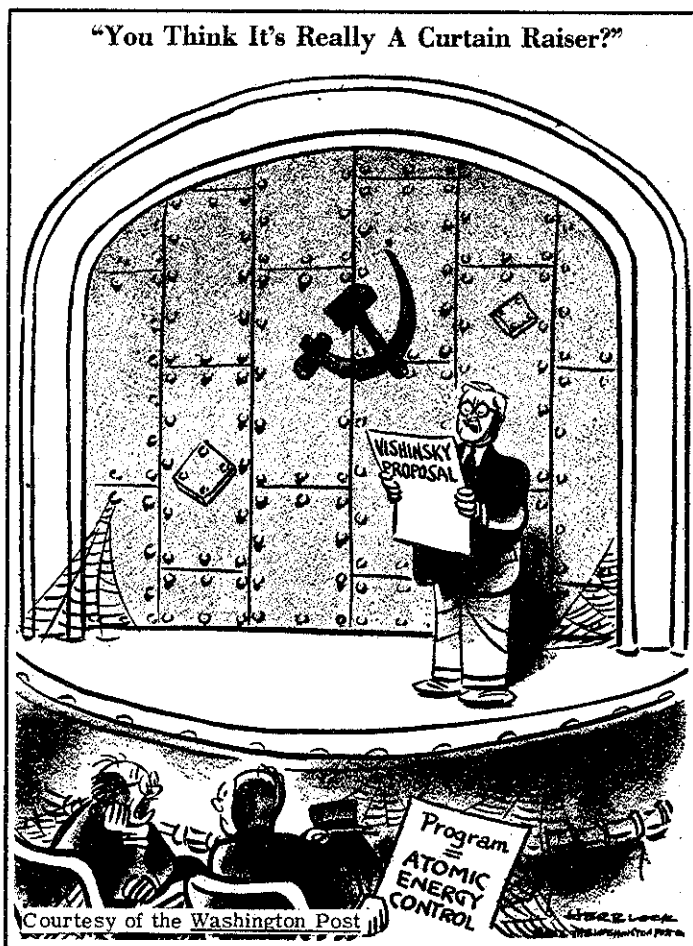
Analysis of the long A-control debate demonstrates a significant narrowing of the original gap between the US and USSR. A point by point comparison of Russian proposals with those of the Western world shows a surprising amount of agreement at least at the verbal level. Both sides, for example, have now agreed to joint consideration of atomic and conventional armaments, to eventual unconditional prohibition of atomic weapons, to continuous veto-less inspection by a UN authority. On a number of other points, e.g., international ownership of A-plants proposed by the Western nations, a hard core of disagreement remains. And even where there is apparent agreement, as on "continuous inspection," the same words may have different meanings to the two sides.

FAS PROPOSAL

Against this background, a small group of FAS members in Chicago began a re-examination of the international control problem about a year ago. Considering the formidable nature of the problem, the Chicago group soon came to the conclusion that a highly qualified group of experts, with full access to information, was needed to analyze all aspects of the control situation. A definite proposal to create such a high level consultative body -- to make a thorough re-study of the whole problem of international control -- was formulated by the FAS Council at its October meeting in Chicago. The proposal was received coolly in government circles, leaving the responsibility for action still with FAS.

Discussion at the FAS meetings on Feb. 2 emphasized that, in this crucial period, it is enormously important for the US approach in the UN Disarmament Commission, soon to meet in New York, to be so open and flexible as to demonstrate beyond question the sincere American desire to reduce the threat of atomic warfare. The

"You Think It's Really A Curtain Raiser?"



Courtesy of the Washington Post

apparent attitude of our diplomacy toward Soviet proposals, expressed in out-of-hand rejection rather than willingness to consider carefully but hopefully, was viewed with alarm. Such proposals, it was felt, should be utilized as opportunities for genuine negotiation or, if they are insincere, to demonstrate on which side there is real desire to reach agreement. This can be done only if the US representatives have "a defense in depth" with well-planned alternatives to be offered to adjust our position as areas of possible agreement appear. To do this, there must be available several plans for limited control as stepping-stones to an eventual full solution. The formulation of such plans is obviously difficult. But its transcending urgency requires extraordinary measures at the highest level.

