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No. 4, 4 APRIL 1978

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No. 4, 4 April 1978

Complete translation of the monthly theoretical journal of the Central Committee of the Chinese Communist Party published in Peking. Passages between slantlines printed in boldface type.

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RAISE THE SCIENTIFIC AND CULTURAL LEVEL OF THE ENTIRE CHINESE NATION

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 2-8

[Speech by Hua Kuo-feng at the National Science Conference in Peking on 24 March 1978]

[Text] Comrades:

This National Science Conference convened by the Central Committee of our party has been in session for 7 days. At the opening session, Comrade Teng Hsiao-ping made a speech and Comrade Fang I delivered a report, both being very important and very good. Comrades attending the conference have discussed them in earnest and have all expressed hearty support. Everyone is greatly encouraged, in high spirits and free from anxiety. A national plan for the development of science and technology will be worked out, and advanced collectives and individuals on the scientific and technical front will be commended at this conference. We are all fully confident that the conference will be a great success and have a tremendous and far-reaching impact on the development of our science and culture, the growth of our national economy and the building of a modern, powerful socialist state.

The Central Committee attaches great importance to this conference. Shortly after it smashed the antiparty "gang of four" of Wang Hung-wen, Chang Chun-chiao, Chiang Ching and Yao Wen-yuan, it convened the Second National Conference on Learning From Tachai in Agriculture and later the National Conference on Learning From Taching in Industry. At the same time the Central Committee was considering the convocation of a science conference after those on agriculture and industry. We officially announced this decision in the political report to the 11th party congress. Then the Central Committee issued a circular on this to the whole party and the whole country. This is the first time in the history of our party and our People's Republic that the party Central Committee convened a conference of such a gigantic scale and broad representation in order to mobilize the whole party, the whole army and the people of all nationalities throughout the country to march toward

the modernization of science and technology. It is an important measure adopted by our party to carry out the general task for the new period in our country's socialist revolution and socialist construction. Ours is a conference of tremendous immediate and historical significance.

Our country has basically eliminated the chaos created by the "gang of four" and is moving toward great order across the land. This has come about through a great, deep-going political revolution aimed at exposing and repudiating the "gang of four" during the last year or so, through the collective efforts of the party and the people on the political, economic, military and cultural fronts and through the several historic conferences for carrying forward the revolutionary tradition and forging ahead into the future--the 11th party congress, the Fifth National People's Congress and the meeting of the Fifth National Committee of the Chinese People's Political Consultative Conference. Now, the line and the general task for the new period have been clearly formulated. The new constitution has been promulgated. The fundamental tasks and policies for various areas of work, the 3-year and 8-year plans and a 23-year outline for the development of the national economy have been mapped out.

Although some detailed regulations, policies and plans still need to be worked out or improved, our major political guideline, namely, grasping the key link of class struggle to bring great order across the land, has in the main been set. What is required at present is to follow the line, policies and plans already laid down and to do solid work, keep our shoulder to the wheel, eliminate interference, surmount difficulties and fulfill the tasks before us step by step.

The general task laid down for the whole party and the whole people in the new period by the 11th party congress and the Fifth National People's Congress has been written into the fundamental law of the state. The task is: Steadfastly continue the revolution under the dictatorship of the proletariat, carry on the three great revolutionary movements of class struggle, the struggle for production and scientific experiment, and transform China into a great, powerful socialist country with modern agriculture, industry, national defense and science and technology by the end of the century. It shows that we must follow the road of socialism unswervingly, grasp the three great revolutionary movements simultaneously and accomplish the splendid goal of the four modernizations. The world has witnessed different roads to modernization. There is capitalist or imperialist modernization and revisionist or social imperialist modernization. What we want is socialist modernization, to be attained by steadfastly continuing the revolution under the dictatorship of the proletariat. Only this kind of modernization conforms to the common aspirations and the fundamental interests of the people of all our nationalities. Only this can bring genuine happiness to our people and cause people the world over to rejoice.

Socialism is the only way out for China. This was proved long ago by hard realities. In old semicolonial, semifeudal China, many persons with lofty ideals sought to develop science in China and make the country independent, strong and prosperous, but they all failed. Not until the Chinese Communist Party led the people of the whole country in winning complete victory in the new democratic revolution and in establishing the socialist system did China build a fairly modern industrial base, which provides the conditions for going on to the four modernizations. The "gang of four" were sworn enemies of socialism. They opposed the four modernizations in a criminal attempt to subvert the dictatorship of the proletariat and restore capitalism. If China were to follow the counter-revolutionary revisionist line of the "gang of four," the country could only degenerate into a colony or semicolony of social imperialism and imperialism. To achieve the four modernizations, independent, socialist China must adhere to Chairman Mao's thought and steadfastly continue the revolution under the dictatorship of the proletariat, which means sticking to the socialist road. For us, socialism and the four modernizations are inseparable from each other. Only by persevering in socialist revolution and continuing to transform that part of the superstructure and the relations of production not in correspondence with the growth of the productive forces can we constantly promote the four modernizations. Only by building a modern agriculture, industry, national defense and science and technology can we provide our socialist system with a powerful material base, steadily consolidate and develop the system, effectively defeat capitalism at home and be in a stronger position to resist aggression by social imperialism and imperialism from abroad.

The general task for the new period calls for hard work in every field by the whole party, the whole army and the people of all our nationalities. Here I would like to go into one question in particular, namely, the necessity for greatly raising the scientific and cultural level of the entire Chinese nation.

The people of all nationalities in our country are industrious, brave and rich in creative talent. Under the guidance of Marxism-Leninism-Mao Tsetung Thought, our people have acquired many highly valuable capabilities in revolution and construction, performed great deeds and made tremendous progress in the course of their long and arduous struggle. Now we must start anew and sustained study movement in order to extend our battle with nature, march toward the four modernizations and fulfill the general task history has assigned us for this new period. It is necessary to raise the study of Marxism-Leninism-Mao Tsetung Thought to a new level and, at the same time, strive to improve our general educational level, acquire modern scientific knowledge and master the work skills and methods of management which are indispensable to modern production. Raising the scientific and cultural level of the entire Chinese nation is a colossal task facing all our people. It is a task of strategic importance. Unless it is accomplished, our general task for the new period cannot be fulfilled.

The "gang of four" willfully undermined our socialist undertakings in science and culture, even babbling such nonsense as "the more knowledgeable, the more reactionary" and "laborers with no culture are preferable." They were a fascist cultural autocracy, sinister and rotten to the core. Their disruption dampened the enthusiasm of the scientific and cultural workers and the masses, so that our scientific and cultural undertakings are far from meeting the needs of our socialist revolution and construction, and the gap between science and technology in China and advanced world levels, which was narrowing at one time, widened again. This teaches us by negative example that raising the scientific and cultural level of the people is not a matter solely of imparting knowledge but is a great class struggle. We must carry through to the end the struggle to expose and criticize the "gang of four," eliminate the pernicious influence of their counterrevolutionary revisionist line, and clear the way for raising the scientific and cultural level of the entire Chinese nation.

It is in the vital interest of hundreds of millions of people to raise the scientific and cultural level of the entire Chinese nation. This can be achieved only by drawing in and relying on vast numbers of people, only by effectively organizing all the people on all fronts on a countrywide scale. What we need is thousands upon thousands of skilled workers, skilled peasants and other skilled working people with socialist consciousness and the ability to master modern production techniques, enormous numbers of revolutionary intellectuals in all trades and professions and revolutionary cadres well versed in methods of management in the fields of modern economy and modern science and technology. We need a mighty force in industry, agriculture, science and technology, culture and national defense--people who are both Red and expert and who can take on a good fight. It won't do to have only a small number or a section of the people; hundreds of millions of people, the entire Chinese nation, must reach a much higher level.

Obviously, workers who are lacking in scientific and cultural knowledge and who fail to learn new production skills can hardly master modern industrial production processes. Rural people's commune members who are lacking in scientific and cultural knowledge, who do not know how to use power, machinery, chemical fertilizer, insecticides, etc. or have no knowledge of scientific farming, cannot cope with modern agriculture. PLA commanders and fighters who lack knowledge of modern military science and techniques cannot use modern arms and equipment and cannot succeed in organizing and directing modern war. On the other hand, if hundreds of millions of people grasp such knowledge and skill, they will become competent workers, peasants and army men, and, moreover, large numbers of technical specialists, innovators, inventors and scientists will emerge from among them.

We should therefore pay great attention to raising the scientific and cultural level of the whole nation. The modernization of science and

technology should not be regarded as a matter only for scientific and technological organizations, nor should it be left to a few people in research institutions or universities. The most powerful base and inexhaustible source of strength for the modernization of science and technology in our country is the masses of the people in their hundreds of millions who, fired with enthusiasm, are determined to eliminate blind faith, emancipate their minds, cast off the sense of inferiority, call up the courage to break new ground, dare to think, speak and act, and exert themselves in study and work.

While we stress the need to rely upon the masses in their hundreds of millions, we must also make vigorous efforts to expand our contingent of professional scientists and technicians. We already have a Red and expert contingent that belongs to the working class. We should unite all revolutionary patriotic scientific and technical workers. Effective measures should be taken to train new forces and expand the professional contingent quickly. It is necessary to raise the level of the professionals and produce many scientists and technicians who will keep raising their political consciousness, serve socialism wholeheartedly and integrate with the workers, peasants and soldiers while at the same time devoting themselves to their professional work, constantly improving their capabilities, combining personal effort with collective wisdom and striving to reach the summits of science and technology. We also hope that more and more people will have a better understanding of Marxism and firmly establish a proletarian, communist world outlook through studying Marxist theory and through class struggle and practical work. When that happens, we will be speaking a common language, in terms not only of patriotism and the socialist system but increasingly of the communist world outlook. The professional contingent is the vanguard and the core in raising the scientific and cultural level of the entire Chinese nation. It has the duty of taking the strongholds of science and technology and popularizing scientific and technological knowledge among the people.

Our people's armed forces have always had a system under which there is a "three-in-one" combination of the field armies, the regional forces and the militia, forming a great bastion in people's war. This should be applied also in scientific and technical fields: the hundreds of millions of people who are making a serious study of science and culture can be likened to a vast militia force on the fronts of science and technology, while the ranks of professionals are like the field armies and the regional forces. A general rise in the level of the masses will provide the base and conditions for growth for the professionals, who for their part will guide the mass forces, crystallize their experience and wisdom and raise it to a higher level. This should be the system under which our country's scientific and technical forces operate; it is the road to victory through people's war on these fronts. Advancing our science and culture is a people's cause. By spreading scientific and cultural knowledge to raise the level of the entire nation, combining popularization with the raising of standards and integrating professional with

mass forces, we will form a mighty army for science and culture and greatly speed our socialist modernization.

The education of young people is another very important aspect that merits special attention in connection with raising the scientific and cultural level of the entire Chinese nation. The young people are our successors in the proletarian revolutionary cause.

Starting from an early age, they should develop themselves physically, establish communist values and workstyle and show heroism in the interests of the collective. They should also cultivate, from an early age, the good habit of loving, studying and using science. Our party and our state must show particular concern for the healthy growth of the young people, make a good job of running primary and middle schools, universities and other types of schools at various levels, open all kinds of new channels for study, create the conditions for bringing up the young people as laborers who have both socialist consciousness and culture, and constantly train from among them scientific and technical personnel who are both politically sound and professionally competent. As talented young people appear in large numbers, our science and technology will flourish.

The task of raising the scientific and cultural level of the entire Chinese nation involves higher demands on our cadres, first of all on leading cadres at all levels. Chairman Mao taught us: "Conditions are changing all the time, and to adapt one's thinking to the new conditions, one must study. Even those who have a better grasp of Marxism and are comparatively firm in their proletarian stand have to go on studying, have to absorb what is new and study new problems." Leading organs and cadres at all levels should be good at adapting themselves to the requirements of our developing socialist modernization program and must improve their methods of leadership and of work. Far from being weakened, political and ideological work should be strengthened in the new period of development in our socialist revolution and construction. Our party has fine traditions in political and ideological work; we should carry them forward and eliminate the pernicious influence of Lin Piao and the "gang of four." We should do our political and ideological work more carefully and precisely so that we constantly prevail over the ideological influence of the bourgeoisie and other exploiting classes, overcome the force of habit characteristic of the petty producer and make our political and ideological work an important guarantee for our socialist modernization. Politics is the commander, the soul in everything, and it won't do not to grasp political and ideological work; but neither will it do if we concern ourselves solely with politics and remain laymen, without any knowledge of technological and professional work. Chairman Mao taught us in all earnestness in 1958: "We must exert ourselves, we must study and carry through to the end this great technological revolution which history has assigned us. This question should be brought up for discussion among the cadres, and a cadre conference should be called to

discuss what else we have in the way of capabilities. In the past we had the capabilities of waging war and carrying out land reform, but these capabilities alone are not enough now. We must acquire new ones and achieve a real understanding of professional work, of science and technology, or we cannot possibly exercise effective leadership." Following Chairman Mao's instructions, quite a number of our comrades have pitched in and obtained very good results in their study. On the other hand, there are some comrades who have failed to understand the profound significance of Chairman Mao's instructions. Moreover, when Lin Piao and the "gang of four" were engaged in disruption and sabotage, dishing up all sorts of fallacies and creating much confusion, they suppressed or attacked all those who paid attention to professional work or production, and it was out of the question for anyone seriously to tackle modern science or technology. Now many cadres have emancipated their minds and are diligently studying politics, economics, military affairs, professional work and technology, and the situation is most encouraging. Cadres at all levels in various professions and trades should do the same.

Our cadres holding leading positions or doing political and administrative work on the scientific and technical front in particular should excel in study and, in the light of the special characteristics of scientific and technical work, should make a good job of political and ideological work, organization and management, and general service work. We should respect the labor of the intellectuals and show concern for them politically and for their work and life. We should draw close to them, understand them, get acquainted with them and forge close friendships. We should create favorable conditions for their work, give full scope to their initiative and bring out their creativity. Our comrades must do well in all these respects and insure the comprehensive and correct implementation of the party's line, principles and policies so as to make new contributions to our socialist revolution and socialist construction.

In order to raise the scientific and cultural level of our nation, it is necessary to reiterate Chairman Mao's slogan on learning from foreign countries. Our principle is to learn the strong points of all nations and countries, to learn from them all that is truly good in politics, economics, military affairs, science, technology, literature and art. While upholding independence and self-reliance, we shall learn from other countries analytically and critically. We have always opposed the slavish compradore philosophy which holds that anything foreign is good, while nothing Chinese is any good, fancying that even the moon looks better over foreign lands and that China can only creep along in the wake of other countries. The "gang of four," for their own reasons, slandered our effort to learn from foreign countries as "slavish compradore philosophy." This was nothing but turning matters upside down and confusing right and wrong. Their purpose was to create counterrevolutionary public opinion so that they could usurp all party and state power

and overthrow the central leading comrades who correctly followed Chairman Mao's principle of learning from foreign countries. If we indiscriminately refused to learn anything from foreign countries, China would remain backward forever. What socialist modernization could one speak of then? It is obvious that all the world's nations and countries have strong points and weak. They should learn from one another, drawing on the strong points of others to make up for their own weak points, so as to make steady progress. Can we refuse to study Marxism because its birthplace was in the West? Can we refuse to learn from the Great October Socialist Revolution because it took place in Russia? As for natural science and technology, we are behind advanced world levels. We admit our backwardness but we refuse to stay backward. We must catch up. We must, therefore, be good at absorbing whatever is valuable in things foreign, take them and turn them to our own use, and combine our learning from foreign countries with our own inventiveness so that we can catch up with and surpass advanced world levels as soon as possible. We should learn from foreign countries now, but should we do so when we overcome our backwardness and become advanced? Yes, because even then other countries will still have points worth learning, and we should still study them. What is wrong with that? After ten thousand years we must still learn from others!

The first 8 years are the key to accomplishing the four modernizations in 23 years, that is, by the year 2000. This is true also for raising the scientific and cultural level of the entire Chinese nation. We should draft plans for the next 3 and the next 8 years and an outline for 23 years. From now on we should encourage diligent efforts throughout society to study politics, raise the level of education and learn science and technology. Science means honest, solid knowledge and allows no hypocrisy and complacency.

Only with honesty, modesty and perseverance can one learn something. It is imperative that all our people develop the habit of studying hard. Conscientious study should be regarded as an honor, and refusal to study as shameful. To be Red and expert should be regarded as an honor, and refusal to make progress as shameful. Hard work and contributing more to socialism is honorable, while easy living, refusing to work and living off socialism are shameful. Our entire country should be turned into a great school.

A great rise in the scientific and cultural level of the entire Chinese nation is a prerequisite for the four modernizations. We should look at its significance in a wider, deeper and farther perspective.

As the scientific and cultural level of the entire nation rises, we shall be able to use Marxism-Leninism-Mao Tsetung Thought still better to arm the cadres and the masses. In natural science, neither theory nor experimentation can be cut off from materialism and dialectics. We should urge all research workers in natural science to make conscious use

of the Marxist world outlook to guide their work, and at the same time to spread materialism and dialectics far and wide among the masses through study of science and technology and participation in scientific experiments. Marxism has its source in the totality of human knowledge. Marx drew critically on all the knowledge provided by previous science to confirm his revolutionary conclusions. That is why raising the scientific and technical level is very important for studying Marxism well and for a more profound comprehension and application of Marxism.

Raising the scientific and cultural level of the whole nation will help activate the masses to participate in managing the economic, cultural and educational undertakings as well as affairs of state. It will help extend socialist democracy in the political life of the country. Lenin said on this point: "We are perfectly aware of the effects of Russia's cultural underdevelopment, of what it is doing to Soviet power--which in principle has provided an immensely higher proletarian democracy, which has created a model of such democracy for the whole world--how this lack of culture is reducing the significance of Soviet power and reviving bureaucracy. The Soviet apparatus is accessible to all the working people in word, but actually it is far from being accessible to all of them, as we all know. And not because the laws prevent it from being so, as was the case under the bourgeoisie; on the contrary, our laws assist in this respect. But in this matter laws alone are not enough. A vast amount of educational, organizational and cultural work is required." How profound are these words of Lenin's: The task we set today of raising the scientific and cultural level of the entire nation is closely related to a full development of socialist democracy.

In socialist society we have to create the conditions for gradually narrowing the differences between town and country, between industry and agriculture, between manual and mental labor. From a long-term point of view, tremendously raising the scientific and cultural level of the entire nation means training hundreds of millions of working people who have both socialist consciousness and culture. They are the kind of working people who are politically conscious and are educated, too, who can combine mental labor with manual labor, who are both Red and expert, and who have an all-round development, people who are both worker-intellectuals and intellectual-workers. This is the direction for our advance.

Comrades, on the eve of the founding of new China, our great leader Chairman Mao said: "We can learn what we did not know. We are not only good at destroying the old world, we are also good at building the new." What we are engaged in now is this great cause of building a new world.

Our country has a long history of thousands of years. Our nation once created a splendid science and culture. In the last few hundred years, owing to the corruption of the feudal system and aggression by colonialists and imperialists, science and culture fell behind in our country.

Since the founding of the People's Republic of China, with its advanced socialist system and under the leadership of the Communist Party, there has been rapid progress of science and culture in our country. The economic and technical blockade enforced by imperialism failed to strangle us; the tearing up of contracts and withdrawal of specialists by Soviet revisionism failed to subdue us. We have developed our science and technology independently through our own efforts. Have we not made our own atomic bombs, hydrogen bombs and manmade satellites? Have we not trained a contingent of outstanding scientific and technological workers who are both Red and expert?

Our people have deep respect for the many scientists who have made important contributions to science and technology in China, including the late Comrades Li Ssu-kuang and Chu Ko-chen. Facts past and present show that we Chinese have a head and two hands just like others and are no stupider than they. The key lies in the correct line. The development of science and technology in China has been delayed and frustrated owing to disruption and sabotage by the counterrevolutionary revisionist lines of Liu Shao-chi, Lin Piao and particularly the "gang of four." Now that the two bourgeois headquarters of Liu Shao-chi and Lin Piao have been crushed and the "gang of four" smashed, Chairman Mao's proletarian revolutionary line can be implemented correctly and in an all-round way. Of course, the class struggle is protracted and we will still have to remove obstacles from our path. But the greatest hindrance to our advance has now been cleared away. Several hundred million people are now marching ahead toward the modernization of science and technology, and thousands of contingents of professional scientific and technological workers are sweeping forward without hindrance. We are fully determined to accomplish the important tasks called for on the scientific and cultural fronts in the new period, and we are entirely confident of success. We will emerge as a nation with a high standard of culture.

Comrades: The comprehensive and correct implementation of Chairman Mao's revolutionary line can bring out fully the superiority of the socialist system, fire the enthusiasm of the masses of people to study new things and build a new world, unite and organize all possible forces throughout society and march forward under a unified plan to the common goal. This is the basic guarantee for the sure triumph of our cause. As we advance, we must study many things we do not know and overcome many difficulties. We can learn anything provided we rely on the enthusiasm of the masses. No difficulty can stop us provided we rely on the united strength of the masses. Our slogan is: Study, study and once more study; unite, unite and once more unite. Let the whole party, the whole army and the people of all our nationalities hold high the great banner of Chairman Mao, rally closely round the party Central Committee, make concerted efforts to raise tremendously the scientific and cultural level of the entire Chinese nation and successfully fulfill the great historic mission of building a modern and powerful socialist state.

SPEECH AT OPENING CEREMONY OF NATIONAL SCIENCE CONFERENCE

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 9-18

[Speech by Teng Hsiao-ping at opening ceremony of National Science Conference on 18 March 1978]

[Text] Comrades! The successful convocation of the National Science Conference is a matter of great joy for us and for the people throughout the country. The very fact that today we are holding this grand gathering unparalleled in the history of science in China clearly indicates that the days are gone forever when the gang of Wang Hung-wen, Chang Chun-chiao, Chiang Ching and Yao Wen-yuan could willfully sabotage the cause of science and persecute the intellectuals. Never before has work in science and technology received such attention and concern from the whole party and the whole people. Vast numbers of scientists and technicians, the workers, the peasants and the army men are actively participating in the movement for scientific experiment. Enthusiasm for science and its study is becoming popular among the young people. The entire nation is embarking with tremendous enthusiasm on the march toward the modernization of science and technology. Splendid prospects lie before us.