Earnest group effort by very able men, free to concentrate exclusively on atomic control in relation to our entire diplomacy, offers the best hope. Though this implies a government group with full access to information, it was felt that if necessary a lesser contribution could be made by a privately-sponsored committee which, in spite of secrecy limitations, might carry out a "pilot" investigation during a limited period, possibly a summer. From this might come justification for FAS belief that despite the threatening international situation and past frustration of negotiation, the Frankenstein of the growing atomic stockpiles is not yet beyond the reach of rational control.

McCARRAN ACT and SCIENTISTS

FAS ASKS ACT REVISION * * * * *

Expressing the general consternation of scientists over the effects of the McCarran Act, especially in keeping many foreign scientists from American meetings and institutions, the FAS Council, at its meeting in New York February 2, unanimously approved the following resolution:

"Resolved, That, in the pressing national interest, the Internal Security Act of 1950 be modified to reduce the restrictions on the freedom of international travel, which have especially affected the interchange of scientists between our country and others."

COUNCIL DISCUSSION

During the discussion which culminated in adoption of the resolution, Dr. V. F. Weisskopf, of the FAS Committee on Passport and Visa Problems, reported on replies to date to a recent questionnaire of FAS' Washington Chapter, asking for information on interference with exchange of scientific personnel through visa or passport difficulties. Though only 19 separate cases were reported in these replies, Weisskopf believed there were actually many more on which information could be obtained. He urged that members continue to submit information about such cases to the FAS; to provide documentation for future action.

Weisskopf stressed that many foreign scientists who enjoy an unexceptionable reputation in their own countries have been among those who suffered the longest delays and the most frequent refusals. The proportion of scientists so treated appears to be considerably higher than among other groups, e.g., businessmen and athletes, and includes not only physicists, and others in conceivably sensitive areas, but biologists, chemists, etc., having no knowledge of, or connection with, classified material. The distinct impression is created that scientists as a group are regarded with suspicion and are subject to special surveillance. The result is marked deterioration of our relationships and reputation with foreign scientists and intellectuals -- a particularly significant group in determining public opinion in their own countries.

ADDITIONAL DATA

The Bulletin of the Atomic Scientists reports that Professor Michael Polanyi, a naturalized British citizen, was given a permanent appointment by the University of Chicago, but that after his visa request remained unanswered for a full year, he finally resigned the appointment. Another example of damage to US prestige, reported by the Bulletin, is the recent treatment of several Mexican physicists. Prof. Vallarta (distinguished physicist who represented his country in the UN Atomic Energy Commission) had been invited to address a regional meeting of the American Physical Society in December 1951, in Houston, Texas. He requested that three of his colleagues be allowed to accompany him to help make his report of the activity of Mexican physicists more comprehensive. Two of these colleagues, however, were unable to obtain visas. In protest, Vallarta and his third colleague refused to attend the meeting.

McCARRAN SOLUTION ?

Possibly in weak response to public protest, one provision of the proposed new McCarran Bill (N. Y. Times, Feb. 10) lowers the bars a bit for people who have erred politically during their youthful years. It would permit entry to those who had recanted and shown active opposition to communism for at least five years. However, the Bill (McCarran-Walter Omnibus Immigration Bill; S. 2550, H.R. 5678) contains new potential threats to many scientists who are naturalized citizens, particularly if the same special surveillance is given to scientists as under the present McCarran Act.

One of the more than 100 changes in present immigration, deportation, and citizenship laws proposed in the Bill subjects naturalized citizens to denaturalization if any private informer files a proper affidavit about acts which were not grounds for refusing citizenship when citizenship was acquired. In some cases, the right of court review is denied.