Among those attending the present conference are outstanding scientists and technicians from various fronts, first-rate technical innovators, model laborers who excel in scientific farming and cadres devoted to the party's scientific undertakings.

You have worked diligently for the progress of science and technology in our socialist motherland and made outstanding contributions. On behalf of the Central Committee of the Communist Party of China, I thank you and pay you tribute.

Comrades, our people face the great historic mission of comprehensively modernizing agriculture, industry, national defense and science and technology this century, making our country a modern, powerful socialist state. We have waged a sharp and bitter struggle against the "gang of four" on whether or not to accomplish the four modernizations. The "gang

of four" made the absurd claim that "if the four modernizations are carried through, capitalist restoration will happen on the same day." Their wild sabotage brought our national economy for a time to the brink of collapse and was increasingly widening our distance from advanced world scientific and technological standards. Were they really opposed to the restoration of capitalism? Not at all. On the contrary, wherever their influence was most rampant, signs of capitalist restoration were most widespread. What they did serves as a negative example, making us appreciate more deeply that under conditions of proletarian dictatorship, if we do not modernize our country, raise our scientific and technological level, develop the social productive forces, strengthen our country and improve the material and cultural life of the people, our socialist political and economic system cannot be fully consolidated, and there will be no sure guarantee for our country's security. We adhere to the party's basic line formulated by Chairman Mao, and the more up-to-date our agriculture, industry, national defense and science and technology, the greater our strength in the struggle against capitalism and all forces of restoration and the more our people will support the socialist system. Only by making our country a modern, powerful socialist state can we more effectively prevent capitalist restoration, cope with aggression and subversion by social imperialism and imperialism and be more certain of gradually creating the material conditions for the advance to the great ideal of communism.

The crux of the four modernizations is the mastery of modern science and technology. Without modern science and technology, it is impossible to build modern agriculture, modern industry or modern national defense. Without a high-speed development of science and technology, it is impossible to develop the national economy at high speed. On the proposal of Chairman Hua, the Central Committee of the party has decided to call this National Science Conference to bring home to the whole party and the whole country the importance of science, map out a program, commend the advanced units and individuals and discuss measures for speeding up the development of science and technology. Today I am going to give some opinions on pertinent questions.

The first question--the question of understanding that science is part of the productive forces. On this point the "gang of four" raised a hue and cry confounding right and wrong and causing much confusion. Marxism has consistently held that science and technology are part of the productive forces. More than a century ago Marx said: Wider use of machines in production calls for a conscious application of natural science. He also pointed out: "Science, too, (is) among these productive forces." The development of modern science and technology has bound science and production ever more tightly together. Science and technology as productive forces are manifesting their tremendous role ever more obviously.

Modern science and technology are undergoing a great revolution. The last three decades have not just seen advances in some aspects of

scientific theory and production techniques, nor has this period been merely the general run of progress and reform. No, there have been profound changes and new leaps in almost all areas of science and technology. A whole series of new, rising sciences and technologies have emerged and are still doing so. Modern science has opened the way for the progress of production techniques and determined the direction of their development. Many new instruments of production and technological processes have come into being first in the laboratory. A series of newborn industries, including high polymer synthesis, atomic energy, electronic computers, semiconductors, astronautics and laser, have been founded on the basis of newly emerged science and technology. Of course, there are now and there will be many theoretical research topics with no practical application in plain sight for the time being. But a host of historical facts have proved that once a major breakthrough is scored in theoretical research, it means tremendous progress for production and technology sooner or later. Contemporary natural science is being applied to production on an unprecedented scale and at a higher speed than ever before. This has given all fields of material production an entirely new look. In particular, the development of electronic computers, cybernetics and automation technology is rapidly raising the degree of automation in production. With the same amount of manpower and in the same number of work hours, people can turn out scores or hundreds of times more products than before. How have the social productive forces made such tremendous advances and how has labor productivity increased by such a big margin? Mainly through the power of science, the power of technology.

Everyone knows that the basic factors in the productive forces are the means of production and manpower. What is the relationship of science and technology to the means of production and to manpower? Throughout history the means of production have always been linked with science and technology of one kind or another, and, likewise, manpower has always meant manpower armed with a certain knowledge of science and technology. We often say that man is the most active factor among the productive forces. "Man" here refers to people who possess a certain scientific knowledge, experience in production and skills in the use of tools to produce material wealth. There were great differences in the instruments of production man used, his mastery of scientific knowledge, and his productive experiences and skills in the stone, bronze and iron ages and in the 17th, the 18th and the 19th centuries. Today the rapid progress of modern science and technology is accelerating the renewal of production equipment and the changes in technological processes. Many products are superseded by a new generation of products in a matter of a few years. Only by acquiring a higher level of scientific and general knowledge, rich experience in production and advanced skills can a worker play a bigger role in modern production. In our society the laborers, who have a high degree of political awareness, study consciously and assiduously to raise their scientific and cultural level and thus will surely be able to achieve a higher rate of productivity than that attained under capitalism.

The recognition that science and technology are productive forces brings the following question in its train: How should we regard the mental labor involved in scientific pursuits? Since science is becoming an increasingly important part of the productive forces, are people engaged in scientific and technological work to be considered workers or not?

There are various kinds of brain workers in societies under the rule of exploiting classes. Some are entirely in the service of the reactionary ruling classes and have thus set themselves against workers engaged in manual labor. But even in those cases, as Lenin said, there are many intellectuals engaged in scientific and technical work who themselves are not capitalists but scholars, although they are permeated with bourgeois prejudice. The fruits of their work are used by the exploiters, but, generally speaking, this is determined by the social system and not by their own free choice. They are entirely different from politicians who rack their brains to advise the reactionary ruling classes directly. Marx pointed out that ordinary engineers and technicians join in the creation of surplus value. That is to say, they, too, are exploited by the capitalists.

In a socialist society, brain workers trained by the proletariat itself differ from intellectuals in any exploiting society in history. In the course of socialist transformation in China, Chairman Mao pointed out that intellectuals from the old society faced the question of what kind of "skin" they attached themselves to. Class contradictions and class struggle exist throughout the historical period of socialism, and the intellectuals face throughout the need to solve the question of what kind of "skin" to attach to and whether to keep to the proletarian stand. But, generally speaking, the overwhelming majority of them are part of the proletariat. The differences between them and the manual workers lies only in a different role in the social division of labor. Those who labor, whether by hand or by brain, are all working people in a socialist society. With the advancement of modern science and technology and progress toward the four modernizations, a great deal of heavy manual work will gradually be replaced by machines. Manual labor will steadily decrease for workers directly engaged in production, and mental work will increase. Moreover, there will be an increasing demand for more people in scientific research and for a larger force of scientists and technicians. The "gang of four" distorted the division of labor between mental and manual work in our socialist society today, calling it class antagonism. Their aim was to attack and persecute the intellectuals, undermine the alliance of the workers, the peasants and the intellectuals, disrupt the social productive forces and sabotage our socialist revolution and construction.

Correctly understanding that science and technology belong to the productive forces and that brain workers who serve socialism are a part of the working people has a close bearing on the rapid development of our scientific undertakings. Since we accept these two premises, we must naturally

put great effort into developing scientific research and science education and give full play to the revolutionary initiative of the scientific and technical workers and the educational workers, in order to accomplish the four modernizations in the short space of 20-odd years and bring about a tremendous growth of our productive forces.

Our science and technology have progressed enormously since the founding of new China and played an important role in economic construction and national defense construction. In old China this would have been unthinkable. There is no way for anyone to deny this great achievement.

But we must see, with a clear head, that there is still a very big gap between our science and technology and advanced world levels and that our scientific and technical forces are still very weak, far from meeting the needs of modernization. We have lost a lot of time, in particular, as a result of sabotage by Lin Biao and the "gang of four."

How do things stand with the technical level of our production? Several hundred million people are busy producing food. We still have not really solved the grain problem. Average annual output of grain per farm worker is about 1,000 kilograms in China, whereas in the United States the figure is over 50,000 kilograms, a disparity of several dozen times. Labor productivity in our iron and steel industry, too, is only a small percentage of advanced levels abroad. The gap in the newly emerged industries is still wider. A lag in this field of only 8 to 10 years, or even 3 to 5 years, makes a big gap, let alone a lag of 10 to 20 years.

Chairman Mao often reminded us: "China ought to make a greater contribution to humanity." In ancient times China had brilliant achievements in science and technology: its four great inventions played a significant role in the advance of world culture. But our ancestors' achievements can serve only to confirm our confidence in overtaking and surpassing advanced world levels and not to console us on our backwardness today. Our contributions in science and technology at present are highly incommensurate with the position of a socialist country like ours.

Will factually pointing out this backwardness make people lose heart? There might be such people. They do not have half a whiff of Marxism about them. As for us proletarian revolutionaries, by stating the facts and making a serious analysis of the historical and the present causes of this situation, we can accurately draft our strategic plan, deploy our forces and strive for a rapid change in the situation. Only in this way, moreover, can we activate people to study modestly and speedily master the world's latest science and technology.

Backwardness must be perceived before it can be changed. A person must learn from the advanced before he can catch up and surpass them. Of course, to raise China's scientific and technological level we must rely on our own efforts, develop our own inventions, and adhere to the policy

of independence and self-reliance. But independence does not mean shutting the door on the world, nor does self-reliance mean blind opposition to everything foreign. Science and technology are a kind of wealth created in common by all mankind. Any nation or country must learn from the strong points of other nations and countries, from their advanced science and technology. It is not just today, when we are scientifically and technically backward, that we need to learn from other countries; after we catch up with the advanced world levels in science and technology, we will still have to learn from the strong points of others.

China's revolution has attracted all the world's revolutionary people who live and breathe with it. Our socialist modernization has won their interest and support and will do so on a widening scale. We must actively develop international academic exchanges and step up our friendly contacts with scientific circles of other countries. We express heartfelt thanks to all our friends abroad who have helped us in science and technology.

That is the first question on which I want to speak.

The second question concerns the building of a mammoth force of scientific and technical personnel who are both Red and expert.

For the modernization of science and technology, we must have a mighty scientific and technical force of the working class which is both Red and expert and a large number of scientists and experts in engineering and technology who are first-rate by world standards. We have a heavy task before us to build such a force.

An important question here is that we must have a correct understanding of being both Red and expert and set reasonable standards for it.

The "gang of four" made the absurd statement "the more knowledgeable, the more reactionary." They said they "preferred laborers with no culture," and they boosted as a "model of being Red and expert" an ignorant counterrevolutionary clown who handed in a blank examination paper. On the other hand, they vilified as being "White and expert" good comrades who studied diligently and contributed to the motherland's cause of science and technology. This reversal of right and wrong and of ourselves and the enemy seriously muddled people's minds for a time.

Chairman Mao advocated intellectuals' becoming Red and expert, encouraging everyone to remold the bourgeois world outlook and acquire the proletarian world outlook. The basic question about the world outlook is whom to serve. If a person loves our socialist motherland and is serving socialism and the workers, peasants and soldiers of his own free will and accord, it should be said that he has initially acquired a proletarian world outlook and, in terms of political standards, cannot be considered

White but should be called Red. Our scientific undertakings are an important part of our socialist cause. To devote oneself to our socialist science and contribute to it is an important manifestation of being Red, the integration of being Red with being expert.

Imbued with Mao Tsetung Thought, our scientists and technicians have made truly rapid progress in the last 28 years. The overwhelming majority of them love the party and love socialism, strive to integrate themselves with the workers, peasants and soldiers, work wholeheartedly and fruitfully at their posts. Their faith in the party and in socialism never wavered, no matter how Lin Piao and the "gang of four" persecuted and tormented intellectuals; they kept working on science and technology under extremely difficult conditions. Many showed a high level of political awareness in the 11th struggle between the two lines. The smashing of the gang unleashed in them great revolutionary enthusiasm. They wholeheartedly support the party Central Committee headed by Chairman Hua and work still harder for the four modernizations. How invaluable are these scientists and technicians: they are worthy of the title "Red and expert," fit to be called our working class' own scientific and technical force. Chairman Hua once stressed with great satisfaction that such a force is an important factor in our confidence that we will catch up with and surpass advanced world standards. This is a realistic, scientific appraisal.

This appraisal naturally does not mean that these scientists and technicians all have a very high level of political and ideological consciousness or that there are no shortcomings and mistakes of one kind or another in their ideology, their workstyle or their specific work.

It means that, judged by the basic criterion of political stands, the overwhelming majority of them take the stand of the working class, and these revolutionary intellectuals constitute a force our party can rely on. They should not be complacent or come to a halt, but should continue the effort, constantly seeking new progress both politically and in their specific fields. Their shortcomings and mistakes are a matter for education and assistance, something to be overcome through criticism and self-criticism. No one is free from shortcomings and mistakes. Take people like us, our cadres doing political work and our veteran cadres who have been in the party for decades: Do we not also have shortcomings or errors of this kind or that? Why be especially exacting toward vocational cadres and technical experts? As for scientists and technicians with undesirable family backgrounds or who committed mistakes in the past or whose families and social contacts present problems, we should judge them mainly by their own basic political attitude, by the way they acquit themselves and by their contributions to socialist revolution and construction.

There is a section of scientists and technicians whose bourgeois world outlook has not fundamentally changed, or who are rather deeply

influenced by bourgeois ideology. They often waver in the midst of sharp, fierce and complicated class struggle. As long as they are not against the party and against socialism, we should, in line with the party's policy of uniting with, educating and remolding the intellectuals, bring out their specialized abilities, respect their labor and take an interest in their progress, giving them a warm helping hand. Chairman Mao consistently held that the more people in our revolutionary ranks the better, that we should respect those who have knowledge and specialized skills or have made contributions, and that our attitude toward any person who has made mistakes should be first to observe and second to give help and not to look down on him. We must earnestly implement these teachings of Chairman Mao's.

In our socialist society, everyone should remold himself. Not only those who have not changed their basic stand should remold, but everybody should study and constantly remold himself, study new problems, absorb what is new and consciously guard against corrosion by bourgeois ideology, so as better to shoulder the glorious and arduous task of building a modern, powerful socialist country.

To catch up with and surpass advanced world levels within the century means that we should cover the distance in the next 22 years that took others 40 or 50 years or more. Scientists and technicians should concentrate their energy on scientific and technical work. When we say that at least five-sixths of their work time should be left free for their scientific and technical work, this is meant to be the minimum demand. It is still better if even more time is available for this purpose. If some persons work 7 days and 7 evenings on end to meet the needs of science or production, that shows their lofty spirit of selfless devotion to the cause of socialism. We should learn from them, commend them and encourage them. Innumerable facts prove that only he can mount the pinnacles of science who devotes himself heart and soul, constantly strives for perfection, fears neither hardship nor disappointment. We cannot demand that scientists and technicians, or at any rate, the overwhelming majority of them, study a lot of political and theoretical books, participate in numerous social activities and attend many meetings not related to their work. Lin Piao and the "gang of four" frequently attacked scientists and technicians, accusing them of "being divorced from politics" and labeling people "White and expert" when they studied diligently to improve their knowledge and skills.

"White" is a political concept. Only political reactionaries who are against the party and against socialism can be called "White." How can you label as "White" a man who studies hard to improve his knowledge and skills? Scientists and technicians who have flaws of one kind or another in their ideology or their style of work should not be called "White" if they are not against the party and against socialism. How can our scientists and technicians be accused of being divorced from politics when they work diligently for socialist science? The cause of

socialism calls for a division of labor. On condition that they keep to the socialist political stand, comrades of different trades and professions are not divorced from politics when they do their best at their posts; on the contrary, this is a concrete manifestation of their service to proletarian politics and of their socialist consciousness. A few years ago Lin Piao and the "gang of four" made it quite difficult for the workers to do their jobs, for the peasants to till the land, for the army-men to do their military training, and for the students to study or scientists and technicians to do research in their work. What heavy losses this meant for our socialist cause! Was that not a profound lesson?

While striving to raise the level of our present scientific and technical force and making full use of their abilities, we must also exert ourselves to train new personnel. Owing to sabotage by Lin Piao and the "gang of four," there is an age gap in this force which makes the training of a younger generation of scientific and technical personnel all the more pressing.

We have a vast supply and a great potential in matters of selecting and training talented personnel. With the recent reform of the university enrollment system, we have discovered fine young people who are diligent, hard working and talented. We are pleased to see their outstanding accomplishments. Though the "gang of four" ran wild for a time, they failed to dampen the enthusiasm of the youngsters for study, nor could they stifle the revolutionary zeal of the teachers to educate the next generation assiduously for the party and the people. Today the Central Committee of the party headed by Chairman Hua is paying close attention to science and education and laying strong emphasis on training and selecting talented people. We can foresee the dawn of a new era, with a multitude of outstanding people like the stars in the sky. The future of science lies with the youth. The growth of the younger generation is the hope of our flourishing cause.

Education is basic for training scientific and technical personnel. We must comprehensively and correctly carry out the party's policy on education, straighten out the orientation and make a good job of the educational revolution to insure a tremendous expansion and improvement. Education concerns not only the educational departments; party committees at all levels must attend to it earnestly as a major issue. People of all trades are gardeners tending the successors to the revolution. Their creative labor should be held in respect by the party and the people. Their teaching time must be guaranteed, and care and attention must be given to their political life, working conditions and professional studies. Teachers with outstanding contributions in pedagogy should be commended and awarded.

On the question of talented people, we must particularly stress the need to break with convention in the discovery, selection and training of those with outstanding talent. This was one of the basic issues muddled by the "gang of four."

They vilified scientists, professors and engineers distinguished for their contributions as bourgeois academic authorities, and all outstanding young and middle-aged scientists and technicians trained by our party and state as revisionist sprouts. We must thoroughly eliminate the pernicious influence of the gang and take up the important task of training in the shortest possible time a group of experts in science and technology who are first-rate by world standards. In the early period of the war of resistance against Japan, Chairman Mao said that our party's fighting capacity would be much greater and our task of defeating Japanese imperialism would be more quickly accomplished if there were one or two hundred comrades with a grasp of Marxism-Leninism which was systematic and not fragmentary, genuine and not hollow. The revolutionary cause needs outstanding revolutionaries, and so does the scientific cause need outstanding scientists. Working-class persons with outstanding talent come from the people and serve the people. Only an extensive mass base can provide a continuous flow of talent, and outstanding talents will, in turn, help raise China's scientific and cultural standards as a whole.

The discovery or training of talented people by our scientists and teachers is in itself an achievement and a contribution to the state. The history of science shows what great results can be produced in the field of science from the discovery of a genuinely talented person! Some of the world's scientists have looked upon their discovery and training of new talent as the greatest achievement of a lifetime. There is much to be said for this view. A number of outstanding mathematicians in China today were discovered in their youth by older-generation mathematicians who helped them mature. Some of the newcomers may have surpassed their teachers in scientific achievement, but the teachers' contributions are indelible, nonetheless.

The third question I want to discuss is how to make the system of division of responsibilities under the leadership of party committees work in scientific and technical departments.

Rapid development of science and technology hinges on good party leadership in these fields.

Our country has entered a new period of development in socialist revolution and construction. According to the constitution adopted by the Fifth National People's Congress and Chairman Hua's report on the work of the government to the congress, the general task in this new period is: To steadfastly continue the revolution under the dictatorship of the proletariat, deepen the three great revolutionary movements of class struggle, the struggle for production and scientific experiment, and transform China into a great and powerful socialist country with modern agriculture, industry, national defense and science and technology by the end of the century. To accomplish this general task we must wage a great political and economic revolution and a great scientific and

technical revolution. This is the new content for continuing the revolution under the dictatorship of the proletariat in the new period of development.

To meet the requirements of the new situation and the new task, there must be corresponding changes in the center of gravity for party work and in the party's workstyle. During the unprecedented Great Proletarian Cultural Revolution, our party concentrated maximum efforts on the political revolution.

Today, after victory in the struggle to expose and criticize the "gang of four," while continuing to eliminate their pernicious influence and deepen the socialist revolution on the ideological and political fronts, the whole party must take firm hold of the work of modernization and carry out the great political and economic revolution and the great scientific and technical revolution, tasks which history has conferred on us.

The party committees at various levels should learn from Taching and Tachai and make an earnest effort to grasp simultaneously the three great revolutionary movements of class struggle, the struggle for production and scientific experiment. Following the examples of Taching and Tachai, they should unfold mass movements for scientific experiment, with new technical progress and new production records every year. There are several hundred thousand enterprises and several hundred thousand production brigades in our country. Extensive application of advanced science and technology to industry and agriculture and a greater, faster, better and more economic growth of production can come about only through large-scale technical transformation and scientific experiments in every enterprise and every production brigade. At the same time, we must work energetically for the success of specialized scientific research institutions. Professional scientists and technicians form the mainstay of the revolutionary movement for scientific experiment. Without a strong contingent of professional scientific researchers of high caliber, we could hardly scale the heights of modern science and technology, and it would be difficult for the scientific experiment movement of the masses to advance wave upon wave in a sustained way. We must get the specialists integrated with the masses.

The Central Committee has stipulated that a system of individual responsibility for technical work be established in scientific research institutes and that the system of division of responsibilities among institute directors under the leadership of party committees be set up. These are important organizational measures which help strengthen the leading role of the party committees while bringing into full play the role of the specialists.

The basic task of scientific research institutes is to produce scientific results and train competent people. They must show more scientific and

technical achievements of high quality and train scientific and technical personnel who are both Red and expert. The main criterion for judging the work of the party committee of a scientific research institute should be the successful fulfillment of this basic task. Only when this is well done has the party committee really done its duty to consolidate the dictatorship of the proletariat and build socialism. Otherwise, putting politics in command will remain mere empty talk.

A lot of work has to be done to fulfill this basic task. It is impossible for party committees to handle and solve all these matters. We must honestly admit that in scientific and technical work there are many things we do not know. Even should we know them, it would still be impossible for party committees to do everything. There must be a division of responsibilities and a system of individual responsibility at each post from top to bottom. This is the only way to make our work orderly and efficient and bring about high-speed development; and this is the only way to define the duties incumbent on each post and to mete out the proper awards and penalties, at the same time obviating procrastination or evasions of responsibility and avoiding getting in each other's way.

The leadership given by party committees is primarily political leadership, that is, to insure the correct political orientation and the implementation of the party's line, principles and policies and to bring out the initiative of all concerned.

At the same time, leadership is exercised through the plan. Good plans must be drawn up for scientific research, personnel must be carefully appraised and placed where they can do the best work, and all forces must be well organized. In order to follow out the plans and push forward our scientific research, it is also necessary to guarantee the supporting services and supplies and to provide the necessary working conditions for scientific and technical personnel. This is also part of the work of the party committees. I am willing to be the director of the Logistics Department at your service and to do this work well together with the leading comrades of party committees at various levels.

We should give the director and the deputy directors of research institutes a free hand in the work of science and technology according to their division of labor. Party committees should back up the work of all party and nonparty experts in administrative positions and try to bring out all their capacities so that they really have powers and responsibilities commensurate with their positions. These experts are also cadres of the party and the state. We must never look askance at them. Party committees should not attempt to supplant them.

We must give full scope to democracy and follow the mass line, heeding opinions from scientific and technical personnel in such things as evaluating scientific papers, examining the competency of scientific and technical personnel, working out plans for scientific research and

appraising research findings. As to divergent views on academic questions, we must follow the principle of letting a hundred schools of thought contend and encourage free discussion. We must listen closely to experts' opinions and enable them to play their full role so that we can do better at scientific and technical work and reduce our errors as much as possible. This is an important aspect of the mass line for party committees of scientific research institutes.

Do we mean to lighten the load of our political work or to lower its standards when we stress that scientific and technical personnel must concentrate on their specific work? No, we do not. This means a demand to raise the level of our political work, improve the method, do away with everything that smacks of formalism, eliminate the poisonous influence of the "gang of four" and conscientiously learn the fine traditions of Liberation Army political work. We must support whatever is conducive to the development of socialist science and criticize and educate those who seek personal gain, hide their findings, refuse to work in coordination or even resort to monopoly and plagiarism and those who display other erroneous ideas and styles of work which are detrimental to the development of socialist science. As we are engaged in socialist modernization and are advancing toward the mastery of modern science and technology, the important task for our political work today is to make every scientist and technician understand how his work relates to the grand goal of the four modernizations, encourage and mobilize them to work together with one heart and coordinate their efforts in the spirit of revolution, so as to storm the citadels of science.

Although our party has accumulated some experience in leading scientific and technological work over the past 20-odd years, we must admit that we confront a very large realm of necessity, an area we still do not know, with regard to how to effectively organize, manage and lead socialist science and technology. Until there is a change in this state of affairs, we can hardly have major achievements, and the initiative will not be in our hands. Chairman Mao taught us time and again that persons in the dark cannot light the way for others. Leading party cadres at various levels must not be content to remain laymen. They must study their work and gradually learn the ropes.

We must apply ourselves to the study of Marxism and raise our political level, and we must also strive to acquire scientific knowledge, sum up experience, both positive and negative, study and grasp the objective laws governing scientific and technological work and implement the party's principles and policies correctly and comprehensively. Our party was able to lead the people to the overthrow of the system of exploitation and to the transformation of society, and it will certainly be able to grasp the laws governing scientific and technological work and lead our people to the heights of world science.

The rights and wrongs in regard to political line have been basically clarified; we have mapped out a program with the measures for its execution; the masses are already on the move. The task now confronting our party organizations at all levels is to inspire real drive in the masses, to find down-to-earth solutions to problems and to do good, solid work. In a word, we must put everything on a solid footing. We must stop all the manifestations of formalism, which go in for ostentation but disregard practical results, real efficiency, actual speed, quality or cost. Bad habits like empty talk, boasting and lying must be stamped out.

Comrades, the 11th party congress, the Fifth National People's Congress and the Fifth Chinese People's Political Consultative Conference, coming one after the other, fully demonstrated the great unity of our whole party and the great unity of the people throughout the country. This National Science Conference is likewise a gathering of unity. The unity of the party and the unity of the people--these are the basic guarantees for the sure triumph of our cause. Let us hold high the great red banner of Mao Tsetung Thought and, under the leadership of the party Central Committee headed by Chairman Hua, march forward unswerving and victorious, moving valiantly toward the grand goal of a modern, powerful socialist country!

May science in China flourish and grow! I wish the conference complete success!

REPORT TO NATIONAL SCIENCE CONFERENCE (Abridged)

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 19-31

[Report by Fang I to National Science Conference on 18 March 1978]

[Text] This National Science Conference is being held under the direct leadership and warm attention of the party Central Committee headed by our wise leader Chairman Hua. It is an unprecedented gathering for our scientific and technological circles and a major event on which the people of all our nationalities are focusing attention. I am instructed by Chairman Hua and the party Central Committee to speak on the following questions.

I. A New Stage in the Development of China's Socialist Cause of Science and Technology

The convocation of our National Science Conference is drawing general attention both at home and abroad, among our comrades and friends and among our enemies.

China is a socialist country with one-fifth of the world's population. The party's 11th national congress and the Fifth National People's Congress set our goal for the rest of this century with the decision to mobilize the whole party, the whole army and the people of all our nationalities to march toward the modernization of agriculture, industry, national defense and science and technology. This new Long March on which we are embarking is highly important and naturally attracts world-wide attention.

This enormous task put forward by our great leader and teacher Chairman Mao is a logical continuation of the overall process of the revolution led by the Chinese Communist Party for over half a century. The anti-party "gang of four" of Wang Hung-wen, Chang Chun-chiao, Chiang Ching and Yao Wen-yuan--the bane of the nation--violently opposed the four modernizations in an attempt to stifle our great socialist cause. The party Central Committee headed by Chairman Hua, holding high the great

red banner of Mao Tsetung Thought, smashed the "gang of four" at one stroke, thus ushering in a period of new development in China's socialist revolution and socialist construction. The dark clouds have been dispelled and the way has been cleared. A bright future is ahead of us. Guided by the strategic decision of Chairman Hua and the party Central Committee to grasp the key link of class struggle and bring about great order across the land, a new situation of growing prosperity has appeared on all fronts. The objective of initial success in the first year was realized. The party Central Committee headed by Chairman Hua attaches great importance to our scientific and technical work and pays great attention to our scientific and technical forces. Chairman Hua proposed that a National Science Conference be held, giving a very important place to scientific and technical work. China's socialist cause of science and technology is entering a new stage of flourishing growth.

Under the leadership of Chairman Hua and the party Central Committee, our comrades on the scientific and technical front are intensifying their study of Marxism-Leninism-Mao Tsetung Thought in the struggle against the antiparty "gang of four," summing up experience in relation to the development of science and technology in the 28 years since the founding of new China, and consolidating and building up their ranks so as to accelerate progress. Major issues of right and wrong concerning the political line in scientific and technical work which were long confounded by the "gang of four" have been basically clarified.

The "gang of four" had intense hatred for science and willfully negated the great role of science and technology. They opposed our efforts to grasp simultaneously the three great revolutionary movements of class struggle, the struggle for production and scientific experiment and wreaked havoc with the revolutionary movement for scientific experiment on the absurd pretext of "opposing restoration." The absurdities of the "gang of four" have been exploded.

Marxists have always held that science and technology are a revolutionary force, a motive force for historical advance. Natural science is a weapon with which people can win freedom. Natural science and production techniques have no class nature in themselves. They sum up experience accumulated by all mankind over long years of struggle in production and scientific experimentation. Science and technology belong to the forces of production, not to the superstructure. In the course of revolution, the proletariat should overthrow the old superstructure, smash the old state apparatus and effect a complete break with the old ideology. At the same time, it should firmly protect and actively develop science and technology and give the fullest play to their revolutionary role in hastening historical progress. The proletariat, which is closely linked with advanced social productive forces, has a greater need than any other class in history for a flourishing, forward-moving science and technology.

Marx and Engels enthusiastically hailed every major new discovery in science and technology. Right up to the last few days of his life Marx closely followed the installation of the first experimental power transmission line. Engels pointed out: "In fact, this thing is enormously revolutionary." ("Letter to A. Bernstein," 1 March 1883) Speaking of the revolution of 1848 that swept Europe, Marx perceptively pointed out that, to the reactionaries, steam, electricity and the self-acting mule were "revolutionists of a rather more dangerous character" than Barbes, Raspail and Blanqui, who were then leaders of the French Revolution. (Speech at the Inaugural Ceremony of VOLKSZEITUNG) After winning state power, the proletariat must make a vigorous, conscious effort to develop science and technology so as to raise socialist production as quickly as possible to a level much higher than capitalist production. This task is even more arduous and pressing for the proletariat which has won state power in an economically and technically backward country. Lenin said on many occasions: "In the last analysis productivity of labor is the most important, the principal thing for the victory of the new social system." ("A Great Beginning") For labor productivity to attain a higher level than that achieved under capitalism, science and technology must be modernized. Formulating the problem in accordance with the basic principles of Marxism, Chairman Mao put forth the brilliant thesis that in socialist society it is imperative to carry out the three great revolutionary movements of class struggle, the struggle for production and scientific experiment. This was one of his important contributions to the theory of scientific socialism.

Chairman Hua has instructed us to grasp the three great revolutionary movements simultaneously and raise the scientific and cultural level of the entire Chinese nation. He has called on us to advance toward the modernization of science and technology. This is a shining example of the application of Mao Tsetung Thought.

Chairman Hua's important instruction, which is finding its way ever deeper into the hearts of the people and of which leading cadres at all levels and the masses are acquiring an ever better understanding of the current momentous struggle to expose and criticize the "gang of four," is a powerful ideological weapon for us in developing science and technology in the new stage. We must grasp the three great revolutionary movements simultaneously if we really want to build socialism, strengthen the dictatorship of the proletariat and prevent capitalist restoration. Otherwise, our desire would only be sham or in vain. Our revolution needs science, so does production, and the people need it, too. If we are eager for socialism, we should also be eager for science and technology. No one who is against science can possibly be a revolutionary.

The "gang of four" vilified the leadership exercised over the scientific and technical front by the party Central Committee headed by Chairman Mao, attacked our party's correct principles and policies guiding scientific and technical work, denied the great achievements scored on this

front since the founding of new China, and slandered our scientific and technical work as being dominated by a revisionist line. All these absurdities of the gang have been exploded, too.

As we all know, Chairman Mao formulated for our party the basic line for the entire historical period of socialism and the general line for building socialism and, at the same time, laid down the specific line, principles and policies for our scientific and technical work. All the major policy decisions concerning science and technology were examined and approved by the party Central Committee headed by Chairman Mao. The party Central Committee and the Central People's Government headed by Chairman Mao decided in November 1949 to establish the Chinese Academy of Sciences. A National Conference of Representatives of Natural Science Workers was held in 1950 with the attention of Chairman Mao and under the leadership of Premier Chou En-lai. An ideological remolding movement was carried out in line with Chairman Mao's instructions by the intellectuals in 1951. This was followed by a conference on problems concerning intellectuals in January 1956 under the personal guidance of Chairman Mao, at which Premier Chou made an important report. At that conference and the ensuing supreme state conference, Chairman Mao set forth the task of rapidly reaching advanced world levels economically, scientifically and culturally in a few decades. He called for advances in science and laid down the principle of letting a hundred flowers blossom and a hundred schools of thought contend.

China's first long-range plan for the development of science and technology, that is, the 12-year plan, was worked out the same year under the guidance of Premier Chou and Comrades Chen I, Li Fu-chan and Kuo Mo-jo and approved by the party Central Committee headed by Chairman Mao. In 1958, Chairman Mao issued a call to do away with blind faith, emancipate the mind and bring about a Great Leap Forward, and set the task of technical revolution for the whole party, thus greatly accelerating the development of science and technology.

Following Chairman Mao's teachings, the leading party groups of the State Scientific and Technological Commission and the Chinese Academy of Sciences, under the direction of Comrade Nieh Jung-chen, in 1961 summed up our experience and drew up "Some Questions Concerning the Present Work of the Research Institutions in Natural Science (Draft)," also known as the 14-point document on scientific research. This gave concrete explanations and laid down stipulations on a series of principles and policies guiding scientific research work. The document, which was examined and approved by Chairman Mao and ratified by the party Central Committee for trial implementation, played an effective part in advancing science and technology in China.

When the main tasks set out in the 12-year plan had been completed in 1962, 5 years ahead of schedule, a second plan, that is, the 10-year plan, was drafted under the direction of Premier Chou and Comrade Nieh

Jung-chen. The party Central Committee headed by Chairman Mao approved the plan the following year, and he explicitly pointed out that it was imperative to tackle science and technology, otherwise the productive forces could not be expanded. China successfully exploded an atomic bomb in 1964 and became one of the countries in the world to possess nuclear weapons. Chairman Mao acclaimed with joy the hard work the comrades had done and gave them encouragement and support in their continued advance.

In 1966 Chairman Mao initiated and led the Great Proletarian Cultural Revolution and asked Premier Chou to look into the movement in the State Scientific and Technological Commission and the Chinese Academy of Sciences. In active response to Chairman Mao's call, the scientific and technical workers plunged into the great struggles against the counterrevolutionary revisionist lines of Liu Shao-chi, Lin Piao and the "gang of four." Chairman Mao and Premier Chou gave repeated instructions in 1972 on strengthening research in the basic theories of natural science in order to counter the disruption and sabotage of scientific research work by Lin Piao and the "gang of four."

Comrade Hua Kuo-feng took charge of scientific and technical work in 1975 on the instructions of the party Central Committee. The principal leading comrades of the Chinese Academy of Sciences, after thorough investigation and extensive canvassing of the opinions of the masses, prepared an "Outline Report" on the work of the academy in accordance with the instructions of Comrades Hua Kuo-feng and Teng Hsiao-ping on consolidating the Chinese Academy of Sciences and on pushing forward our scientific research work. Under the conditions prevailing at the time, this document was in essence a revolutionary call to arms to condemn Lin Piao and particularly the "gang of four" for disrupting our endeavors in science and technology. The State Council discussed the document. Chairman Mao went over it. While the Chinese Academy of Sciences was revising the Outline Report on the instructions of Chairman Mao and the party Central Committee, however, the "gang of four" came out with the slander that the document was a "big poisonous weed" and launched an "encirclement and suppression campaign" against it as part of their plot to usurp party and state power. The masses on the scientific and technical front firmly defended Chairman Mao's revolutionary line and fought heroically against the gang, showing a high degree of awareness of the rights and wrongs in the 11th struggle between the two lines.

In reviewing these facts, we can see more clearly that although affected and disrupted by revisionist lines, China's scientific and technical undertakings have nevertheless been developing all along under the warm attention and leadership of Chairman Mao, Premier Chou and Chairman Hua. Confounding right and wrong and calling black white, the "gang of four," for their own ulterior motives, spread the slander that the scientific and technical work under the leadership of our party was thoroughly penetrated by a so-called counterrevolutionary revisionist line in

science and technology. They thus directed the spearhead of their attack against Chairman Mao and Premier Chou as well as against Chairman Hua and Vice Chairman Teng. In the "Circular on the Holding of a National Conference on Science" the party Central Committee points out in clear terms that Chairman Mao's revolutionary line has been predominant on the scientific and technological front throughout the 20 years since the founding of new China. This is the only correct conclusion, and it conforms to the facts. It clearly distinguishes between right and wrong and inspires us to add to the great victories we have won over the past 28 years, correct our mistakes and advance with heightened awareness and courage along Chairman Mao's revolutionary line in the new stage.

The "gang of four" completely negated the important role played by our scientific and technical workers in socialist revolution and construction and denied the fact that the revolutionary intellectuals are a force to rely on. They maligned the intellectuals as the "stinking ninth category," "the target of the dictatorship" and "the foundation of capitalist restoration." These absurdities have been exploded, too.

The proletarian revolutionary teachers attached great importance to the role played by scientific and technical workers in the working class cause of liberation. Engels said: "The bourgeois revolutions of the past asked the universities only for advocates as the best raw material for politicians; the liberation of the working class above that needs doctors, engineers, chemists, agronomists and other specialists; because what must be done is to take in hand not only the leadership of the political machinery, but in the same way that of the whole production of society, and here, instead of high-sounding phrases, solid knowledge is required." ("Letter to Congress of International Socialist College Students") Chairman Mao pointed out on several occasions in 1957 that, in order to build socialism, the working class must have its own mighty contingent of technical cadres who are both Red and expert and must have its own scientists. He said that this task should be basically fulfilled within 10 to 15 years.

Now 20 years have elapsed. Our scientific and technical contingent is vastly different from what it was two decades ago. It has withstood grueling tests particularly during the storms of the Great Proletarian Cultural Revolution and in the life-and-death struggle with the "gang of four." No matter how hard the gang tried to intimidate and bribe, they succeeded in winning over only a handful of degenerates. In the days when the gang were running amok, the mass of scientific and technical workers, under the brilliant guidance of Mao Tsetung Thought, persevered in struggle, worked hard and made contributions to the socialist cause under extremely difficult conditions. Their success is inseparable from the party's education over the years and their own conscious efforts, in addition to the very composition of this force. Twenty years ago, scientific and technical workers trained by our party made up only a small proportion of the entire scientific and technical

force, and those from families of laboring people likewise accounted for only a small proportion. Now the composition of this force has undergone a radical change.

Statistics show that over 90 percent of the professional scientific and technical workers have been trained by our party since liberation, and more than two-thirds of them come from families of laboring people. The overwhelming majority of scientific and technical workers trained since liberation, including a section not from families of laboring people, have deep feelings for the party and the workers, peasants and soldiers and are conscientious in studying Marxism-Leninism-Mao Tsetung Thought; they constitute a new force of intellectuals belonging to the working class. The overwhelming majority of scientific and technical workers from the old society support the party's leadership, love our socialist motherland and work hard to serve the people; they have made progress to varying degrees in transforming their world outlook, and an increasing number have turned into working class intellectuals. In line with Chairman Mao's teachings, the scientific and technical workers have made it a regular practice to integrate and identify themselves with the workers, peasants and soldiers. We have already built a Red-and-expert scientific and technical contingent of the working class. As for all other patriotic scientific and technical workers, we should acknowledge the importance of their role, correctly implement the party's policy on intellectuals and create favorable conditions for their work.

Lenin said shortly after the October Revolution in Russia: "We must not practice a policy of petty pinpricks with regard to the experts. These experts are not the servitors of the exploiters, they are active cultural workers, who in bourgeois society served the bourgeoisie, and of whom all socialists all over the world said that in a proletarian society they would serve us." ("Report on Party Platform") The experience of our revolution has further testified to the complete correctness of this thesis of Lenin's. All slanders and false charges leveled at scientific and technical workers by the "gang of four" should be repudiated and canceled. We rejoice wholeheartedly at the progress made by our scientific and technical workers. We hope that they will make constant efforts to transform their world outlook, raise their scientific and technical level and press ahead on the road of becoming both Red and expert. We are convinced that in the new stage they will rally still more closely around the party Central Committee headed by Chairman Hua, unite as one and make still greater contributions to the people.

II. Foster Lofty Ideals, Set High Goals, March Toward the Modernization of Science and Technology

Chairman Mao and Premier Chou mapped out a gigantic plan for us to make China a modern, powerful socialist country. By the end of this century, all departments and localities in China that can use machines must be fully mechanized, electrification must be realized in both urban and

rural areas, the production processes in major industrial departments automated, advanced techniques extensively applied, labor productivity raised by big margins, and a radical change brought about in industrial and agricultural production so that our national economy can take its place in the front ranks of the world. We must equip our armed forces with the latest achievements in science and technology and greatly enhance our national defense capabilities. We must build a vast army of working-class scientists and technicians who are both Red and expert, and we must have our own experts in science and technology who are first-rate by world standards. We must also acquire the most sophisticated equipment for scientific experimentation so that we can approach advanced world levels of that time in most branches of science and technology, catch up with them in some other branches and take the lead in certain branches.

When these are done, we can say that we have realized by and large our objective of modernizing agriculture, industry, national defense and science and technology. China will radiate an even greater brilliance throughout the world.

The 8 years from now through 1985 are crucial for the prospective long-term plan mentioned above. We must follow the inscription written by Chairman Hua for this conference: "Foster lofty ideals, set high goals and march toward the modernization of science and technology," work out a strategic plan, fully mobilize all positive factors and organize all our forces well.

Our plan should be aimed at helping the realization of the four modernizations. The key to this lies in the modernization of science and technology. The whole party, the whole army and the people of all our nationalities are pinning high hopes on the speedy development of science and technology, and they expect us to make a great contribution to the four modernizations. This is also the aspiration and determination of our comrades on the scientific and technical front. Our plan must meet the needs of the four modernizations and the needs for developing our national economy and building our national defense. The plan on science and technology must dovetail with the plan on production and construction, and the two must be organically combined. Research in applied sciences and in basic theories and the immediate and long-term tasks must be properly arranged to avoid overemphasizing one to the neglect of the other.

Our plan should be aimed at high-speed development. Compared with advanced world levels in science and technology, our country is now lagging 15 to 20 years behind in many branches and still more in some others. Modern science and technology are developing rapidly; while we are trying to catch up with and surpass other countries, they are also forging ahead. Only by developing at a higher speed can we catch up with or surpass the capitalist countries. We won high speed by fulfilling 5 years ahead of schedule the major targets specified in the 12-year plan

for the development of science and technology mapped out in 1956. In the mid-1960's we approached advanced world levels at the time in some scientific and technical spheres and achieved a number of outstanding successes which helped the popularization of some new techniques and the building of some new, rising industries. Now that we have much better conditions and a much better foundation than in those days, a much higher speed is entirely possible.

Our plan should, moreover, be an advanced one with the present-day advanced levels as its starting point. In scientific and technological research we must do away with blind faith, emancipate the mind, be good at learning from the advanced and dare to break with conventional practices. We should conscientiously assimilate the experience and lessons of our predecessors so as to avoid the twists and turns they went through. In carrying out the first plan for the development of science and technology, we worked in the correct direction by taking semiconductor technology, which was an advanced branch of science at the time, as our starting point for studying and developing electronic computers. As a result, we soon passed the stage of the electron tube and gained time. In the years to come we should base our research work in all branches of science on the mastery of the latest scientific and technological achievements and be courageous in breaking new ground. We must work hard to raise all our scientific research work to advanced levels as quickly as possible. Scientific experiments by the masses should also be steadily improved on the basis of popularization.

Since last June, departments under the State Council and various localities and units have done a great deal of work in drawing up the plan for the development of science and technology. A National Conference for Planning Natural Science Disciplines was held in September and October last year, and a National Conference for Planning the Development of Science and Technology took place in December last year and January this year. Through repeated discussions and revisions an "Outline National Plan for the Development of Science and Technology 1978-1985 (Draft)" took shape.