An additional section abolishes existing statutes of limitations to allow deportation because of acts alleged to have been committed 50 years in the past. Still another makes all grounds for deportation retroactive to cover all immigrants who have hitherto been admitted to the US. The Bill provides 13 new grounds for excluding future immigrants, more than 20 new grounds for deporting those admitted in the past, and many new ways for losing one's American citizenship. (An analysis of the salient points is available through the FAS Washington Office.)

NSFoundation NEWS

BUDGET BEFORE CONGRESS * * * * *

The President, in his proposed budget for 1952-53, has asked for \$15,000,000 for the National Science Foundation -- the full amount permitted by the NSF Act. This amount is requested to expand the fellowship and grant-in-aid programs, and to allow NSF to formulate a national science policy. The budget message informs Congress that NSF is expected to become the focal point for federal support of basic research and that the budgets of other agencies supporting research have been adjusted in the light of the NSF request.

Hearings have already been held before the House Appropriations Subcommittee on Independent Offices, NSF being the first agency considered early in January. The subcommittee has now nearly completed its hearings on the entire bill and probably will shortly reach decisions. Its report will then be made to the full Appropriations Committee before going to the House floor. This is, therefore, a strategic time to bring to the attention of Representatives, and particularly of committee members, the importance of granting the President's full request.

HOUSE APPROPRIATIONS COMMITTEE MEMBERS

Committee Chairman: Clarence Cannon (D., Mo.)

Subcommittee on Independent Offices:

Albert Thomas (D., Tex.), Chairman

George W. Andrews (D., Ala.)

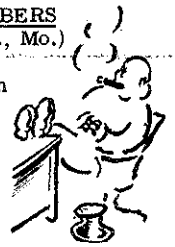
Norris Cotton (R., N. H.)

Frederic R. Coudert, Jr. (R., N. Y.)

Albert Gore (D., Tenn.)

John Phillips (R., Calif.)

Sidney R. Yates (D., Ill.)



FIRST STEPS

On February 8, the National Science Foundation announced its first grants in support of basic research. The announcement, which Director Alan T. Waterman referred to as "something of an historic event," listed 28 grants totalling approximately \$410,000, all in the field of biology. The grants were widely distributed subject-wise and geographically and went both to young and to well established investigators. Selected from some 70 applications received by the Biology Division, the grants allotted a large portion, though not all, of the funds available to that division for this fiscal year. The Medical Research Division and the Division of Mathematical, Physical, and Engineering Sciences, both staffed later than Biology and hence less fully organized, are processing applications and should announce their first grants in the next month or two.

The National Research Council, under contract with NSF, is now evaluating the more than 2800 fellowship applications from every state and territory which were received before the deadline on January 7, 1952. Since the limited Foundation budget will allow support of only about 500 fellows, selection will have to be rigorous. Emphasis will be on first year graduate students since attrition due to financial limitations is known to be highest at this stage. It is hoped that the first fellows can be announced about April 1.

These activities in the fields of research support and scientific education have yet to be matched in the area of national policy for scientific research -- a primary responsibility of NSF under the Act. To many observers, the limited grant and fellowship program which NSF can support with its relatively small budget will be important only as it is judiciously used to fill gaps and correct weaknesses revealed by some kind of general inventory and evaluation of current US science. The need for such a survey has long been recognized and authority and obligation to carry it out are implicit in the NSF Act.

In remarks before the Congress on Medical Education and Licensure of the American Medical Association in Chicago on February 11, NSF Director Waterman commented on the policy responsibilities of the Foundation as follows:

"Admittedly, such a function is not one which we can assume all at once. We shall need a seasoned and experienced staff and many kinds of background data as to need and the ways in which various aspects of the need are being met at the present time. However, we look forward to the time when the Foundation may fulfill completely the functions relating to the national policy that Congress prescribed for it."

Members of FAS, which has long felt that NSF policy functions can do much to strengthen US science, are awaiting anxiously announcement of the first concrete steps toward formulation of a national science policy.