The outline plan (draft) sets forth the following goals to be striven for in the next 8 years:

- (1) Approach or reach the advanced world levels of the 1970's in a number of important branches of science and technology.
- (2) Increase the number of professional research workers to 800,000.
- (3) Build a number of up-to-date centers for scientific experiment.
- (4) Complete a nationwide system of scientific and technological research.

The 8-year outline plan (draft) makes all-round dispositions for the tasks of research in 27 spheres, including natural resources, agriculture, industry, national defense, transport and communication, oceanography, environmental protection, medicine, finance and trade, culture and education, in addition to the two major departments of basic and technical sciences. Of these, 108 items have been chosen as key projects in the nationwide endeavor for scientific and technological research. When this plan is fulfilled, our country will approach or reach the advanced world levels of the 1970's in a number of important branches of science and technology, thus narrowing the gap to about 10 years and laying a solid foundation for catching up with or surpassing advanced world levels in all branches in the following 15 years.

The 8-year outline plan (draft) gives prominence to the eight comprehensive scientific and technical spheres, important new technologies and pace-setting disciplines that have a bearing on the overall situation, namely, agriculture, energy resources, materials, electronic computers, lasers, space science and technology, high-energy physics and genetic engineering. It calls for concentrating all forces and achieving remarkable success so as to promote the high-speed development of science and technology as a whole and of the entire national economy.

Science and technology in agriculture: Agriculture is the foundation of the national economy. Chairman Hua has given this instruction: "It is essential to undertake energetic research in agricultural science and change the present situation in which it falls far behind the growing speed of development of large-scale socialist agriculture."

In accordance with the principle of "taking grain as the key link and insuring an all-round development," we will in the next 3 to 5 years actively carry out comprehensive surveys of our resources in agriculture, forestry, animal husbandry, sideline production and fisheries, study the rational exploitation and utilization of the resources and the protection of the ecological system, and study the rational arrangement of these undertakings so as to provide a scientific basis for the all-round development of our country's large-scale socialist agriculture.

We should implement in its entirety the Eight-Point Charter for Agriculture (soil, fertilizer, water conservancy, seeds, close planting, plant protection, field management and improved farm tools) and raise our level of scientific farming so as to bring about a big increase in agricultural output. We should study and evolve a farming system and cultivating techniques that will carry forward our tradition of intensive farming and at the same time suit mechanization, and manufacture farm machines and tools of high quality and efficiency. We will study science and technology for improving soil, controlling water, drastically changing the conditions of our farmland and turning it into crop fields that give stable and high yields. In order to improve as quickly as possible the low-yielding farmland that accounts for about one-third or more of the

country's total, we must make major progress in improving alkaline, lateritic, clay and other kinds of poor soil, in preventing soil erosion and in combating sandstorms and drought. We will study projects for diverting water from the south to the north and relevant scientific and technical problems; study and develop new compound fertilizers and biological nitrogen fixation, methods of applying fertilizer scientifically and techniques for drainage and irrigation, cultivate new seed strains, develop new techniques in seed cultivation and improve the fine crop varieties in an all-round way so that they will give still higher yields, produce seeds of better quality and which can better resist natural adversities. We should quickly find out new insecticides that are highly effective and are harmless to the environment and develop techniques for simultaneous prevention and treatment of different kinds of plant diseases and pests.

We need to step up scientific and technological research in forestry, animal husbandry, sideline production and fisheries and promote an all-round development of these branches. We should provide new tree seeds and techniques that will make the woods grow fast and yield more and better timber, develop multipurpose utilization of forest resources and study techniques and measures for preventing and extinguishing forest fires; step up research on building pasturelands, improving breeds of animals and poultry, mechanizing the process of animal husbandry, increasing water life production, fish breeding, marine fishing and processing so as to make our contribution to improving the ingredients of the people's diet.

We will set up up-to-date centers for scientific experiments in agriculture, forestry, animal husbandry and fisheries and organize all departments and branches of science to tackle key problems by coordinated efforts and accumulate experience.

We must lay great emphasis on research in the basic theories of agricultural science and step up our study in the application of agricultural biology, agricultural engineering and new technologies to agriculture so as to lay a solid scientific foundation for constant innovations in agrotechniques and steady expansion of production.

Science and technology of energy: Energy resources are an important material basis for developing agriculture, industry, national defense and science and technology and for improving the people's livelihood. Every major breakthrough in science and technology concerning energy resources has led to a revolution in production techniques. We must energetically accelerate the development of energy science and technology so as to carry on full and rational exploitation and utilization of our energy resources and insure sustained, speedy development of the national economy.

We have our own inventions in the science and technology of the oil industry, and in some fields we have caught up with or surpassed advanced levels in other countries. We must continue our efforts to catch up with and surpass advanced world levels in an all-round way. We should study the rules and characteristics of the genesis and distribution of the oil and gas in the principal sedimentary regions, develop the theories of petroleum geology and extend oil and gas exploration to wider areas; study new processes, techniques and equipment for exploration and exploitation and raise the standards of well drilling and the rate of oil and gas recovery; and actively develop crude oil processing techniques, use the resources rationally and contribute to the building of some 10 more oilfields, each as big as Taching.

China has extremely rich resources of coal, which will remain our chief source of energy for a fairly long time to come. In the next 8 years we should basically mechanize the key coal mines, achieve complex mechanization in some of them and proceed to automation. The small and medium-sized coal mines should also raise their level of mechanization. Scientific and technical work in the coal industry should center around this task, with active research in basic theory, mining technology, technical equipment and safety measures. At the same time, research should be carried out in the gasification, liquefaction and multipurpose utilization of coal and new ways explored for the exploitation, transportation and utilization of different kinds of coal.

We must push up the power industry as a pressing task. We should take as our chief research subjects the key technical problems in building large hydroelectric power stations and thermal power stations at pit mouths, large power grids and super-high-voltage power transmission lines. China has a great abundance of water power resources. We must concentrate our efforts on comprehensive research in the techniques involved in building huge dams and giant power generating units and in geology, hydrology, meteorology, reservoir-induced earthquakes [Shui ku yu fa ti chen 3055 1655 6131 4099 0966 7201] and engineering protection which are closely linked with large-scale hydroelectric power projects.

We should devote great efforts to exploring new sources of energy in order to change China's energy pattern gradually. Atomic power generation is developing rapidly in the world, and we should accelerate our scientific and technical research in this field and speed up the building of atomic powerplants. We should also step up research in solar energy, geothermal energy, wind power, tide energy and controlled thermonuclear fusion, pay close attention to low-calorie fuels, such as bone coal, gangue and oil shale and marsh gas resources in the rural areas, and make full use of them where possible.

The techniques for the rational utilization and saving of energy present an important question that must be solved. People in all professions and trades should study this question, make full use of surplus heat,

study and manufacture fine and efficient equipment for this purpose, try their best to lower energy consumption and particularly coke consumption in iron smelting, coal consumption in power generation and energy consumption in the chemical and metallurgical industries.

Science and technology concerning materials: Painstaking research in this field is of paramount importance to the all-round modernization of agriculture, industry, national defense and science and technology.

Steel must be taken as the key link in industry. Great efforts must be made to grasp metallurgical science and technology. It is imperative to make a breakthrough in the new technology of intensified mining and solve the scientific and technological problems of beneficiating hematite so as to provide the iron and steel industry with large quantities of raw materials. We should speed up research work on the paragenetic deposits at Panchihua, Paotow and Chinchuan, where many closely associated metals have been formed, solve the major technical problems in multipurpose utilization, intensify research on the exploitation of copper and aluminum resources, make China one of the biggest producers of titanium and vanadium in the world and approach or reach advanced world levels in the techniques of refining copper, aluminum, nickel, cobalt and rare-earth metals. We should master modern metallurgical technology quickly, increase varieties and improve quality; study and grasp the rules governing the formation of high-grade iron ore deposits and the methods of locating them; establish a system of ferrous and nonferrous materials and extend it in the light of the characteristics of our resources.

We should make full use of our rich natural resources and industrial dregs and increase at high speed the production of cement and new types of building materials which are light and of high strength and serve a variety of purposes; step up research in the technology of mining and dressing nonmetal ores and in the processing techniques; lay stress on research in the technique of organic synthesis with petroleum, natural gas and coal as the chief raw materials, step up our studies of catalysts and develop the technology of direct synthesis; renovate the techniques of making plastics, synthetic rubber and synthetic fiber and raise the level of equipment and automation in the petrochemical industry. We must solve the key scientific and technical problems in producing special-purpose materials, structural materials and compound materials necessary for our national defense industry and new technology and evolve new materials characteristic of China's resources.

We should devote great efforts to basic research on the science of materials, develop new experimental techniques and testing methods and gradually be able to design new materials with specified properties.

Electronic computer science and technology: Electronic computers have been used ever more extensively with far-reaching effects in scientific research, industry, agriculture, national defense and social life. At

present the electronic computer is developing in the following directions: giant computers, microcomputers, computer networks and intelligence simulation. The scientific and technical level, scope of production and extent of application of computers has become a conspicuous hallmark of the level of modernization of a country.

China must make a big new advance in computer science and technology. In the next 3 years we should rapidly develop basic research on computer science and related disciplines, lose no time in solving the scientific and technical problems in the industrial production of large-scale integrated circuits, and make a breakthrough in the technology of ultra-large-scale integrated circuits. We should turn out giant computers, put a whole range of computers into serial production, step up study on peripheral equipment and software of computers and on applied mathematics, and energetically extend the application of computers. We aim to acquire by 1985 a comparatively advanced force in research in computer science and build a fair-sized modern computer industry.

Microcomputers will be popularized and giant ultra-high-speed computers put into operation. We will also establish a number of computer networks and data bases. A number of key enterprises will use computers to control the major processes of production and management.

Laser science and technology: This is one of the most active branches of science and technology which began to develop in the 1960's. Its emergence, which marked a new stage in man's control and utilization of light waves, has effectively promoted the development of physics, chemistry and biology. Laser has been widely used in material processing, precision measurement, remote ranging, holography, telecommunications, medical treatment and seed breeding. It has broad prospects in isotope separation, catalysis and information processing. Laser fusion is an important approach in exploring controlled thermonuclear reaction.

We will study and develop laser physics, laser spectroscopy and non-linear optics in the next 3 years. We should solve a series of scientific and technical problems in optical communications, raise the level of routine lasers quickly and intensify our studies of detectors. We expect to make discoveries and creations in the next 8 years in exploring new types of laser devices, developing new wavelengths of lasers and studying new mechanisms of laser generation, making contributions in the application of lasers to studying the structure of matter. We plan to build experimental lines of optical communications and achieve big progress in studying such important projects of laser applications as separation of isotopes and laser-induced nuclear fusion. Laser technology should be popularized in all departments of the national economy and national defense.

Space science and technology: Space science and technology has been used in many aspects of the military, the national economy and scientific

research so that man is beginning to extend his activities to the boundless universe. The development of space science and technology is bringing about tremendous changes in earth science, astronomy and other disciplines. Space technology has raised such work as meteorological observation, survey of resources, environment monitoring and cartographic survey to the level of concentrated automation. This not only saves large amounts of manpower and time but makes possible a timely collection of a greater wealth of data. As an information transmission center, the manmade earth satellite can send messages directly to different places, thus causing radical changes in the technical system of communications, television and radio broadcasting.

We should attach importance to the study of space science, remote sensing techniques and the application of satellites; build modern centers for space research and systems for the application of satellites; step up the development of the vehicle series, and study, manufacture and launch a variety of scientific and applied satellites; actively carry out research in the launching of skylabs and space probes; and conduct extensive research in the basic theory of space science and the application of space technology.

High-energy physics: High-energy physics is a branch of science that studies the structure of elementary particles and the sublevel structure of matter and the laws governing their interaction. At present, new particles and new phenomena are being discovered, and theoretical research is deepening, bringing about new changes in high-energy physics every day and making it one of the most active frontline branches of study in the development of natural science of our time.

We expect to build a modern high-energy physics experimental base in 10 years, completing a proton accelerator with a capacity of 30 billion to 50 billion electron volts in the first 5 years and a giant one with a still larger capacity in the second 5 years. Completion of this base will greatly narrow the gap between our high-energy accelerators and advanced world levels and will stimulate the development of many branches of science and industrial technology.

We should from now on set about the task in real earnest and make full preparations for experiments in high-energy physics, with particular stress on studying and manufacturing detectors and training laboratory workers. We should step up research in the theory of high-energy physics and cosmic rays, consciously promote the interpenetration of high-energy physics and the neighboring disciplines, actively carry out research in the application of accelerator technology to industry, agriculture, medicine and other spheres, and pay attention to the exploration of subjects which promise important prospects of application.

The high-energy physics experimental base is a key project on the nation's list of scientific research centers, and it is necessary to organize the forces of all quarters to build and use it jointly.

Genetic engineering: It is possible for genetic engineering, an outgrowth of molecular biology, to splice and transfer genetic substance at the molecular level and create new biological species to meet the needs of humanity. Genetic engineering provides an effective means of experiment for such basic studies concerning higher organisms as cell differentiation, growth and development and formation of tumors. It is likely to open new vistas for momentous changes in agriculture, industry, medicine and certain other fields of production.

Genetic engineering is a new branch of study which appeared in the 1970's. Fast developing and highly explorative, it deals with a wide range of disciplines and technologies, yet our country has only a rather weak foundation in this respect. Therefore, we must in the next 3 years strengthen organization and coordination and step up the tempo of building and improving the related laboratories and conduct basic studies in genetic engineering. In the next 8 years we should combine them with the studies in molecular biology, molecular genetics and cell biology and achieve fairly big progress. We should study the use of the new technology of genetic engineering in the pharmaceutical industry and explore new feasible ways to treat certain difficult and baffling diseases and evolve new high-yield crop varieties capable of fixing nitrogen.

We must grasp firmly and effectively the above eight important spheres and organize all forces to tackle the major problems by concerted effort. But this in no way means that we can neglect work in other spheres. All branches of science and technology have their specific positions and roles in our socialist construction, and none can be dispensed with or replaced. It is precisely as a result of the interaction and interpenetration of different branches of study that new disciplines have kept emerging. We should grasp the key spheres well on the one hand and make overall planning and give all-round consideration on the other. Make all-round arrangements while laying emphasis on the key points--this is our policy.

Here I would like to mention in particular the question of multipurpose utilization.

Chairman Hua has given this instruction: "We must attach importance to multipurpose utilization which makes full use of natural resources and alleviates pollution of the environment. The three industrial wastes (liquids, gases and dregs) will bring harm if they are discarded but will become treasures if they are turned to good account." People working in all professions and trades should go in for multipurpose utilization, and the departments concerned should be organized to concentrate their forces on tackling major scientific and technical problems.

Copies of the "Outline National Plan for the Development of Science and Technology 1978-1985 (Draft)" have been distributed to you for your examination.

III. Mobilize the Whole Party To Develop Science Energetically

The march toward the modernization of science and technology is the common task of the whole party, the whole army and the people of all our nationalities. This great march means in essence a comprehensive and fundamental technical transformation of all fields of material production in our country. This is a great technical revolution that history has entrusted to us. Accomplishment of this revolution depends on leadership by the party and on the people of the whole country. Our party organizations at all levels, first of all the leading party groups of the ministries and commissions under the State Council and the party committees of the provinces, municipalities and autonomous regions, must earnestly implement the instructions of Chairman Hua, simultaneously grasp the three great revolutionary movements of class struggle, the struggle for production and scientific experiment, and do the following work well in a down-to-earth manner:

(1) Consolidate the Scientific Research Institutions and Build Up a Scientific and Technological Research System

It is imperative to continue fulfilling all the requirements set in the CCP Central Committee's "Circular on the Holding of a National Conference on Science" and lose no time in making a success of the work of consolidation and in implementing party policies. The party committees at various levels have done a great deal in this respect in the last few months. But the development has been uneven. In some departments and localities the leadership lags far behind the mass movement. This state of affairs must be changed quickly.

The present distribution of our specialized scientific research institutions is not entirely rational; some branches of study are not covered, and some institutions are confronted with quite a number of problems regarding their system of leadership and their orientation and tasks. All this points to the need to devote great efforts to consolidating and building up these institutions. In the next 8 years we must create a nationwide scientific and technological research system that covers all branches of study, which should complement each other and be rationally distributed and developed in coordination, and that integrates professionals with the masses and military research efforts with those undertaken in the civilian sector.

The Chinese Academy of Sciences, the various departments under the State Council and the key universities and colleges must concentrate their efforts on restoring, strengthening and building a number of key scientific research institutions.

They must pay particular attention to strengthening research in those disciplines where the work has been weak and building and expanding a number of research institutions in the basic sciences and new branches of science and technology where there is an urgent need.

The provinces, municipalities and autonomous regions must establish and strengthen research institutions that suit the needs of economic development and their natural conditions and resources. If it is at all possible, branches of the Chinese Academy of Sciences or local academies of sciences are to be established where they are needed. Special attention should be paid to the establishment and development of scientific research institutions in the interior and in areas inhabited by the minority nationalities.

All large industrial and mining enterprises should take active steps to establish and strengthen research institutions. Small and medium-sized factories and mines may establish research institutions independently or jointly, according to the situation. Scientific research groups, technical innovation groups or teams for tackling difficult scientific and technical problems should be set up wherever possible.

Big efforts should be made to strengthen research institutions in agronomy and farm machinery and tools at the county level and, with these as the nucleus, consolidate and expand the network of agrosience institutions and agrotechnical stations at county, commune, production brigade and production team levels.

We must lose no time in consolidating the existing scientific research institutions, particularly the key ones. We must first of all consolidate their leading bodies. It is imperative that party committee secretaries are selected from among comrades who have a good understanding of party policies and are eager to promote science, that experts or near-experts are appointed to leading professional posts, and that conscientious and hard-working comrades are given charge of supply services. It is imperative to remove from leading bodies those persons who are politically bad and make political "earthquakes," persons who belong to the "weathervane school" and the "slippery school," as well as persons who have committed serious mistakes but refuse to mend their ways.

The system of institute directors assuming responsibility under the leadership of the party committees must be applied in scientific research institutions. The orientation and the selection of projects and personnel of the research institutes and their subdivisions should be determined after extensive and serious discussions by the masses and once decided should be kept relatively stable. There must be a good apportionment of personnel of different categories in a scientific research institution, and the present irrational situation in this respect must be changed as quickly as possible.

(2) Open Broad Avenues to Able People and Recruit Them Without Over-stressing Qualifications

The recruitment of able people is a key question in modernizing science and technology. Only with able people can we get worthwhile results.

Resolute measures must be taken to train able people in greater numbers and at a faster rate.

Since education is basic for training scientific and technical personnel, conscientious efforts must be made to run universities and colleges, middle schools and primary schools well, and the key colleges and schools must be run successfully. It is necessary to modernize the means of education step by step, develop television and radio courses and increase and improve the equipment of school laboratories. We should make a success of communist labor universities, "July 21" workers colleges and "May 7" colleges and take active steps to set up television and correspondent universities and night schools. Institutions of higher education can apply tentatively the systems of enrolling day students and auditors and the credit system. In a word, diverse forms and ways must be employed to expand student enrollment. Graduates from all types of schools who have passed examinations and proved themselves qualified college graduates by state standards should be issued diplomas and assigned to jobs where they can put what they have learned to good use.

Great efforts must be made to strengthen postgraduate training. The Chinese Academy of Sciences and institutions of higher learning should take steps to increase postgraduate enrollment, and all production departments and local research institutions that have the required facilities should do the same, so that a large group of fairly well equipped research workers who can work independently is trained in a relatively short time.

We should open all avenues to able people, making selections not only through student enrollment in institutions of higher learning and enrollment of postgraduates but also from among young people who participate in scientific contests, readers of scientific journals, people recommended by various departments and inventors and innovators on the industrial and agricultural fronts.

We must not overstress qualifications in selecting able people. Outstanding students can graduate from school ahead of time. Key colleges and universities can break with conventional practices and enroll exceptionally outstanding young people at any time. Self-taught students who have attained the level of college graduates or complete postgraduate courses can apply for permission to take the appropriate examinations. In a word, our system must be suited and conducive to the development of our scientific and technological undertakings and to the growth of our scientific and technological forces.

We must take resolute steps to transfer to scientific and technical posts those competent and well-trained scientific and technical workers whose specialties are not being put to use. Retired scientists and technical experts who can still work should be allowed to resume work if they apply to do so. Appropriate steps should be taken to assign jobs to

those scientists and technicians who for various reasons have not been given work despite their specialized knowledge.

(3) Institute Regulations for Training, Testing, Promoting and Rewarding Scientific and Technical Personnel

The fundamental task of scientific research institutions is to produce research results and able people.

We already have a working class contingent of scientific and technical personnel who are both Red and expert, which provides the basis for accelerating the development of science and technology in China. But this contingent is not yet large in number nor high in level, and painstaking efforts must be made to increase the numbers and raise the level.

We must exert greater efforts to revolutionize our scientific and technical personnel and encourage them to make a diligent study of Marxism-Leninism-Mao Tsetung Thought, constantly raise their political consciousness and remold their world outlook in the three great revolutionary movements so as to make steady progress along the road of becoming both Red and expert.

It is highly important to train a core force of scientific workers and topnotch scientists. It is not at all a proletarian policy to disregard priorities and forbid people to become topnotch. Scientific and technical personnel who have attained the level of assistant research fellow, lecturer and engineer or higher should be given a certain period of time for advanced study every 2 or 3 years. Plans should be worked out to select and send scientific and technical personnel abroad for advanced study or for short-term work. Various measures should be taken to help scientific and technical workers in general study basic theory and acquire specialized knowledge so as to raise their professional level all the time.

It is necessary to correct such wrong ideas as: It makes no difference whether you work or not, whether you do a good job or a poor one, and whether you do more work or less. We must firmly establish the moral code under which it is correct to work hard to improve professional competence in the service of revolution, it is praiseworthy to produce good results in scientific research for the socialist motherland, and it is an honor to make advances in science and technology in order to achieve the four modernizations. Technical titles should be restored, the system of individual responsibility established for all technical posts, and the testing and promotion of scientific and technical personnel undertaken at regular intervals, in general every 2 or 3 years. Those who prove to be exceptionally outstanding can have their records examined promptly and be promoted more than one grade at a time. Those who prove unequal to scientific research after a period of training and testing should be transferred to jobs more suited to their capabilities.

Scientific and technical personnel who have made important contributions to the country should be rewarded in various ways. Moral encouragement should be the main form, but there should also be proper material rewards.