ATOMIC DEVELOPMENTS

A-WEAPONS UNLIMITED * * * * *

A third major post-war expansion of the national atomic energy program, involving the expenditure of some \$5-\$6 billion in the next five years, was announced by President Truman late in January. This is about the cost of the entire program from its inception to June 1951. Coming on the heels of the as yet uncompleted second expansion, it implies a tremendous new impetus to production of atomic weapons.

The necessity for this vastly increased program rests basically on the tense world situation, on our inability to reach a practical agreement for worldwide control of atomic energy, and on the evidences of rapid Russian progress in the field of atomic weapons. The feasibility of the expanded plans arises out of: (1) the success of last year's Eniwetok and Nevada tests, which proved the practicability of tactical atomic weapons, (2) recent discoveries of new sources of uranium in Canada and the Colorado plateau, and (3) improved and more economical techniques for ore extraction.

The most obvious implication of the new program is the still greater role to be played by atomic energy in weapons and military equipment. The days when atomic weapons were limited to strategic uses by available fissionable material are rapidly running out. Atomic artillery shells and guided missile warheads are just over the horizon, and potential targets will be extended from cities to troops, strong points, interdiction targets, ships, and submarines. Of almost equal importance is the growth of atomic energy as a fuel for military power plants. The first atomic-powered submarine should be operating by about 1954, while several contracts have been let to large concerns for the development of nuclear-powered aircraft.

On the political and economic sides, the implications are equally important. Unless we are willing to resign ourselves to atomic control through fear of retaliation, we must find a more happy solution on which we and Russia can agree in the near future (see page 1). Each expansion of atomic energy into a new field of military equipment makes it more difficult to subject atomic weapons to international control. Meanwhile, stockpiles continue to grow at increasing rates, making wider and wider applications possible, and atomic energy eats deeper into national budgets.

Some doubts have been raised as to our ability to absorb the proposed expansion program in an effective manner and accusations of severe waste on present projects have recently been made. There is little doubt that the requirements of haste have greatly increased the expense of a number of AEC contracts. However, concentration of effort in the expansion should permit its completion within the scheduled time. The money may not be spent most wisely, but with fear as a spur it will certainly be spent, and vast amounts of military "hardware" are sure to be produced.

EXCHANGE OF INFORMATION

The international freeze of atomic information, instituted by the US at the end of the war in 1945, has only recently begun to thaw. AEC Chairman Gordon Dean and Lord Cherwell, Churchill's scientific adviser, are reported to have set up a joint US-British scientific committee to work out procedures for a strictly limited interchange of atomic information. No general release of information by the US is contemplated, but only the possibility of replies to specific requests when they are made.

To guarantee that each separate exchange will benefit the US and not endanger its security, approval reportedly would have to be obtained from the AEC, the National Security Council, and the President (presumably including any executive agency involved). In addition, 30 days' notice of any exchange would have to be given to the Joint Committee on Atomic Energy when Congress is in session. Only trades with Britain and Canada have been authorized, and they cannot include information on weapons. Also, no discussion is permitted as to how the US expects to use the information it is given.

According to Chemical and Engineering News of February 4, one such exchange with Canada has already been effected and greatly benefitted the H-bomb project. The hedged exchange to be allowed may be of some benefit, but it is only a beginning. In the words of the Washington Post (January 19), "What Congress did in passing a 'liberalized' amendment to the McMahon Act last fall was little more than to replace a three-combination safe with a case-hardened padlock." And, it should be noted, the lock operates to keep information out as well as in. With the current level of nuclear research abroad, the US has more to gain than to lose by free exchange of nuclear knowledge.

PARABLE

In Severna Park, Md., police were recently forced to use tear gas to remove a terrified boy armed with two pistols from a barricaded room. The boy was suffering from an acute phobia induced by fear of atomic bombardment and was obsessed with the need to find refuge. The prolonged tension induced by the threat of atomic warfare has evoked this kind of overt irrational escape behavior in few adults. But one may ponder to what extent the need of the frightened boy is subtly influencing our national thinking, and to what degree his behavior is symbolic of our national policy.