(4) Uphold the Policy of Letting a Hundred Schools of Thought Contend

"Let a hundred schools of thought contend" is the correct policy Chairman Mao formulated for developing China's socialist cause of science. Free contention among different schools should be encouraged and fostered in science. Imposing one particular school and banning another by administrative fiat can only hamper the development of science. Truth develops through contention. "Only in an atmosphere of democracy can large numbers of able people be brought forward." With regard to academic problems, we should have both freedom for criticism and freedom for refuting criticism; we should foster the attitude of upholding truth and correcting mistakes and strictly prohibit the practice of affixing political labels indiscriminately. Scientific papers and reports must not be withheld from publication unless they divulge state secrets or involve charlatantry. Those scientific and technical personnel who have aired erroneous views on academic questions should not be discriminated against, but should be helped so that they will work better.

The National Scientific and Technical Association and the societies of natural sciences should broaden their academic activities. Scientific research institutions, universities and colleges and all scientific and technical organizations should make it a regular practice to carry out academic activities.

We should encourage and help scientific and technical personnel to study Marxist philosophy. Lenin pointed out: "For natural science is progressing so fast and is undergoing such a profound revolutionary upheaval in all spheres that it cannot possibly dispense with philosophical deductions." ("On the Significance of the Fighting Materialism") It is necessary to hold different kinds of forums regularly, begin publishing journals on dialectics of nature, carry out research on the history of natural science, and encourage scientific and technical personnel to guide their scientific research with Marxist philosophical concepts.

Guiding scientific research with Marxist philosophy in no way means substituting philosophical deductions for concrete, painstaking scientific research. In evaluating scientists, ancient or contemporary, Chinese or foreign, we should avoid negating their achievements in science and technology because of their reactionary political attitudes or idealistic world outlook, or rejecting their correct aspects because of their errors on certain questions.

(5) Learn Advanced Science and Technology From Other Countries and Increase International Academic Exchanges

Science and technology are the common treasure of mankind. All countries and nations have their own merits and characteristics, and exchanges can help them assimilate each other's strong points and blaze new trails. An important way to develop science and technology at high speed is to utilize fully the latest achievements in the world in science and technology and absorb their quintessence.

We should introduce selected advanced technologies that play a key and pace-setting role in line with the needs for modernizing our country. We should take effective steps to master the technologies introduced. Special teams should be organized to learn and study major scientific and technological projects and complete sets of equipment that have been introduced. We should know the how, and endeavor to know the why, of the technologies introduced so as to create our own. We should study earnestly and conscientiously and grasp and understand the subject matter before trying to improve on it. We must not lightly criticize and discard anything before we know it inside out.

We must strengthen scientific and technical cooperation and academic exchanges with other countries and keep abreast of the results, trends, policies and measures of their scientific and technological research as well as their experience in organization and management. We should actively and systematically enlarge the scope of sending scientific and technical personnel, students and postgraduates abroad to study, receive advanced training, make study tours and take part in international academic conferences and other academic activities. At the same time, we will also invite foreign scientists, engineering and technical experts to China to give lectures, serve as advisers or join us in scientific research.

(6) Insure Adequate Work Hours for Scientific Research

Catching up with scientifically and technologically advanced countries means that we must narrow our time-gap with them. High speed means doing more work in less time. In this sense, time is the crucial factor, and we must seize the day and even the minute and the second. Mental labor is also a kind of labor and a very hard one at that. Just as we must insure full work hours for workers and peasants, so we must make sure that scientific research workers can devote at least five-sixths of their time each week to professional work. We must exercise strict control over the practice of assigning scientific research institutions tasks that are irrelevant to scientific research.

Scientific research workers should be encouraged to study and improve their professional competence in their spare time, when they should be left free except for attending party and Youth League meetings or other major political activities.

A special effort should be made to study and solve the problem of insuring an adequate number of work hours for the core research workers. They should be provided with assistants and their administrative duties cut down.

Guaranteeing adequate work hours for scientific research is an important political task for all scientific research institutions. Our party has a fine tradition and rich experience in political work. Since the founding of our People's Republic, the political workers on the scientific and technological front have conscientiously implemented the party's policies, untiringly carried out propaganda and organizational work among the masses and made great efforts to develop science and technology and build up a scientific and technical force. However, our political work was seriously disrupted as a result of sabotage by the "gang of four." We must make a clean sweep of the gang's pernicious influence, carry forward our party's fine style--integrating theory with practice, forging close links with the masses and practicing self-criticism--and carry out lively political work. We must do away with formalism and strive to achieve practical results in all our work.

Supply services in scientific research institutions must serve scientific research, serving the frontline in the battle of scientific research and improving the living as well as working conditions for scientific and technical workers. Our supply workers are dedicated to their job, defying hardship and fatigue and ignoring cold and heat. Their work goes into every achievement in science and technology. A close relationship of unity and cooperation, mutual help, mutual understanding and mutual encouragement should be established between the scientific and technical personnel and the supply workers. It is essential to create favorable conditions for work and study so that scientific and technical personnel can devote themselves entirely to the advancement of scientific research. Steps should be taken to improve canteens, nurseries and other collective welfare facilities and the supply of equipment and materials. Our country is not yet rich enough and cannot possibly solve all the problems of material conditions at once. We can make improvements only gradually, while giving priority to certain important problems. At present, we should first of all improve the working and living conditions of scientific and technical workers who have made outstanding achievements.

(7) Strive To Modernize Laboratory Facilities and Information and Library Work

Modern natural science came into being only after the emergence of experimental science. Many important scientific results have been attained primarily because of the availability of new laboratory facilities. Up-to-date laboratory facilities are an important feature of modern science and technology.

In the next 8 years we should build a number of modern experimental installations and centers. We should give a high priority to refitting the existing laboratories so as to modernize them as quickly as possible.

Emergency measures must be taken to push forward the designing and production of instruments and equipment. Efforts must be made to expand, renovate and build a number of factories specializing in scientific instruments and chemical reagents. Scientific research institutions, universities and colleges should pay great attention to new principles, new techniques and new products in their research on instruments and equipment and where necessary expand the capacity for processing, trial-manufacturing and production.

It is essential to strengthen the management of the designing, production, distribution and use of scientific instruments and bring them under an overall national plan. Costly large precision instruments should be used jointly by the units requiring them so that they are fully utilized. All large modern experimental centers should be open to scientific and technical personnel from organizations related to them and teachers and students from universities and colleges who come to conduct experiments and research so that these centers will gradually become research complexes.

With the development of science and technology, the number of scientific papers and data is increasing tremendously. Several million scientific papers are published in the world every year. If we should fail to keep abreast of the developments, trends and levels of achievement in science and technology the world over and waste our valuable man and material power in following the beaten track and making detours that others have made, it would be out of the question for us to reach, catch up with and surpass advanced world levels in science and technology.

We should improve and strengthen our scientific and technical information institutions and take effective steps to form scientific and technical information networks, each covering a region or a trade. We should collect foreign scientific and technical information and data extensively through diverse channels. We should register and organize exchanges of the research topics and scientific and technical results of our research institutions. Departments of scientific and technical administration, scientific and technical information institutions and all scientific research organizations must improve their analysis and study of information.

It is essential to modernize scientific and technical information work and equip information institutions with modern facilities in the shortest possible time. In the next 8 years we will set up a number of documentation retrieval centers and data bases and build a preliminary nationwide computer network of scientific and technical information and documentation retrieval centers. We should also strengthen the publication of scientific and technological material.

(8) Close Cooperation With an Appropriate Division of Labor

The Chinese Academy of Sciences is the overall center for research in natural science throughout the country. Its main task is to study and develop new theories and techniques and to solve major scientific and technical problems involving many fields of economic construction, in cooperation with the departments concerned. It should lay stress on basic theoretical research and aim at raising standards. The institutions of higher learning serve as both educational and research centers; they are an important force in scientific research, covering both the basic and the applied sciences. Research institutions of the various departments and localities should devote themselves mainly to the applied sciences, but they should also undertake appropriate research in basic science. The above institutions and the nonprofessionals engaged in scientific experiment should work in close cooperation with an appropriate division of labor.

We must develop the attitude of subordinating ourselves to the national interest. We must, first of all, insure the fulfillment of the tasks assigned by the state and key projects, for this is where the overall interest lies. We must avoid diffusing our efforts and guard against the attitude of each going his own way. If every project claims priority, none can make a real advance, and this will be detrimental to the overall interest. It is imperative to give scope to the initiative of both the central and local authorities. Scientific research must be integrated with production and with application. All departments, regions and organizations should display a communist spirit of cooperation and should regard the attitude toward cooperation as a question of world outlook.

(9) Speed Up Popularization and Application of Scientific and Technical Achievements and New Technologies

It is a growing trend that raising labor productivity depends on the application of new technologies. We must take effective steps to change the present situation in which the popularization and application of a large number of scientific and technological achievements have long been delayed. We must first of all overcome the conservative idea among some of our comrades of being content with things as they are, make greater efforts to publicize scientific and technological achievements and new techniques, seriously study and solve the problems that exist in the exchange and popularization of these achievements and change irrational regulations on keeping secrets.

Close attention should be paid to the intermediate links between scientific research and industrial and agricultural production, and essential pilot factories and workshops to trial-produce new products should be built or improved.

We should study and formulate appropriate technical and economic policies and encourage the application of scientific and technological achievements. The standards by which production departments are examined should include the application of such achievements and the innovations made in technology. We should actively support their efforts to apply new techniques and improve work processes by providing them with the necessary materials and funds.

(10) Make Painstaking Efforts To Popularize Science

We must arm our cadres and the masses with modern scientific and technical knowledge.

We should organize popular science groups which combine the efforts of both professionals and the masses, expand the publication of popular science readers and the production of science and education films, run successfully halls of science and technology, museums, exhibition centers, technique-exchanging teams and various kinds of scientific and technical clubs. The press, radio and television should devote more space and time to the dissemination of science and technology. Public establishments should gradually extend their programs to include popular science activities. Where conditions permit, big and medium-sized cities should expand or build halls of science and technology and museums of natural history.

Special efforts should be made to interest our cadres at various levels in science and technology. Arrangements should be made for scientific and technical workers and teachers to acquaint cadres with the latest trends, basic knowledge and current research results in China and the rest of the world.

In popularizing science, we must give full scope to the active role of educated young people settled in the countryside.

All sectors must pool their efforts to foster among the cadres, the masses and the young people the habit of loving, studying and applying science.

Comrades, we have undertaken a task of historic significance. We have a glorious task and a hard job. Under the wise leadership of the party Central Committee headed by Chairman Hua, our advance toward the modernization of science and technology is gaining momentum. We are sure to reach the magnificent goal of the four modernizations!

SPEECH AT CLOSING CEREMONY OF NATIONAL SCIENCE CONFERENCE

Peking RED FLAG in Chinese No 4, 4 Apr 78 p 32

[Speech by Chi Teng-kuei at closing ceremony of National Science Conference on 31 March 1978]

[Text] Comrades:

The National Science Conference has fulfilled its scheduled tasks. On behalf of the CCP Central Committee, I thank all the delegates, staff and service workers whose diligent work and cooperation have made this excellent conference a great success.

In his speech to the conference our wise leader Chairman Hua issued a momentous call for "greatly raising the scientific and cultural level of the whole Chinese nation" and gave important instructions on how our party and our state should develop science and culture in the new period. His speech is a program guiding our march toward the modernization of science and technology. Vice Chairman Teng Hsiao-ping in his speech gave a profound exposition of important principles and policies for developing our socialist cause of science and technology. On instructions from the party Central Committee, Comrade Fang I made a report on the plan and measures for the development of science and technology. After earnest discussion, all the comrades have voiced hearty support for the speeches and the report.

Holding high the great red banner of Mao Tsetung Thought, this conference struck up the drums that hasten the advance and kindled the torch that lights the way. We are confident that, with the impetus given by the conference, the march toward the modernization of science and technology will gain tremendous momentum in both town and country throughout the land. This conference, with its great significance for the present time and its far-reaching historical implications, is certain to be entered in the glorious annals of our party and our People's Republic.

Our conference has been full of revolutionary enthusiasm and fighting spirit and has had a powerful response throughout the land, with warm support from the masses. There has been a steady flow of cables, letters and precious mementos pouring in from workers, peasants, army-men, cadres and intellectuals on all fronts, from "Little Red Guards" of 8 or 9 and old people in their eighties or nineties.

These are tokens of the boundless concern our people in their multitudes feel for scientific and technical work and the fervent hopes they place with our scientific and technical workers.

Vice Chairmen Yeh Chien-ying and Comrade Nieh Jung-chen have been happy to write soul-stirring verses for our conference. We have just had a message from Comrade Kuo Mo-jo entitled "The Springtime of Science." We have all been greatly inspired by the eager expectations of older-generation proletarian revolutionaries for a flourishing growth of science and technology in China.

Comrades, raising tremendously the scientific and cultural level of the whole Chinese nation, putting an end to China's backwardness in these fields as quickly as possible and successfully building a modern, powerful socialist country--this is the great mission history has assigned us, a common task before the whole nation. There is no job that has nothing to do with it, nor anyone who can stand aloof. We hope that the whole party, the whole army and the people of all our nationalities will answer Chairman Hua's call. Study, study and once more study; unite, unite and once more unite. Leading cadres of the party at all levels and all Communist Party members should be models in study and in unity.

Comrades, we are bound to run into many hardships and obstacles on our new Long March. A great deal of work lies before us. We must carry through to the end the struggle to expose and repudiate the "gang of four." We must do hard, solid work, stress practical results and high efficiency, and oppose empty talk and formalism. The people of the whole country, all professions and trades, all provinces, municipalities and autonomous regions should unfold a mass emulation campaign to show which localities, departments, scientific research institutions, schools enterprises and production brigades are capable of good work and rapid progress. We will commend those that work well and make fast progress. Only 22 years are left before 2000. There can be only 22 annual checkups and work appraisals. Time is really tight, with not a minute to lose. We must seize the day and seize the hour, defy all hardships and reach the pinnacles of world science as quickly as possible!

The present National Science Conference is only a good beginning for our march toward the modernization of science and technology. After it closes, I hope you will go back and unite with all comrades, disseminate and implement the conference guidelines and push our science and technology forward as rapidly as possible to help build a modern, powerful socialist party.

I hereby declare that the National Science Conference has come to a triumphant conclusion.

FOSTER LOFTY IDEALS, SET HIGH GOALS AND MARCH TOWARD THE MODERNIZATION OF SCIENCE AND TECHNOLOGY--WARMLY GREETING THE OPENING OF THE NATIONAL SCIENCE CONFERENCE

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 33-35

[Joint editorial of the PEOPLE'S DAILY, RED FLAG and LIBERATION ARMY DAILY dated 18 March]

[Text] The National Science Conference, proposed by the wise leader Chairman Hua himself and convoked by the CCP Central Committee, formally opens in Peking on 18 March. This is an important step for the Chinese people in their new Long March and a new milestone in the development of science and technology in China. It follows the first session of the Fifth NPC, which set the general task for a new period of development of socialist revolution and socialist construction.

The conference will hold aloft Chairman Mao's great banner, implement the line of the 11th National CCP Congress, grasp the key link of exposing and criticizing the "gang of four," formulate plans for scientific and technological development, commend advanced people, cite outstanding achievements and further mobilize the forces in all fields to fulfill the general task for the new period and march toward the modernization of science and technology.

This unprecedented conference on science is bound to provide a tremendous impetus to the socialist revolution and socialist construction in our country. The whole party, the whole army and the people of all nationalities throughout the country are very concerned about and have great hopes for it. We extend warm greetings to the conference.

Chairman Hua wrote a special inscription for the National Conference on Science, calling on us to foster lofty ideals, set high goals and march for the modernization of science and technology. This stirring call gives concentrated expression to the strong desire and firm resolution of the whole party, the whole army and the people of the whole country to push science and technology forward. It gives tremendous inspiration

and boundless strength to the scientific and technological workers and the masses of workers, peasants and soldiers. It encourages us to overcome all difficulties and work tirelessly to scale great heights in science and technology.

It is the glorious historic mission of the Chinese working class and the Chinese people of the 20th century to build our country into a great, powerful socialist country with modern agriculture, industry, national defense and science and technology in this century.

The modernization of science and technology holds the key to the four modernizations. What is meant by the modernization of agriculture, industry and national defense? In the final analysis, it means the use of the most advanced scientific techniques to equip the various sectors of the national economy and national defense.

Chairman Hua pointed out: "Modern science and technology, which are characterized mainly by the use of atomic energy and the development of electronic computers and space science, are experiencing a great revolution leading to the emergence of new industries and spurring the advance of technology by leaps and bounds. To catch up quickly with the dramatic changes in modern science and technology and rapidly transform our backwardness in science and technology is absolutely necessary for quickly developing our national economy and strengthening our national defense power. This must arouse the great attention of the whole party, the whole army, and the people of our whole country."

If we fail to break through the conventions and widely use new techniques in all sectors of the national economy; if we fail to vigorously develop new scientific techniques, including atomic energy, different kinds of satellites, lasers, genetic engineering and especially integrated circuits and electronic computers; and if we fail to earnestly step up theoretical research in such basic subjects as modern mathematics, high-energy physics and molecular biology, it is inevitable that the talk about modernization of agriculture, industry and national defense will come to nought.

To completely change the social and economic outlook of our country, basically change our backwardness and, in the event of aggression by social imperialism and imperialism, avoid our being in the passive position of having to receive blows, and to fully consolidate the dictatorship of the proletariat, prevent capitalist restoration and make a greater contribution to humanity, we must make a breakthrough in the modernization of science and technology, so that scientific research will advance ahead of economic construction. Whether we can advance in science and technology as quickly as possible is a matter of fundamental importance concerning socialist construction as a whole and the destiny and future of our country.

Marxism always regards science as a revolutionary force spurring the development of history. The great revolutionary teachers paid close attention and gave active support to every major discovery in science and every major innovation in technology. Our party has always attached great importance to science and technology. When we were living under the difficult conditions of revolutionary war, we set up in Yenan the Natural Science Research Society of the Border Region. In a speech at the inaugural meeting of the society, our great leader and teacher Chairman Mao set out the famous thesis "Natural science is one of man's weapons in his fight for freedom."

Immediately after nationwide liberation, the party Central Committee proceeded to develop science and technology, later issuing the great call to make advancements in science and technology. Our respected and beloved Premier Chou En-lai personally guided the drafting of plans for the development of science and technology in both 1956 and 1962. Furthermore, in 1963 Chairman Mao made scientific experiment one of the three great revolutionary movements for consolidating the dictatorship of the proletariat, preventing capitalist restoration and building a mighty socialist country and brought it to the attention of the whole party and nation.

The carrying out of a great revolution in science and technology is an important part of the continued revolution under the dictatorship of the proletariat. In a socialist country like ours, which is vast in territory and populous but backward economically, it is an even more pressing political task for us to carry out modernization of science and technology. This is Chairman Mao's consistent thought, an inseparable part of Chairman Mao's revolutionary line.

On the question of whether to carry out revolution in science and technology and whether to strive for modernization, our party has waged an acute struggle against the "gang of four." The "gang of four" wantonly distorted and tampered with Chairman Mao's theory on continuing the revolution under the dictatorship of the proletariat and rabidly opposed scientific and technical revolution and the four modernizations. They babbled: "Up goes the satellite, down plummets the red flag." "The day when the four modernizations are accomplished is the time when capitalism is restored." They even cursed the sciences, attacked knowledge, persecuted scientific and technical workers, disrupted scientific and technical ranks, disbanded scientific research organizations and destroyed experimental facilities. They were the archenemies of science and the people.

Lenin had a famous saying: "In the final analysis, labor productivity is the most important essential guarantee for the success of the new social system."

Without rapidly developing the social productive forces and greatly raising labor productivity, how can socialism triumph over capitalism? If we fail to carry out revolution in technology and fail to accomplish the four modernizations, the very survival of our country and nation will be in doubt. How can we then hold high the red flag? All the activities of the "gang of four" were aimed at turning history backward, keeping the people forever ignorant and having our country retrogress to the semi-colonial and semifeudal old society it once was.

Chairman Hua, carrying out Chairman Mao's behests, led the whole party in sweeping away these pests, in exposing their sham "left" and real rightist features and in criticizing their counterrevolutionary revisionist line. He issued the call of grasping the three great revolutionary movements of class struggle, the struggle for production and scientific experiment simultaneously. We now can carry out socialist revolution and construction according to Chairman Mao's revolutionary line, and thus we can boldly and vigorously promote scientific and technological work.

We are happy to note that since the CCP Central Committee issued the circular on the convocation of a National Science Conference, within a short period of time a new situation has emerged in which the whole party and the whole country are being mobilized to develop science in a big way. In many areas and departments the secretaries of party committees are acting personally to strengthen leadership over scientific and technological work. Many scientific research organizations have been reinforced and strengthened. Scientific research personnel are in high spirits and are competing with each other to assume the heavier responsibilities. Academic interchanges are being developed step by step. New scientific research projects are being initiated one after another. New achievements in scientific research are being made continuously. The enthusiasm to pursue scientific and cultural studies is soaring among students and young people. We can predict that a completely new situation will assuredly emerge in which science and technology will propel the entire national economy forward by leaps and bounds.

The conference is a meeting of heroes active on the scientific and technological front. It is the first time since the founding of new China that such a conference has been convened. Nearly 6,000 delegates from various fields will sit together to expose and criticize the "gang of four," exchange experience, review their achievements and discuss plans. In the past 28 years Chairman Mao's revolutionary line has always been maintained on the scientific and technological front despite the interference of a revisionist line. China's scientific and technological contingent, guided by Chairman Mao's revolutionary line, has made great progress. The overwhelming majority, including those trained after liberation and others from the old society, love the party and socialism and are willing and able to serve the proletariat. They have worked diligently and made tremendous contributions to the development of our country's science and technology.

Even in the days when the "four pests" were running amok, labeling and attacking people everywhere, many of the scientific and technological workers never gave up their endeavors despite the extremely difficult conditions. They never turned in a blank paper. They turned in one excellent report after another to the party and the people. Many such comrades will be present at the conference. They are outstanding representatives of our country's scientific and technological contingent. Facts have proven that our scientific and technological contingent is a fine contingent, a force we can trust and rely on. We should increase the number of scientists, raise their quality and advance science and technology at a faster pace. Anyone who has contributed to the people's cause should have the respect of the state and the people and should be commended and encouraged.