***** DANGEROUS BABIES

Dangerous misconceptions about so-called "baby A-bombs" have become widespread since the recent atomic tests in Nevada. This was the worried opinion of scientists at the last Council meeting of the FAS in New York City. As emphasized by Sen. Brien McMahon in a recent interview with the editors of the Bulletin of the Atomic Scientists, "They may call them 'baby bombs,' or 'tactical weapons,' but if it is an atomic explosion, its destructive power will be so great compared to any conventional kind of weapon as not to admit of a fair comparison."

Because public misinformation on this subject could generate pressure for unsound uses of atomic weapons, Council members sought to counteract the impressions conveyed by newspaper accounts from Nevada, that improvements in fission bombs have reduced them to just "another weapon." A statement now in preparation will stress that any decision to use A-bombs, whether tactically or strategically, must be based on psychological and political, as well as military considerations. The power to make such decisions thus should remain in the hands of our highest-level civilian authorities.

***** UNIVERSAL MILITARY TRAINING

The House Armed Services Committee brought UMT one step nearer early this month. It sent to the House floor a bill which follows the main recommendations of the National Security Training Commission, but with added emphasis on civilian control.

House and Senate votes on the bill are unpredictable in this election year. Opponents are expected to try to amend the bill so it cannot go into effect until the draft is stopped. Strongly opposed are powerful labor and farm groups and numerous church groups. A majority of members of the National Education Association also were quoted as favoring postponement or cancellation of UMT plans. Veterans' organizations, the Department of Defense, and the Administration are continuing active support and urging prompt action.

***** NOMINATIONS ARE IN ORDER

Nominations for Chairman, Vice-chairman, and Council delegates-at-large are still open to allow the widest possible membership participation. Act now to get your nominees listed. Send to the nominating committee (c/o W. M. Woodward, Lab. of Nuclear Studies, Cornell U., Ithaca, N.Y.) either (1) suggested names for consideration, or (2) nominating petitions which will ensure appearance of the candidate's name on the ballot (10 members' signatures required for officers, or 5 member-at-large signatures for Council delegates).

As we go to press, the following have accepted nomination: V. F. Weisskopf for Vice-chairman, and for Council delegates: J. Bregman, C. Coryell, D. Hawkins, D. Hill, P. V. Hough, P. Hartman, J. Keller, E. C. Kemble, I. Halpern, M. S. Livingston, V. A. Lewinson, D. S. Sweinhart, H. C. Torrey.

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Note. New members adding \$2.50 to their dues will receive an introductory subscription to the Bulletin of Atomic Scientists (regularly \$5).

UNESCO COGITATIONS

The third national conference of the US National Commission for UNESCO, at Hunter College January 27-31, brought together 2200 leaders in education, science, labor, and public affairs for consideration of "The Citizen and United Nations." According to the Christian Science Monitor, there was deep concern over the lack of understanding of the UN collective security system, particularly in the US. Increasing resistance in the US to UN programs was attributed to racial prejudices, isolationism, and false patriotism. Intensified educational programs in schools and colleges -- stressing UN ideals, foreign languages, and geographic studies -- were called for as counter-measures. Also discussed was the encouraging progress of the UNESCO anti-illiteracy program and need for diminishing the present restrictions on free exchange of information and travel.

FAS DELEGATE REPORTS

Hugh C. Wolfe, member of the Executive Committee, attended the conference as an FAS delegate, and several other FAS members were present representing other organizations. Wolfe reports: "UNESCO has a very small budget with no funds for sustained operations in any field. It functions as a guide and catalyst for national and international operations. Its current international attack on illiteracy works on the chain-reaction principle, through a few regional schools whose function is to develop teaching materials and to produce national leaders who will train teachers in their respective countries. A European computing laboratory is projected by UNESCO to be financed and operated by a regional group of nations, with initiative and a mechanism for organization to be provided by the international organization."

FURTHER REPORT

Charles Coryell, FAS Council member who attended as delegate of the American Academy of Arts and Sciences, regarded most of the sessions and panel discussion as too generalized. For example, the panel on "Peaceful Settlement and Collective Security" considered the role of the UN as an agent for bridging the East-West gap and for defending the free world against aggression. It produced little that was new, sidestepping any specific consideration of US reaction to Soviet proposals for atomic inspection in favor of general discussion of the dual role of the UN as both judge and policeman.

Coryell found the opinion-sampling surveys on "Foreign Attitudes on World Affairs" the most illuminating single session. Attitudes in Western Europe were reported as mildly hopeful of UN potentialities, but not too flattering to the US. Pro-US opinion in Greece and Turkey was reported high, in consequence of our stand in Korea. In Arab states (Egypt, Jordan) regard for the US, based on not too adequate data, was low in the upper economic stratum and high in the lower income groups. It was further reported that 90% of South Korea is pro-UN and that respect for the UN has increased in Japan, despite the military setbacks of last winter. Also, throughout the Far East, the UN is regarded as the only hope against the old colonialism, on the one hand, and the new economic and political bondage personified by Russia, on the other.

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NEW LOYALTY HURDLE * * * * *

Originally, the Federal Loyalty Review Board was set up to afford impartial review to persons found disloyal by departmental or regional boards. Now, by amending its regulations, the Board has given itself the powers of an enforcement agency. Clearance by any lower board does not necessarily mean that the individual thus investigated and "acquitted" can consider himself entirely finished with such procedures. In effect, according to an editorial in the Washington Post (February 7), "the Loyalty Review Board will henceforth review the cases of persons who have been cleared whenever it thinks that the lower board responsible for them is not being tough enough. We are astonished," the Post continued, "not so much at the injustice of this standard as at the brashness of the Loyalty Review Board in acknowledging it. This is a policy in which the protection of loyal employes from unjust accusation -- which President Truman set forth as one of the loyalty program's twin aims -- has been gravely impaired."

The pattern of events which has led many scientists to withdraw from government service is now being repeated with other types of specialists. Despite the fact that he had been cleared on all loyalty and security grounds, O. E. Clubb, former head of the Office of Chinese Affairs, decided with "deep regrets" to retire. "It is...clear," said Clubb in a statement, "that the present clearance does not automatically restore me to my previous career standing and protect me from future jeopardy on the same or similar grounds. I am compelled reluctantly to recognize that circumstances attendant upon the very process which resulted in my clearance have in actuality...impaired my present usefulness." Thus the State Department and the country lose another of the few remaining Far East experts at a time when they are sorely needed.

SARTON HEADS STRUIK DEFENSE * * * * *

Professor George Sarton (5 Channing Place, Cambridge 38, Mass.), Harvard historian of science, has accepted the chairmanship of a committee to aid the legal defense of Dirk J. Struik, M.I.T. mathematician and professing theoretical Marxist, who was indicted under Massachusetts law for conspiracy to overthrow both the state and federal governments (see NL 52-1, p.3). Among the nearly 70 committee members are: Professors Warren Ambrose, Bart J. Bok, Harold Freeman, Herbert M. Gale, Clark Goodman, Witold Hurewicz, Kirtley F. Mather, Philip M. Morse, and Norbert Wiener.

A recent statement by the Committee concludes: "We believe that Prof. Struik should have the right to express his views without intimidation. Without taking a stand on his political opinions, we feel his indictment is a potential threat to the freedom of all of us. Agreement or disagreement with Prof. Struik's views is not an issue here, and this statement is directed to Americans of all political beliefs. It is important to all of us that this case be defended vigorously and to the full by all freedom-loving people."

The Committee is seeking financial support for legal defense of Struik, anticipating costs running into "many thousands of dollars -- far more than a professor can pay from his salary."

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