It is the purpose of this conference to commend the advanced units and advanced individuals who have made important contributions and encourage scientists, technicians, workers, peasants and soldiers to foster lofty ideas, set high goals, fear no ghosts, believe in no fallacies, be both Red and expert, attack and capture scientific fortresses and scale great heights in science and technology.

Chairman Hua has repeatedly called for a great rise in the nation's scientific and cultural level. This is an extremely farsighted and important strategic concept. During the revolutionary war years, Chairman Mao pointed out: "An army without culture is a dull-witted army, and a dull-witted army cannot defeat the enemy." Now, apart from continuing the socialist revolution, we are engaged in a new war--fighting the backwardness of our economy and technology. To fight this war of all-round and fundamental technical transformation of the entire material production sphere in our country, we have to master much more scientific and technical knowledge than we did in the past when we fought wars with millet plus rifles.

In achieving the four modernizations, the scientific and technological workers shoulder extremely arduous and glorious tasks. So do the people of the whole country. The four modernizations are the business and responsibility of every person. We shall build a vast army of working-class scientists and technicians who are both Red and expert and, at the same time, carry out scientific experiments with the participation of the masses in their millions. We will launch a movement of technical innovation and revolution throughout our cities and rural areas. If our workers, peasants, fighters, cadres and intellectuals do not have scientific and technical knowledge, it will be very difficult for them to learn modern production techniques, use modern weapons and equipment, and manage a modern economy. It is very obvious that without greatly raising the scientific and cultural level of the whole nation, the four modernizations are no more than empty words. To fulfill the general task for the new period, everyone, while working hard at study in politics, should make a great effort to study science and technology. An environment where

science is loved, studied and made use of should be created for all of the people. This needs to start with children. This conference is a meeting to mobilize the whole party, the whole army and the people of the whole country to study and make use of science, an oath-taking rally to respond to Chairman Hua's call to foster lofty ideals, set high goals and march for the modernization of science and technology.

On the eve of the founding of new China, Chairman Mao said: "The era in which the Chinese people were regarded as uncivilized is now ended. We shall emerge in the world as a nation with an advanced culture." This prediction of Chairman Mao's assuredly will become a shining reality through the diligent labor of all our workers, peasants and intellectuals with great wisdom.

**LEAPING FORWARD ARE THE 900 MILLION IN CHINA--HAILING THE SUCCESSFUL
CONCLUSION OF THE NATIONAL SCIENCE CONFERENCE**

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 35-37

[Joint editorial of the PEOPLE'S DAILY, RED FLAG and LIBERATION ARMY
DAILY dated 1 April]

[Text] In an atmosphere imbued with revolutionary enthusiasm, the spirit of seeking truth from facts, unity and militancy, the grand National Science Conference concluded victoriously after completing its various tasks under the direct leadership of the party Central Committee headed by wise leader Chairman Hua. Both Chairman Hua and Vice Chairman Teng delivered very important speeches at the conference. Vice Premier Fang I presented an important report which won warm support from all delegates; Vice Chairman Yeh also wrote a special epic poem for the science conference. This conference not only inspired the broad masses of scientists and technicians but also attracted the attention of people of all nationalities throughout the country and closely united them. Its great significance will extend far beyond science and technology: it will have a tremendous, far-reaching effect on all fields in building a powerful, modern socialist country. We warmly hail the successful conclusion of this conference!

At the conference Chairman Hua made a farsighted call on the whole party, the whole army and the people of the country's nationalities to work determinedly to "raise the scientific and cultural level of the entire Chinese nation." Chairman Hua pointed out: "Raising the scientific and cultural level of the entire Chinese nation is a colossal task facing all our people. It is a task of strategic importance. Unless it is accomplished, our general task for the new period cannot be fulfilled." Chairman Hua's important speech expresses the common aspiration of the people, reflects the needs of the era, and fires the revolutionary spirit of the whole nation. It is a soul-stirring clarion call which stimulates us to make great strides toward the splendid goal of modern science and technology, requiring efforts by all people on all fronts on a country-wide scale. It leads toward the bright prospect of the elimination of

the three great differences. It is a sublime and heroic declaration. It solemnly declares: Our Chinese nation will appear in the East as a nation with a high standard of culture. Chairman Hua's speech profoundly elucidates the inseparable relationship between socialism and modernization, as well as the dialectical relationships between politics and professional work, between popularization and improvement of standards, between the masses and the professionals and between upholding independence and self-reliance and learning from foreign countries. By correctly handling these relationships, according to Chairman Hua's instructions, we will be able to bring into full play the superiority of the socialist system along the socialist path and greatly promote the great cause of the four modernizations.

In the face of the interference and sabotage of the "gang of four," the conference adopted a clear-cut stand for ending the chaos, restoring order and emancipating our minds. This stand has won great popularity.

Vice Chairman Teng's important speech at the opening session offered a thoroughgoing solution to a series of such major questions as whether science and technology number among the productive forces, whether intellectual workers are part of the laboring people, what is our understanding of and standards for being Red and expert and how we are to assess intellectuals.

This fundamentally clarified the distinction between right and wrong in the struggle between the two political lines and shattered the mental fetters the "gang of four" imposed on the people, particularly the intellectuals, for so long. By following the party's line, principles and policies in the development of science and technology as outlined at the conference, we will definitely be able to even more vigorously arouse the enthusiasm and creativeness of the broad masses of scientists and technicians and worker-peasant-soldier masses and organize a mighty revolutionary army to march toward the four modernizations.

The conference formulated the "Outline National Plan for the Development of Science and Technology for the Years 1978-85." This is an advanced, high-speed program in the service of the four modernizations. Its implementation will mean a great development of science and technology in our land and lay a firm foundation for approaching, catching up with and surpassing advanced world standards in the 15 years ahead. It is a program with a fully scientific basis. Through our efforts, we can certainly reach the goals set.

In the early period after the founding of new China, conditions were very difficult and our foundation was weak. Yet, because we adhered to a correct line, in only 7 years we basically carried out the 12-year plan formulated in 1956, and our science and technology advanced rather rapidly. The "gang of four," our greatest obstacle which caused delays and setbacks in our nation's development of science and technology, have

now been removed, and Chairman Mao's revolutionary line can be more smoothly implemented. Under the strong leadership of the party Central Committee headed by Chairman Hua, we have acquired adequate conditions for developing science and technology more rapidly and for successfully carrying out the 8-year program and 23-year plan. We are very confident of victory.

Our present task is to promptly implement the spirit of the conference, disseminate Chairman Hua's great call among the cadres and masses, and mobilize hundreds of millions of people to foster lofty ideas, set high goals and march toward the modernization of science and technology.

In order to adapt to the new situation and accomplish the new tasks, the whole party, the whole army and the people throughout the country must greatly raise their ideological level and grasp consistently and simultaneously the three great revolutionary movements. Chairman Mao pointed out long ago that class struggle, the struggle for production and scientific experiment are the three great revolutionary movements for building a mighty socialist country. Today, as we vigorously march toward the four modernizations, we feel even more strongly that to accomplish the general tasks for the new period it is very important and urgent for us to firmly implement this brilliant idea of Chairman Mao. Class struggle is the key link. If we do not grasp class struggle, we cannot adhere to the socialist orientation, cannot heighten people's revolutionary spirit and cannot do a good job in the struggle for production and scientific experiment. If we only carry on class struggle and do not conduct the struggle for production and scientific experiment, talk of attaining the four modernizations will be empty talk.

Modernization of science and technology is the key to accomplishing the four modernizations. Science and technology, as productive forces, are playing an increasingly vital role. The way science and technology develop directly affects production levels and the speed of attaining the four modernizations.

We must grasp the three great revolutionary movements simultaneously, regard scientific experiment as an indispensable great revolutionary movement for building a mighty socialist country and develop its scope and depth. If we do not regard scientific experiments as essential, believe that without scientific experiments we can still farm the land and produce goods, or regard it as something that concerns only scientific-technological departments and a small number of people and not as something that needs the participation of hundreds of millions of people, we will be making very serious mistakes. Whether we strongly desire to grasp scientific experiment well and whether we are very enthusiastic about promoting science and technology is a question of whether our desire to build a powerful socialist country is genuine or not. On this question the cadres and masses must raise their consciousness higher and reduce blindness. To learn from Taching and Tachai we

must simultaneously grasp the three great revolutionary movements as they have done. We should make promotion of scientific experiment part of the movements to learn from Taching and Tachai.

Chairman Hua has said: "Our slogan is: Study, study and study again; unite, unite and unite again." Lenin said that communism is soviet power plus the electrification of the whole country. Our general task in the new period is the dictatorship of the proletariat plus the four modernizations. To achieve the four modernizations is a new subject for us. There are many things we do not understand. In front of us is a great unknown realm of necessity. Since we do not understand, we must study. Everyone must study, especially the leading cadres at all levels--they are to be commanders in marching forward toward the four modernizations. They must take the lead in study. We must diligently study Marxism-Leninism-Mao Tsetung Thought and raise our political consciousness and ideological level. We must also diligently study to raise our general educational level and study science and technology to master the working skills and management methods required by modern production. In science and technology a gap exists between us and advanced world levels. In the final analysis it is a gap between people's scientific and cultural levels. In the past, people who could not read were called illiterates. In marching toward the four modernizations, if we do not understand science and technology, we will be "science-blind"--we will be unable to fulfill the tasks for the new period assigned to us by history. Are we willing to be "science-blind"? Of course not. We should not only train a large number of outstanding specialists in science and technology but also mobilize the people in their hundreds of millions to study hard and raise the scientific and cultural level of the entire nation; only when this happens will it be possible for us to catch up with and surpass advanced world levels in every field and to speed up the four modernizations. We must start a new sustained study movement and turn the whole country into a great political, scientific and cultural school.

Chairman Mao taught us: "The unification of our country, the unity of our people and the unity of our various nationalities--these are the basic guarantees of the sure triumph of our cause." In order to accomplish the four modernizations, we must continuously develop the excellent situation of stability and unity and unite all forces that can be united throughout society. We must strengthen the unity inside and outside the party, the unity among workers, peasants and intellectuals, the unity between professionals and the masses, and the unity with foreign friends; we must mobilize all positive factors, whether directly or indirectly.

Strengthening study and strengthening unity are two important conditions for realizing the four modernizations. When these two conditions are met, the prospects for building a powerful, modern socialist country will be very good.

During this conference the line, principles and policies on developing science and technology have been clarified, plans have been formulated, and measures that have been adopted are very specific. It is of crucial importance that party committees at all levels strengthen leadership and change their workstyle so that the task of modernizing science and technology can be effectively implemented. Party committees at all levels, and those of provinces, municipalities and autonomous regions in particular, should put the launching of a campaign in scientific experiment as an important item on their work agenda and do a really good job in strengthening leadership over science and technology. A careful study should be made on how to deepen the struggle to expose and criticize the "gang of four" on the scientific and technological front. No time should be lost in strengthening the scientific research institutions, particularly including their leadership. More work should be done in carrying out the party's policies on intellectuals. Political work should be strengthened and improved, and a good job should be done in logistic support in order that better conditions will be created for quickly advancing our scientific research.

Lenin said: "We should not indulge in idle talk, because idle talk cannot satisfy the working people's needs." No amount of idle talk can narrow an inch the gap between our country and advanced world levels in economy and technology. Instead, it can only delay the process of the four modernizations. In this sense, indulging in idle talk is a crime. We must do solid work and find real solutions to our problems. To catch up with and surpass advanced world levels, we must race against time and work fast. Whatever we do, we must stress tangible results and efficiency and must not merely put on a show. We must oppose formalism. The habit of following the beaten track, engaging in self-indulgence and moving sluggishly--work habits that are the results of the backward mode of production operating for a long time in our country--very seriously impede the realization of the four modernizations and must be resolutely cast away. We must thoroughly eliminate the "gang of four's" poisonous influence and seriously change our old habits and workstyles so that our workstyles can meet the requirements of the four modernizations and we can really become activists in promoting the four modernizations.

Some 40 years ago, under the leadership of Chairman Mao, the Chinese workers and peasants Red Army made the 25,000-li Long March. Those heroic sons and daughters of the Chinese nation climbed snow-capped mountains, passed through grasslands and crossed treacherous rivers. They went through all kinds of hardships bordering on the limits of human endurance. They surmounted innumerable dangers and obstacles and worked wonders in the history of China and the world as a whole. We are now on a new Long March heading for the four modernizations, which once again is a unique heroic undertaking. This Long March is great and extremely difficult. In a sense, it is no less difficult than the 25,000-li Long March. The "snow-capped mountains" and "grasslands" still lie on the road ahead, and we still have to attack "Latzukou" and cross

the "Tatu River." But as long as we hold high Chairman Mao's great banner, obey the command of the party Central Committee headed by Chairman Hua and carry forward the spirit of "the Red Army fears not the trials of the Long March, holding light ten thousand crags and torrents," we certainly will be able to sweep away all difficulties and achieve our goals.

"Leaping forward are the 900 million in China, and, when satellites fly past like lightning, startled is Wu Kang." We are engaged in a very glorious and great undertaking never before attempted by our ancestors. Our cause must and can be victorious. Let us unite and, under the command of Chairman Hua, adhere to the line of the 11th National CCP Congress and advance courageously toward the splendid goal of building a powerful, modern socialist country.

THE RED ARMY IS NOT AFRAID OF A DIFFICULT LONG MARCH

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 38-40

[Article by RED FLAG Commentator]

[Text] A new great Long March has begun!

Chairman Mao, our great leader and teacher, led us for more than half a century and founded a socialist new China. Now, carrying on where he left off, Chairman Hua, our wise leader, is leading us to undertake a new Long March toward building China into a strong, modern socialist country.

In the history of China's development, it was an earth-shaking change for the old China of semicolonial and semifeudal nature to be transformed into a new socialist China. It will again be an earth-shaking change for the economically and technically backward China to be turned into a socialist modern China advanced economically and technically. On the eve of the founding of new China, Chairman Mao said: "Winning the countryside victory is only the first step in a long journey of 10,000 li," and "the journey after the revolution will be longer, the work greater and more difficult." The new Long March will be a profound political, economic, scientific and technological revolution which will be greater and more arduous than any previous struggle.

The new Long March is to realize the general task of the new period of socialist revolution and construction set for the whole party and the whole nation by our party's 11th National CCP Congress and the Fifth National People's Congress. This means to persist in continuing the revolution and develop the three great revolutionary movements--class struggle, the struggle for production and scientific experiment--under the dictatorship of the proletariat and to build our country within the present century into a great and powerful socialist country with modern agriculture, industry, national defense and science and technology. This general task has solemnly been written into the new constitution. Now, an upsurge of mass study, mass propaganda and mass mobilization is

being whipped up throughout the land. "On the path of the new Long March, what are we going to do?" people ask each other wherever they meet, and they ponder the following questions: How should we view the historical mission placed on our shoulders in the new period? How are we to unify our thinking and actions along with the general task of the new period? How should we carry forward and promote the fearless, heroic spirit of "the Red Army is not afraid of a difficult Long March," join the new Long March and make our own maximum contributions? Such rising revolutionary enthusiasm is really encouraging. With the entire Chinese nation being mobilized to rise vigorously and become strong rests the hope of completing the new Long March.

The realization of the general task in the new period will make our socialist motherland undergo extremely profound and colossal changes in various spheres from the productive forces to the relations of production and from the economic base to the superstructure. By the end of the 20th century, China's national economy and science and technology will join the front ranks of the world. Our socialist production relations will be further developed and strengthened, the dictatorship of the proletariat will be more consolidated, the level of the people's material and cultural life will be greatly raised and the might of national defense will be enormously increased. Turning China into such a strong, modern socialist country was the last wish of both great leader Chairman Mao and respected and beloved Premier Chou--and an ideal the Chinese people have eagerly sought to achieve for many years. Now, this great ideal will be turned into a brilliant reality through the efforts of this generation.

There are all kinds of roads toward modernization. There is the road of capitalism and imperialism and there is the road of revisionism and social imperialism. The modernization we are to achieve is the modernization in the socialist direction. According to the general task of the new period, we must steadfastly take class struggle as the key link, persist in the struggle of the proletariat against the bourgeoisie and combat and prevent revisionism. We must continue the revolution in the area of production relations and in that of the superstructure and keep reforming those parts of both which are incompatible with the development of the productive forces in order to further release the productive forces and pave the way for the revolution in production technology. By closely linking socialist revolution and modern construction and by simultaneously taking up the three great revolutionary movements it will be possible to insure that our country will advance along the socialist road and bring about socialist modernization while continuing the revolution under the dictatorship of the proletariat.

The new period will be a period of crucial significance for the consolidation of the socialist system in our country. Chairman Mao pointed out as long ago as 1957 that only through the relatively full development of the social productive forces would our socialist economic and political

institutions acquire their own relatively adequate material basis and would our country become fully consolidated. In the final analysis, high-speed development of the socialist economy will be of decisive meaning for all kinds of work in the new period--political, economic, cultural, military and foreign affairs. How can the superiority of the socialist system be fully demonstrated and the ultimate triumph of the new socialist system over the capitalist system be insured if our rates of production growth and labor productivity do not surpass those of capitalist countries? We must realize the four modernizations as quickly as possible and have our socialist system built on the strong material basis of modern large-scale production before we can consolidate the dictatorship of the proletariat, prevent capitalist restoration, impel continuous reform in socialist production relations and superstructure, gradually narrow the three major differences and more effectively prepare to cope with aggression by social imperialism and imperialism. By the end of the present century, China will stand on its feet in the world as a strong modern socialist country--one that will neither seek hegemony nor become a superpower but will firmly stand on the side of the world proletariat and the oppressed peoples and nations. This will greatly promote the progress and the liberation of mankind. The Chinese nation with one-fifth of the world's population will, as Chairman Mao earnestly hoped, make a greater contribution toward humanity.

Our goal is great and magnificent. Our future is bright. The party Central Committee headed by Chairman Hua has already set forth the line, policies and plans for the fulfillment of the general task, and the grand principle of grasping the key link in bringing order across the land has been laid down. Now, we must unify the thinking and action of the whole population along with the general task of the new period, mobilize all positive factors and unite with all forces that can be united with to work realistically and hard, eliminate interference and overcome difficulties so as to complete step by step the various tasks placed before us.

Chairman Mao pointed out: "Grasping ideological education is the central link for uniting the whole party to conduct great political struggles. If this task is not solved, it will be impossible to fulfill all the political tasks of the party." We must grasp this central link--ideological education--in the same way we carried out the general line and general task of the transitional period in former years by unfolding among the people of the whole country mass study, mass propaganda and mass mobilization so that the general task of the new period will be known to every household and person. When people are of one will, they can remove Mount Tai. Only when the hundreds of millions of people know the truth, the goal of our struggle and the way, plan and measures for the fulfillment of this goal will we increase our confidence in our ability to win, raise our courage to overcome the difficulties and hazards, pool together our ideas and strength and strive to complete the new Long March.

The mass study, propaganda and mobilization must be joined closely with the struggle to penetratingly expose and criticize the "gang of four." We waged an acute and violent struggle with the gang over whether it was necessary to have the four modernizations. Flaunting the banner of "grasping class struggle," the gang alleged that to carry out the four modernizations "is to let the bourgeoisie rise to power," "the day when the four modernizations are realized will be the time when capitalism will be restored," to step up production was to "prepare the wedding gown" for capitalism, to promote scientific research was to take the "White and expert road," and so on. They labeled and bludgeoned people everywhere, called black white, slandered socialist modernizations as capitalist modernizations and seriously distorted the thinking of people. This made it impossible for cadres to promote the three great revolutionary movements or to carry out socialist modern construction, impossible for workers and peasants to carry out production and impossible for scientists and technicians to engage in vocational research. Extremely grave consequences were thus created. The gang opposed and sabotaged the four modernizations because these would strengthen the material foundation of socialism, consolidate the dictatorship of the proletariat and make it more difficult for them to realize their dream of restoring capitalism. They were the sworn enemies of socialism and their evil goal was to turn back the wheels of history and drag our country once again into the dark chasm of a colonial or semicolonial land. Such was the real substance of the ultrarightist counterrevolutionary revisionist line pushed by the gang under cover of an ultra-"left" disguise. Although the gang was smashed, the various fallacies they spread still bind some of our comrades today. Still "haunted by fears," these comrades are indecisive and hesitant in marching toward socialist modernization. For this reason, we must fully utilize the gang as a teacher by negative example, carry out the struggle to expose and criticize the gang well and to the end, and thoroughly smash its spiritual chains and pernicious influence. People on all fronts should, on the basis of their actual conditions, deeply criticize those reactionary ideological viewpoints of the gang which they feel exerted the most intensive and extensive pernicious influence, and at the same time they should combine their study and criticism with their summing up of both the positive and negative experiences.

To realize the general task and complete the new Long March is a great undertaking. The responsibility is heavy and the journey is long and numerous difficulties will be encountered. To catch up with and surpass the advanced world level within the present century, we must in 23 years' time walk the path that took others 40 to 50 years or even longer to walk. Particularly in the first 8 years, we must lay a solid foundation and reach a number of targets such as an annual output of 800 billion catties of grain and 60 million tons of steel so as to bring about a substantial development of the national economy as a whole. To this end, people on all fronts must fight many tense and tough battles. This requires that like the Red Army of former days when it had to climb snowy mountains and

cross grasslands and in the same manner as we fought the war of resistance against Japan and the war of liberation, we make up our minds, fear no sacrifice and surmount every difficulty to win the victory. We must despise difficulties strategically and pay serious attention to them tactically. In the past, it was in accordance with this teaching of Chairman Mao's that we, through struggle, grew from a small force to a big force and from weak to strong and defeated the powerful enemy. Today, if only we hold fast to this instruction, we shall also be able to overcome the hurdles and attain high speed.

Cadres become the decisive factor after the political line is determined. The resolve of the party Central Committee to achieve the general task is very great and the enthusiasm of the broad masses is very high. The crucial question is that leading bodies at all levels must stand in the van of the struggle, walk in front of the movement and join the masses in combat. They must intensify their ideological revolutionization, restore and develop the party's fine traditions and workstyle and thoroughly eliminate subjectivism and bureaucratism. The attainment of the four modernizations is in many ways still an unknown realm of necessity, and one will be confronted with many unfamiliar new situations, new things and new problems. We must make an effort to learn, study Marxism-Leninism-Mao Tsetung Thought, study politics and economics, science and technology and production management, know the ropes of our trade and become experts. Veteran cadres must do their best to help the younger ones so as to train and discover more talented people for the revolution. Leading cadres at various levels must lead the masses to work realistically and in a big way, so that through practical efforts the appearance of their own department, area or unit will change constantly and there will be a leap forward year after year. If the area or unit under your charge fails to produce good results in 1 year, that may be forgivable, but if it still fails to produce good results in 2 years, then it should be criticized. If after 3 years the situation remains the same, then it will have let the party and the people down. Of course, as far as leading organs at various levels are concerned, it is necessary to care for and support the work of cadres at the lower levels, inspire and cherish their enthusiasm and commend their achievements. If they have shortcomings or make mistakes, it is necessary to help them warmheartedly and assume responsibility for them. It is only in this way that it will be possible to fully develop the initiative and creativeness of the vast army of cadres.

It is the common cause of the hundreds of millions of people to realize the general task and complete the new Long March. The masses of people have unlimited creative power. This creative power is being fully demonstrated on all fronts with the force of a landslide since the "gang of four" were smashed, and this is the guarantee for us to overcome difficulties and achieve the general task. We must promote socialist democracy, consult the masses on matters of common concern and respect their pioneering spirit. We must seriously implement the various policies of the party

in order to call forth the socialist zeal of the hundreds of millions of the masses. Their enthusiasm must be highly cherished once it is aroused. The new Long March has provided an opportunity to the people of the whole country and in all trades and professions to show their prowess. All the Chinese with aspirations must commit their whole strength to making their mother country prosperous and strong.

Though there will be innumerable difficulties and hazards on the road of the new Long March, we should see that after the removal of the "gang of four," the biggest obstacle blocking the road of progress, we have unprecedentedly favorable conditions for winning victory. We have the superior socialist system and the enthusiasm of the hundreds of millions of people to build socialism in a big way. We have vast land and rich resources. We have the material foundation that has been built up for more than 20 years and the rich experiences, both positive and negative, of socialist revolution and construction. We have extensive support from revolutionary people the world over. What is especially important is that we have the guidance of Chairman Mao's revolutionary line and have wise leader Chairman Hua at the helm. Provided that the whole party and the people of the whole country hold high the great banner of Chairman Mao, closely follow the strategic plan of the party Central Committee headed by Chairman Hua, unite as one and strive to study and fight together, then we shall assuredly be able to triumphantly reach the other shore after bypassing the shoals on the new journey of 10,000 li.

CORRECTLY IMPLEMENT CHAIRMAN MAO'S PRINCIPLE OF SHOWING CONCERN FOR AND
TAKING GOOD CARE OF CADRES

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 41-47

[Article by RED FLAG contributing commentator]

[Text] The historically significant 11th National CCP Congress and the recently concluded Fifth NPC issued the call for building a modern and powerful socialist country. Under the direction of the party Central Committee headed by Chairman Hua, China's 800 million people are embarking on a new Long March.

In accordance with Chairman Mao's principle of taking good care of cadres, we should train a large number of commanding personnel who are expert in both political and professional work as well as a large number of people who are capable of carrying out construction in various fields--this is the most urgent and important militant task which we must carry out during this new Long March.

Showing concern for cadres and taking good care of them is a fine tradition of our party. As early as the Sixth Plenum of the Sixth CCP Central Committee, Chairman Mao explicitly pointed out: "We must know how to take good care of cadres. There are several ways of doing so. First, give them guidance. This means allowing them a free hand in their work so that they have the courage to assume responsibility and, at the same time, giving them timely instructions so that, guided by the party's political line, they are able to make full use of their initiative. Second, raise their levels. This means educating them by giving them the opportunity to study so that they can enhance their theoretical understanding and their working ability. Third, check up on their work and help them sum up their experience, carry forward their achievements and correct their mistakes. To assign work without checking up and to take notice only when serious mistakes are made--this is not the way to take care of cadres. Fourth, in general, use the method of persuasion with cadres who have made mistakes and help them correct their mistakes. The method of struggle should be confined to those who have made serious

mistakes and nevertheless refuse to accept guidance. Here patience is essential. It is wrong to wantonly label people as 'opportunists' or begin waging struggles against them. Fifth, help them with their difficulties. When cadres have difficulties as a result of illness, stringent means or domestic or other troubles, we must be sure to give them as much care as possible."

Due to the serious interference and sabotage of Lin Piao and the "gang of four" in past years, this correct principle laid down by Chairman Mao has faded from the minds of some veteran comrades, while some young comrades do not understand this fine party tradition. In the struggle to expose and criticize the "gang of four," party organizations at various levels and comrades in leading positions, keeping their positive and negative experiences in mind, must restudy and correctly implement Chairman Mao's principle of taking good care of cadres and eliminate the pernicious influence of the revisionist cadre line pursued by Lin Piao and the "gang of four." It is essential for us to do this in order to build a powerful contingent of cadres and to unite and lead our hundreds of millions of people in striving to fulfill the historic tasks in the new period.

It Is Necessary To Give Guidance to Cadres

The first important question a leader has to solve in showing concern for cadres and taking good care of them is to give cadres correct and timely instructions so that, guided by the party's political line, they are able to make full use of their initiative. In connection with this question, Chairman Mao made the following two points: First, allow cadres to have a free rein in their work; second, give timely instructions to cadres. Allowing cadres to have a free rein means helping them to liberate their thinking and, guided by Marxism-Leninism-Mao Tsetung Thought, to be bold in their thoughts and action; it also means placing responsibility on their shoulders and asking them to work independently. "True knowledge comes from practice; genuine gold is refined through a blazing fire." Therefore, strong and fine cadres must be tempered in the storms and waves of mass struggle. A leader must support cadres and give them a free rein in their work. They should be allowed to temper themselves in practical work so that they can gain both positive and negative experiences and enhance their abilities and talents. When cadres are not given responsibilities for fear that occasional mistakes may be made, and when various restrictions are imposed on cadres for fear that they may cause trouble, this actually indicates distrust of cadres. Binding cadres' hands and feet only encourages slavishness, which is by no means conducive to taking full use of cadres' creative talents and initiative. To do so makes it impossible to train successors who can meet the needs of the proletarian revolutionary cause.

Allowing cadres to have a free rein does not mean letting them take their own course. It is necessary to give them timely instructions

while they are carrying out their tasks. It is necessary not only to assign cadres duties but also to inform them of the significance, steps and methods of fulfilling such duties. It is necessary not only to explain to them the party's line, principles and policies, but also to constantly discuss with them problems that should be noted and deviations that may occur in work and to study with them ways and means of solving such problems, so that the cadres can develop their initiative and creativeness under the guidance of the correct line. If a leader fails to give cadres timely guidance, it is a manifestation of his irresponsibility to the party and the cadres and a bureaucratic way of doing things.

Motivated by their restorationist ambition to establish a new regime, Lin Piao and the "gang of four" harbored bitter hatred toward the broad masses of revolutionary cadres and wantonly persecuted them by labeling and bludgeoning them at random. Wasn't it true that Chang Chun-chiao, the Kuomintang spy, said that he didn't care how work was to be done and that all he cared about was "retaining the right to criticize"? This so-called "right to criticize" was a bludgeon later used against the people. Under the evil influence of Lin Piao and the "gang of four," some leading comrades, who still act with trepidation, don't dare to express their opinions when confronted with contradictions and with questions concerning right and wrong; they don't dare to assume responsibility for mistakes.

Chairman Mao taught us: "Without investigating the actual situation, there is bound to be an idealist appraisal of class forces and an idealist guidance in work." If we do not go deep among the masses, have no contact with reality, and allow "nature to take its course," we will not progress in our work and will not even appear to exercise leadership. This situation will not only undermine the normal relationship between upper and lower levels and cause leaders to lose prestige, but will inevitably affect the development and advancement of cadres.

Chairman Mao said: "It is necessary for the party's leading organs to have correct guidance and to find solutions for problems so that a leadership core can be established." The key to achieving this task lies with the leading comrades, who must have a great understanding of Marxism and the party's line, principles and policies. The leading comrades must heighten their awareness of implementing the party's line and must study well in order to understand everyday work, including that involving cadres, and must effectively obtain firsthand information and more accurate assessments of the situation at lower levels.

Leadership at all levels must go to the frontline to sum up and make good use of the experiences of the masses by "grasping the work in one-third of an area," by making use of typical examples and by strengthening guidance for cadres in order to implement the party's line, policies and decisions and change the bureaucratic workstyle of not holding free discussions at meetings and of creating excessive paperwork. Only if that is done can leading organs take a clearcut stand and assume a command position, thus bringing into full play the key role of leadership.

It Is Necessary To Raise the Level of Cadres

Our party has constantly paid great attention to the work of educating cadres. Both in war and in peace, the party has energetically created conditions and organized cadres to study Marxism, culture and professional work in order to enable them to constantly raise their ideological and theoretical level and enhance their working abilities.

During the infancy of the party, Chairman Mao set up the Peasant Movement Lecture Institute to train backbone elements for the peasant movement. Not long after the Red Army arrived in northern Shensi, our party successively established the University of Resistance Against Japan, the party school, the Shensi public school, craft schools, the girls college, training classes and classes for the training of youth run by its organizational department, and workers schools--altogether more than a dozen cadre schools. Chairman Mao concurrently became the principal of the Central Party School and delivered lectures, and he directed that the various base areas establish large-scale cadre schools as far as possible. Speaking of the unprecedentedly booming condition of the training of cadres by our party in Yen-an, Chairman Mao once said humorously that when Confucius opened his school he had "70 sages and 3,000 disciples," and that was quite an achievement. However, the number of his students was very small compared with that of the students in Yen-an; moreover, the former neither studied revolutionary theories nor took up labor. Chairman Mao also stressed the need for cadres to persist in study at their work stations. At a study mobilization meeting convened by the cadre education department of the Central Committee in 1939, he called on the cadres of the whole party, who were busy in work and production, to "squeeze" some time to study and to understand problems by means of "penetrating research." On Chairman Mao's initiative, a partywide study emulation campaign, far-reaching in historical significance, was vigorously whipped up, preparing a large number of cadres for winning victory in the war of resistance against Japan and for liberating the whole country.

After the nationwide liberation and in the wake of the continuous deepening of the socialist revolution, Chairman Mao pointed out with foresight that the important question now was to reeducate the cadres. He said that if the cadres were properly educated our cause would have a bright future; otherwise, he would not have a way out. He said that in carrying out the democratic revolution we must educate the cadres on a long-term basis and that we must also do the same with the socialist revolution. During the Great Proletarian Cultural Revolution, Chairman Mao warned the whole party time and again that it was necessary to read and study seriously, master Marxism and raise our power of discernment, and not to fall into the trap of those pseudo-Marxists.

An important question in educating cadres is to conscientiously organize cadres in a planned manner to make painstaking efforts to study

Marxist-Leninist works and Chairman Mao's works and the party's line and policies in order to heighten their awareness of the line and their level of understanding policies.

Concerning Marxist works, it is necessary, first of all, to study basic theories and basic principles in order to recognize and grasp the objective law of the development of socialist society. If a cadre does not understand the basic principles of Marxism, he will find it hard to do his work well. In the struggle against Lin Biao and the "gang of four," some comrades made mistakes of one kind or another and thus held that it was impossible to understand the struggle between the two lines. The reason for this kind of thinking was that they had not really implanted the basic Marxist principles in their minds. The struggle to expose and criticize the "gang of four" is also a Marxist education movement. It is imperative to closely combine the study of Marxist theory with the struggle to expose and criticize the "gang of four" and to launch a new upsurge in studying Marxism-Leninism-Mao Tsetung Thought in the whole party, in the whole army, and among the people of all nationalities in the country. Cadres, particularly leading cadres, should play an active part in this new upsurge.

We have now entered a new period of building a modern and powerful socialist state. During this new period we will overcome nature on an even larger scale and march toward the four modernizations. The key to accomplishing the four modernizations lies in the modernization of science and technology. Therefore, raising the scientific and cultural level of the entire Chinese nation is a new strategic task confronting us. In view of this, in educating cadres we should pay great attention to organizing them to learn about science and technology and culture and see to it that they not only understand Marxism but also have some knowledge of the natural sciences and become experts and specialists in certain fields. During the period of the democratic revolution, in order to overthrow the three big mountains, our cadres learned about fighting and land reform, and many of them became experts and specialists in these fields. Today, in order to realize the four modernizations, we should also rearm our cadres with new knowledge of science and technology and culture. Our party must learn the things it did not understand in the past, and it must have thousands and thousands of experts in science and technology and economic work. Some cadres have onesidedly thought that a layman could lead the experts, and for a long time they did not study vocational affairs, content with being "outsiders." They even pretended to know what they did not know. This simply won't do. Of course, it is impossible to expect them to know everything, but we should nevertheless enable them to gradually master the vocational affairs in their charge through their own painstaking study. As revolutionaries, we should adapt our thinking to the new, ever-developing conditions, accept new things and study new problems. It is necessary to study, study and study again. At no time should we be armchair politicians. Some cadres of worker and peasant origin, after joining the revolution, were for a long time unaware

of the need to study culture and science and technology. It is now time to change this situation as soon as possible.

When Lin Piao and the "gang of four" were in power, they randomly slandered people for "taking the road of becoming bourgeois specialists" and babbled that "the more knowledge one has, the more reactionary one will become," thus suppressing and dealing a blow at cadres' enthusiasm to study culture and professional work. In the struggle to expose and criticize the "gang of four" we must eliminate their pernicious influence and foster a spirit that regards efforts to study as an honor and reluctance to study as shameful, and being both Red and expert as an honor and refusal to make progress as shameful. We must take effective measures to raise the cadres' scientific, technological and cultural knowledge to a new level.

The key to whether or not cadres--guided by a correct line--are able to mature rapidly is whether leaders attach great importance to the work of educating cadres, properly handle the relationship between work assignments and training of cadres, and do a good job in training and raising the level of cadres. "The grinding of the axes must not delay the work of chopping firewood." When the axes are sharpened fast, quicker results will be had with only half the effort. Some cadres have worked for many years and yet failed to significantly raise their ideological level and work abilities, and some cadres fell into the traps of Lin Piao and the "gang of four" because they did not understand Marxism-Leninism. These facts should make us clearly see that great efforts must be made to step up the work of educating the cadres. It is necessary to carry forward the fine tradition of our party in cadre education work, make vigorous efforts to do a good job in running various cadres schools, including 7 May cadre schools, and strengthen the cadres' study at the schools. During the education of cadres, studies of politics, science and technology and culture must be arranged in a unified manner in the light of the requirements of work, and a system of checking the results must be introduced. Leaders must play a leading role in creating an atmosphere conducive to study and actively create study conditions for cadres.

Since the smashing of the "gang of four," the Central Committee has made the decision to promptly reopen and earnestly run well party schools at all levels, and Chairman Hua has called on the whole party to launch a study emulation campaign and urged our comrades to conscientiously make painstaking efforts to study Marxism-Leninism, economics, production management, and science and technology in order to become both Red and expert. The study emulation campaign of the new period, like that of our party in the war of resistance against Japan, will surely leave a splendid new chapter in the revolutionary annals of the Chinese people.

It Is Necessary To Check the Work of Cadres

By checking their work, leading organs will learn about advanced experiences that may be of significance in guiding all areas, will learn about new problems that have arisen and will find solutions to them. This is quite necessary in party work and in the heightening of the level of quality of the cadres. Such a method of checking work which starts from loving care for the cadres is not to pour cold water on the cadres, and they welcome it. In checking work, emphasis should be placed on examining how cadres implement the party's line and policies. This should include checking their way of thinking, their workstyle, their work efficiency, and their efforts in studying Marxism-Leninism, improving professional skills, and taking part in collective productive labor.

In conducting checks it is essential to make conscientious analyses and clearly distinguish between right and wrong, achievements and shortcomings, what should be done and what should not be done. The cause of mistakes and shortcomings should be determined, achievements publicized, and errors corrected. Such practices as going only infrequently to grassroots units to check work or only glancing at work without careful study do not allow a cadre to fulfill his responsibilities.

In China's great struggle for socialist revolution and construction, Chairman Mao, Premier Chou, and other proletarian revolutionaries of the older generation conducted regular inspections on all fronts and traveled throughout the vast motherland. Wherever they went they met the cadres and the masses, held cordial talks with them, conducted deep-going investigations in order to understand all kinds of new phenomena and problems arising in everyday work, and gave warm support to the creative spirit of the masses, thus greatly encouraging the broad masses of cadres and people. They also tried to discover the shortcomings in the cadres' and masses' work in order to correct them in time. Thus, the older generation of revolutionaries are brilliant examples for leading cadres to emulate.

Opportunist chieftains within the party always make use of the power they usurp and, in the name of inspection, push their opportunist line. When they see something on the surface or a side issue, they gesticulate with their hands and feet and condemn this or that. On the other hand, they take their ways of doing things as "absolutely correct" and ask others to follow them "without hesitation." The result is to hurt the cadres and harm the party cause. The "gang of four" went further and used checking on work as a means of purging people and willfully persecuted the cadres. These so-called checks were nothing short of disasters for those areas and units subject to such checks.

While checking work, it is imperative to guard against the evil wind of formalism fostered under the poisonous influence of the "gang of four." Certain people invited guests to dinner, sent gifts to others, made

sightseeing trips, and played deceptive tricks under the pretext of "checking," "comparing" and "appraising" work. This not only resulted in waste but also turned our party's solemn task of checking work into bourgeois ceremonies of "courtesy" in which there was mutual praising and cheating. This had a detrimental effect on the people, the cadres, and the party's cause. Some cadres who worked in the basic levels were bitter about such "checks" by the leaders and deeply resented them. And for such "inspectors," the masses of people were justified in beating them with their "shoulder poles." We must, through the struggle to expose and criticize the "gang of four," sweep away such dirty things of the exploiting class and restore our party's fine traditions. Constant attention should be paid to checking work, and whenever a problem arises, immediate action should be taken to resolve it without allowing problems to accumulate. Criticism should be made in time. "After the fact" criticism is not recommended. In 1958, a year which witnessed the Great Leap Forward, Chairman Mao proposed the work methods of mapping out overall plans, making several inspections a year and evaluating and comparing results at yearend, and he asked the central and provincial authorities to undertake several inspections of work annually. With regard to the important tasks, it was even more necessary to examine them in time before they were fully launched. Realization of the strategic objective of grasping the key link in running the country well requires that such a tradition and system of regular inspections of work be restored and perfected. It is the masses who understand the cadres the most.

In checking the cadres' work, we should patiently listen to the cadres' reports, and, more importantly, we should learn about the masses' reaction to the reports. On the basis of fully understanding the situation and analyzing the problem by seeking truth from facts, we should boldly commend advanced cadres and set strict requirements. In no way should we take a lenient attitude in dealing with shortcomings and mistakes. A small number of cadres do not welcome inspections from the higher levels, still less any move to point out their shortcomings. It seems as though the moment they are chosen as advanced cadres, others can only learn from them but not make suggestions to them and can only praise them but not criticize them. Such an attitude of being indifferent to progress shows that they have lagged behind ideologically. The more this is the case, the greater the need to sound the alarm for them through inspections, and this is the only way of truly showing loving care for the cadres.

Leaders should regard checking the cadres' work as an examination of the leaders' own work and should be good at discovering problems in their own work from the shortcomings of their subordinates. Leaders should think about whether or not there is any relation between the problems in a low-level unit and the leaders' own actions and workstyle, and they should think about what responsibilities the leaders should assume for any deviation by a cadre from the party's line and policies. Only by firmly adhering to this scientific attitude can we do a good job in

our undertakings and can a heightening of the cadres' quality be achieved through checking on the work.

It Is Necessary To Help Those Cadres Who Have Made Mistakes

Chairman Mao pointed out: "In general, use the method of persuasion with cadres who have made mistakes," "the struggle method should be confined to those who make serious mistakes and who nevertheless refuse to accept guidance." The cadres that Chairman Mao referred to here, of course, do not include those bad elements who sneaked into our cadre ranks. As for the handful of sworn followers of the "gang of four" and all class enemies, we must deal them resolute blows and must never be merciful and softhearted. However, we should give them a way out of their predicament.

There have been two completely different policies in dealing with cadres who have made mistakes. One is to deal with them by mercilessly struggling against them and relentlessly attacking them. The other is to learn from past mistakes to avoid future ones and cure the sickness to save the patient. Wang Ming and other opportunist chieftains adopted the policy of destroying their comrades who disagreed with them, negating everything the latter did and forbidding them to make revolution. The policy of "learning from past mistakes to avoid future mistakes and curing the sickness to save the patients" formulated by Chairman Mao calls on us to analyze the circumstances involving cadres who have made mistakes in order to straighten out their thinking on the one hand and to unite with them on the other and help them correct their mistakes and continue the revolution.

To make a successful revolution it is best to have the greatest number of people participate. Whenever our party was experiencing a major two-line struggle, Chairman Mao always reiterated our consistent policies on erring cadres and earnestly expounded the dialectics of inner-party unity. His teachings have educated cadres, united the whole party and helped our cause to thrive.

With the power they usurped, Lin Piao and the "gang of four" abused disciplinary measures and even used the apparatus of the dictatorship of the proletariat to persecute revolutionary comrades. In particular, they persecuted the long-tested veteran cadres and were not satisfied short of their deaths. They often created out of thin air shocking "incidents," always clamored for dragging out "sinister backstage bosses," and wantonly declared that a certain front was subject to "dictatorship by the sinister line." Without any grounds whatsoever, they labeled a number of comrades as renegades, spies, capitalist roaders or counterrevolutionaries and caused many an innocent comrade to suffer. The fascist brutality they displayed in attacking and framing cadres was rare in the history of our party. We should make full use of these teachers of negative example, such as Lin Piao and

the "gang of four," to educate the whole party, repudiate the slanders and false charges they leveled at cadres and seriously implement the party's policies on cadres. These actions are important in correctly carrying out Chairman Mao's cadre-cherishing policies and fully arousing the cadres' enthusiasm.

In dealing with cadres who have made mistakes, we should first observe them and then help them. We should see whether we can help them passively or positively create the conditions to help them. Our help should focus on analyzing the content, adverse effects, and theoretical and class origin of their mistakes. Regarding their past mistakes, it is imperative to mercilessly expose all mistakes and wage active ideological struggle. Criticism must be sharp. Right and wrong must be clearly distinguished, and there must be no ambiguity in dealing with questions of principle. These cadres must be made fully aware of where and why they have erred and of what actions they should take to correct their mistakes. Here there is first of all a viewpoint of showing loving care, a desire for unity. We must help them warmheartedly and convince them with sound arguments, so that they will "sincerely accept" our criticisms. Such "sincere acceptance" depends on our taking an honest attitude and doing good for people, on our criticism being realistic, our arguments logical and our help so effective as to enlighten and educate them. If they have corrected their mistakes, that is well and good. In dealing with the cadres who have made mistakes, we must consider their future development. To regard them as static and unchangeable is against dialectics. Of our comrades who have erred, most have made mistakes unconsciously and only later did they perceive their errors. Since they unconsciously made mistakes because they thought what they were doing was correct, it may take some time before they can perceive their mistakes and willingly correct them. Hence, we must give them time to become sober-minded and correct their mistakes. As for those cadres who made serious mistakes in the struggle between the two lines, if they deserve party disciplinary action, they must be considered in an overall way rather than being dealt with in a hasty and careless manner. This is the "cold treatment" principle which our party has consistently applied in dealing with errant cadres. If their mistakes are too serious to justify their continued stay at present work posts, they may be transferred to other posts, given opportunities to study, or assigned to lower levels so that they can study and conduct investigations, participate in productive labor, spend more time with the masses and breathe the fresh air there. This will be tremendously helpful to them in summing up experience and lessons, correcting mistakes and acquiring new knowledge.

As for those comrades who made misleading speeches or did wrong things under the influence of the erroneous line, we must absolve them as early as possible as long as they have made full confessions and have been forgiven by the masses and do not cling to their erring ways. We should not create an atmosphere in which people fear to make a mistake, that once they have made a mistake they are finished. Such an atmosphere is

harmful to the growth of cadres. People make mistakes unavoidably. A mistake is a bad thing, but it can become a good thing if it is corrected. People usually mature in the course of gaining experience, both positive and negative. In a sense, one's experience is incomplete if one has never made a mistake. Of course, the erring comrades should assume a correct attitude. They should not "conceal their illness to avoid treatment," nor should they disavow their mistakes. They should sincerely accept criticism and help from others, honestly examine their mistakes, make earnest confessions of their problems and firmly correct their mistakes in the course of their work. Only in this way can mistakes and setbacks become useful experience and lessons.

Chairman Mao, Premier Chou, Chairman Chu Te of the NPC Standing Committee and other proletarian revolutionaries of the older generation set an example for the whole party in consistently applying the policy of "learning from past mistakes to avoid future ones and curing the sickness to save the patient." During the Great Proletarian Cultural Revolution, Premier Chou, acting on Chairman Mao's cadre line and policy, waged a resolute struggle against the criminal acts of Lin Piao and the "gang of four" in attacking and framing cadres, and they protected a large number of cadres. Even in the case of those comrades who were guilty of mistakes, Premier Chou, while seriously criticizing their mistakes, firmly resisted the attempt of Lin Piao and the "gang of four" to persecute them. The touching spirit in which Premier Chou showed his loving care for errant cadres will never be forgotten by the comrades of the party.

It Is Necessary To Help the Cadres Solve Difficulties

Since they joined the revolutionary ranks, our party cadres have dwelled in the revolution and fought and lived in the bosom of the party and will continue to do so until the last minute of their lives. Our party's consistent and correct principle of taking good care of the cadres is permeated with proletarian class sentiments of being concerned about, cherishing and helping each other. It is imbued with the ardent wishes of our great leader Chairman Mao, of the esteemed and beloved Premier Chou, and of Chairman Chu and other proletarian revolutionaries of the older generation. Our party's concern and care for the cadres is extremely meticulous. It entails giving attention to the cadres' political and ideological training and to their work as well as taking care of specific problems of livelihood to the extent possible. In the war years the conditions were very difficult, but to enable the cadres to persist in struggle the party organizations also tried by all possible means to care for them in livelihood, giving them very great warmth and encouragement.

Flaunting the banner of "eliminating bourgeois rights," the "gang of four" made every effort to conceal their crimes of riding roughshod over the people and their vicious disregard of the vital interest of cadres. The

influence of their counterrevolutionary fallacies has caused an extremely abnormal situation in some units. It is common in such units that no one takes care of problems related to the cadres' livelihood. At the same time, a very small number of persons abuse their authority to grab profits for themselves and pursue a bourgeois style of life. They have thus perverted our party's traditions and corrupted and demoralized the cadres.

Showing concern for the cadres' livelihood is in line with taking good care of their political training. Hard work and plain living, denying oneself and serving the public loyally are the fine traditions of our party. The purpose of taking care of the cadres' livelihood problems that are within our purview is to end their worries about their livelihood so that they can work harder for the people and devote themselves to their work wholeheartedly and exclusively. It is definitely not to make the cadres divorce themselves from the masses or to disrupt the fine relationship between the cadres and the people of sharing joy and sorrow. Therefore, the leading comrades should help the cadres--be they cadres at work posts, cadres who have lost the ability to work, old, middle-aged, or young cadres--to overcome difficulties caused by illness or difficulties in livelihood, family affairs or children's education. The leading comrades should take the initiative in solving problems as they did during the war years. If they cannot solve the problem right away, they should actively create the conditions for solving it step by step. With regard to the unreasonable demands of a small number of comrades, we must convince and educate them with facts. As for certain individuals who whip up the vile wind of seeking privileges, we must firmly criticize and stop them. The principal leading cadres should handle the administrative work of their departments and units and promote collective welfare in accord with party policies. They should firmly adhere to Chairman Mao's teaching, "Rack our brains to solve the difficulties of the cadres." The unfair practices of failing to solve the cadres' difficulties seriously and giving special privileges to a few leading cadres must be thoroughly corrected, because they represent a bourgeois ideology and workstyle rather than our party's traditions.

The test of history is the best scientific test. During the 40 years from the day when Chairman Mao put forward the policy on taking good care of the cadres at the Sixth Plenum of our party's Sixth Central Committee to the present, the Chinese revolution has advanced from the period of the democratic revolution to the period of the socialist revolution, and the number of our party cadres has risen from tens of thousands then to tens of millions now. Today our party has won a great victory in the 11th struggle between the two lines, during which we smashed the "gang of four," and has entered a new period of socialist revolution and construction. At such a time it is even more important for us to reiterate and seriously implement Chairman Mao's correct policy on taking good care of cadres. The party Central Committee headed by Chairman Hua has adopted a series of effective measures to take care of cadres. The right and

wrong once confused by the "gang of four" with regard to the line in dealing with cadres are being corrected. The great revolution to grasp the key link and run the country well has raised the pressing demand for talented persons. It has also supplied us with a classroom for training capable persons. We are convinced that in the great struggle to build a modern and powerful socialist state our cadre ranks will thrive, our cause will forever maintain its youthfulness and our future will certainly be even more prosperous as long as we follow the line of the 11th National CCP Congress and conscientiously implement Chairman Mao's correct principle of taking good care of cadres.

PARTY COMMITTEES MUST BE GOOD AT LEADING SCIENTIFIC AND TECHNOLOGICAL WORK

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[Article by RED FLAG contributing commentator]

[Text] With the "gang of four" completely crushed, socialist revolution and construction in our country have entered a new period of development. Under the leadership of wise leader Chairman Hua and the party Central Committee, the people throughout the nation are holding high the great banner of Chairman Mao and striving to build China into a modern and powerful socialist country before the end of the century. The recent convocation of the National Science Conference has further mobilized and encouraged the whole nation, including all scientific and technological workers, to march toward the modernization of science and technology. A great revolutionary mass movement in science and technology is rapidly taking shape. The pressing task before the party committees of our science and technology departments is to follow the strategic plan of Chairman Hua and the party Central Committee, to be good at leading scientific and technological work and to push this work forward as quickly as possible.

Persist in Taking Class Struggle as the Key Link and Scientific and Technological Work as the Central Task

The key to the realization of the four modernizations is the mastery of modern science and technology. The basic task of science and technology departments is to realize as many scientific and technological achievements as possible and to train competent scientists and technicians who are both Red and expert so that the four modernizations can be realized and a modern, powerful socialist country built. In judging the work of the party committee of a department concerned with science and technology, we must see whether or not it completes this basic task. Practical experience shows that it is necessary to persist in taking class struggle as the key link and scientific and technological work as the central task in order to complete this task.

In a science and technology department the basic, routine practical activities of scientists and technicians consist of performing scientific and technological work, which is indispensable to social production. As workers are required to turn out more industrial products and peasants to produce more grain, so scientists and technicians are required to realize more scientific and technological achievements--this is concrete action taken by them in carrying out proletarian political tasks. All science and technology departments must put politics in command, arrange scientific and technological work as their daily central task and carry out all their other work around this central task. They must insure that workers, scientists and technicians devote their main energy and most of their time to scientific and technological work. If they are concerned with other activities all day long and have no energy or time left for scientific and technological work, they cannot realize achievements or train competent people.

Persisting in class struggle as the key link and scientific and technological work as the central task involves dialectical unity. Only if class struggle is grasped can we keep to the socialist orientation, promote stability and unity, heighten the people's revolutionary spirit and successfully complete scientific and technological work. Persisting in taking scientific and technological work as the central task in an effort to achieve the modernization of science and technology as soon as possible is necessary in order for the proletariat to triumph over the bourgeoisie and socialism over capitalism in the transition to communism.

Since the founding of the PRC the development of science and technology has raised labor productivity, expanded the social productive forces and strengthened the material foundation for socialism. Scientific and technological achievements have been realized and competent people have been trained.

We have successfully tested atomic and hydrogen bombs and nuclear weapons, launched satellites and accurately recovered them. Thus, we have contributed to strengthening our national defense capability, to breaking the nuclear monopoly of the two superpowers--the Soviet Union and the United States--and to supporting the revolutionary people of the world in their struggles. This has played an important role in consolidating the dictatorship of the proletariat, in preventing capitalist restoration and in building socialism.

Chairman Mao consistently stressed that it is necessary to grasp class struggle as the key link. At the same time he stressed that it is necessary to use class struggle as a motivating force in carrying out our central task well. During the war of resistance against Japan, Chairman Mao pointed out that it was necessary to carry out two major campaigns well--one for rectification of the workstyle and the other for production. On the eve of the victory of the liberation war, Chairman Mao pointed out that all our work "revolves around and serves the central

task, production and construction." In the period of the socialist revolution and socialist construction, Chairman Mao profoundly expounded the great significance of class struggle, the struggle for production and scientific experiment and the relationship between them. He then set forth the principle of "grasp revolution, promote production and other work and preparedness against war." These important instructions, which have developed Marxism-Leninism, are radiant with the brilliance of materialist dialectics.

The "gang of four" opposed Mao Tsetung Thought and distorted the dialectical relationship between class struggle and science and technology. They placed class struggle in opposition to science and technology and isolated them from each other. They raved that whoever grasped science and technology was opposing class struggle as the key link. They intentionally confused the relationship between the principal task and the key link. They raved that scientific and technological units that regarded science and technology as the main task were putting class struggle and science and technology on the same footing, putting technology in command, and so on and so forth. Although we have won significant victories in the preceding period in exposing and criticizing the "gang of four" and have achieved initial success in grasping the key link in running scientific research, the gang's pernicious influence is still far from being completely eliminated.

Hurt and affected by the "gang of four's" counterrevolutionary fallacies, some of our leading comrades are still apprehensive even today and dare not grasp science and technology work forcefully and outright. They dare not grasp it as a central day-to-day task of the party committee, nor do they dare to grasp programs, plans, systems, tasks and so on. They are afraid of grasping too much and thereby committing the error of rightism. This shows that if we do not carry the struggle to expose and criticize the "gang of four" through to the end or thoroughly criticize the gang's reactionary ideological system, we will be unable to wipe out the ideological obstacles to realizing the four modernizations, and we will not be able to make a giant stride in our scientific and technological work.

Chairman Mao pointed out: "If in the decades to come we don't completely change the situation in which our economy and technology lag far behind those of the imperialist countries, it will be impossible for us to avoid being pushed around again." And he added: "In planning our work we should start from the possibility of being attacked and do our utmost to change the backward state of our economy and technology in not too long a period of time. Otherwise we will make mistakes."

Achieving the four modernizations, particularly the modernization of science and technology, is not simply a matter of economic and technical work. It is also an acute political issue. Party committees of departments concerned with science and technology, in particular the top

leaders, should follow Chairman Hua's instruction on simultaneously grasping the great revolutionary movements for class struggle, the struggle for production and the struggle for scientific experiment. Leaders should grasp not only the key link but also scientific and technological work as the central task. The vast number of workers, scientific and technical personnel and cadres should also be mobilized to engage in scientific and technological work boldly and free of worry and encouraged to study science for the revolution; everyone should vigorously march toward the modernization of science and technology.

Party committees should make a conscientious effort to solve problems in scientific and technological work. They should pay attention to formulating plans, building work contingents, establishing procedures, conducting scientific management, following rules and regulations and insuring that the necessary support services and supplies are available. In units in which conditions permit, plans should be made as quickly as possible as regards the unit's orientation, tasks, personnel, equipment and cooperative relations. In units in which conditions do not currently allow for such plans, every effort should be made to rectify the situation. Under the leadership of the party committees it is essential to divide responsibilities, institute a system in which each site is responsible for its work and facilitate the exchange of technological information. Thus, all types of work will be dealt with realistically and planned targets achieved in a practical manner.

Develop the Fine Traditions of the Party's Political Work and Combine Political Work With Scientific and Technological Work

To successfully direct science and technology work, party committees must persist in putting politics in command, grasp political and ideological work well, insure the implementation of the party's line, principles and policies, keep to the socialist orientation, build a revolutionary scientific and technical force and insure that there are more fruitful results and that more talented people are trained.

After summing up our past experience, we find that a very important criterion for judging whether political and ideological work is successful or not is to see whether it can be done in connection with all central tasks. When launching armed struggle during the democratic revolution, we did our political and ideological work in connection with our military work and the work of the masses. In socialist building we do our political and ideological work in line with our industrial and agricultural production and all vocational work. When combined well, political and ideological work will become lively and play a powerful role.

We previously stressed that, in departments concerned with science and technology, political and ideological work should be combined with scientific and technological work and conducted at the forefront of

scientific research. Practice proves that this has produced very good results. It embodies the unity of politics and technology and the unity of both the command and support roles of politics, as Chairman Mao continually instructed us. However, Lin Piao, the "gang of four" and their ilk advocated that "politics must take precedence over everything else," severed the ties between politics and vocational work and set one against the other. Under their harmful influence, some of our comrades were unable to see clearly the relationship between politics and vocational work and separated political and ideological work from scientific and technical work.

Chairman Mao consistently stressed that it is necessary to do political and ideological work in combination with economic work and that we should not do political and ideological work in isolation. In departments concerned with science and technology, political and ideological work must be done in combination with scientific and technological work. The central authorities are now calling upon us to make a conscientious effort to insure that scientific and technical personnel devote at least five-sixths of their time to vocational work weekly. This is very important, since it is similar to insuring that the workers and peasants devote their time to production. Doing so never means reducing the political and ideological work. On the contrary, it means setting a still higher criterion for our political and ideological work--greater results in less time. Therefore, we must make greater efforts to combine political and ideological work with the entire scientific and technological process so that the former can be brought into full play all the time. When fighting a war in the past we used to mobilize before the war, agitate during the war and sum up and evaluate after it, so that every fighter would know for whom he fought and how to fight well. Now our political and ideological work is aimed at making all scientific and technological personnel and all staff and workers understand the work in which they are engaged and its relationship to the great goal of achieving the four modernizations and at urging and encouraging them to display their revolutionary spirit, unite and cooperate with one another, study hard and improve their work so as to serve socialism.

To combine political and ideological work with scientific and technological work, it is first necessary to overcome formalism. In previous years the idealism and metaphysics of the "gang of four" ran rampant, thus damaging our party's fine traditions and style. As a result, formalism in our political and ideological work became very serious. Instances of this include the following: One makes a lot of noise and shouts "revolutionary" slogans without being willing to work realistically and hard; in political studies, instead of stressing the need to appreciate the spirit and the substance and master the stand, viewpoint and approach of Marxism-Leninism-Mao Tsetung Thought in order to analyze and solve practical problems, one is content with reciting certain phrases from the works of Marx, Lenin and Chairman Mao or exaggerating them out of context; apart from promoting political campaigns, political organs do not

appear to have regular political and ideological work to do, and even if they have something to do, this involves holding meetings, making reports and issuing documents, giving the impression that the more meetings there are the better, the longer the reports the better, and the more complicated the briefings about plans the better; when directives from the higher levels are transmitted, they are just read, without relating them to the actual state of affairs and work of the unit concerned; when a meeting is held to discuss something, people take turns speaking and expressing their opinions--a pattern which is repeated again and again. Since these ways of doing things do not yield practical results, the masses are very dissatisfied with them. Now we must adopt the attitude that the party is responsible for the revolutionary cause and resolutely cast aside the formalist stuff dished up by the "gang of four," revive and carry forward the party's fine traditions with regard to political work and bring about a vigorous and dynamic political situation.

We should conscientiously learn from the experiences of Taching, Tachai, and the PLA in performing political work, improve the methods for carrying out political work, raise the quality of work, and pay attention to its role in relation to science and technology. For instance, we must pay attention in our work to separating the ideological problems from the technical problems. We must also see that some ideological problems such as fear of hardship and difficulties, irresponsibility, pursuit of private interests, withholding information from each other, and refusal to cooperate or even seeking exclusive control of data are more often than not reflected through technical problems. We must be good at summing up the laws governing the ideological activities of scientific and technological personnel in various stages of research, design, trial manufacture, experimentation, model selection and production when they succeed or fail in tackling technical snags or conducting a test, and when they are given a problem to work on or a task to perform. We should grasp the ideological problems as they emerge amid different conditions and actively take the initiative in working on them. When carrying out mental labor and digging into science and technology, scientific and technological personnel have to work in a concentrated fashion, and this requires a peaceful and quiet environment. The requirements for civilized production and civilized experimentation are particularly high for those who work in the most advanced branches of science and technology. What is more, some research and experimental work has to be carried out continuously for many days and must not be interrupted. Our political and ideological work must be adapted to these special characteristics.

Our leading cadres and political organizations must not work in offices, but at the forefront of science and technology. They should conduct investigations and studies, take part in manual labor, chat and make friends with workers and scientific and technical personnel and show concern for them ideologically, in their work and in their daily lives.

It is necessary to bring the party branch's role into full play as a fighting fortress and the party members' role as vanguards, mobilize the masses to do ideological work, provide typical examples and commend the advanced by conducting positive education and self-education. In addition, it is necessary to strictly adhere to regulations governing reward and punishment. It is essential to link ideological education with the maintaining of discipline. In short, if we clearly understand our task, pay attention to the role of political and ideological work and improve our methods, our political and ideological work will surely produce greater results.

Bring the Role of Scientific and Technical Personnel Into Full Play and Mobilize All Positive Factors

An important issue in achieving success in science and technology is the correct handling of the relationship between man and technology. The decisive factor in advancing science and technology and in catching up with and surpassing advanced world levels is man. We must first train talented people before we can achieve fruitful results. When man's enthusiasm is aroused, miracles can be performed. We must fully develop the enthusiasm of scientific and technical personnel and personnel in all fields and organize mighty contingents of scientific and technical personnel to march toward the goal of modernizing science and technology.

Intellectuals are largely concentrated in departments concerned with science and technology, and some comrades are concerned when they see so many intellectuals there. Actually, the large number of intellectuals is good rather than bad, as it signifies that our science and technology are flourishing and thriving. Since the founding of our country our scientific and technical force has developed greatly, but in general we do not have sufficient numbers of scientific and technical personnel, and their level of skills is not high. The persecution of intellectuals and the scientific and technical force by Lin Biao and the "gang of four" has led to a situation in which old scientists and technicians are passing on with no successors to carry on the work. Hence, we must give full play to the initiative of our scientific and technical personnel so that one person can perform the work of several and several years' work can be completed in 1 year. Every effort must be made to achieve more in less time and to train talented people to reinforce the scientific and technical force as quickly as possible. This is an important political task.

To enhance the initiative of scientific and technical personnel, party committees should correctly understand them. We should understand this: Tempered by several political movements, particularly the Great Proletarian Cultural Revolution, intellectuals--either those who are from the old society or those who were trained by the party after liberation--have scored remarkable progress both politically and professionally. The overwhelming majority of them are good or comparatively good. They are the socialist workers our party seeks to unite with and rely upon.

The overwhelming majority of them are part of the proletariat themselves, making important contributions to socialist construction.

It is necessary to correctly understand and be reasonable in dealing with "Red" and "expert" intellectuals. So long as they love the socialist motherland and are serving socialism and the workers, peasants and soldiers of their own free will and accord, they have met the requirements of being "Red."

It is essential to encourage them to master science and technology and score even greater achievements for the sake of the party and the people.

It is necessary to correctly deal with the shortcomings and maladies of intellectuals. We should not demand perfection and be too exacting in what we expect from them. To require that gold be 100 percent pure and man to be flawless is not right. It is also impossible. We must carefully analyze the family background and social relations of the intellectuals. Our policy is that we take class origin into account, but not exclusively. Our emphasis is on one's political attitude. We should carefully guide the intellectuals to transform their world outlook, identify themselves with workers and peasants and make constant progress while studying and working.

To give full play to the initiative of the scientific and technical personnel, it is essential to fully and correctly understand the relations between unity, education and transformation of intellectuals and conscientiously implement the party's policy on dealing with intellectuals. We must implement our policy in dealing with not only veteran intellectuals but also young and middle-aged intellectuals. It is necessary to restore all technical positions and titles, make rational work assignments to veteran experts, promote outstanding scientists and technicians to leading technical posts and make sure that they are given jobs and authority. We must commend and give citations to the scientific and technical personnel who make contributions. We must also draw correct conclusions about persons who have been investigated. Conclusions should be drawn regarding those who are still living as well as those who have already died. It is necessary to refute the slanderous and untrue remarks of the "gang of four" and to restore the name of those comrades who were persecuted and attacked. Efforts must be made to turn the process of implementing policy into the process of exposing and criticizing the "gang of four," strengthening unity and mobilizing all positive factors.

To give full play to the initiative of scientific and technical personnel, attention must also be given to discovering, training and selecting talented persons and assigning them jobs in which they can rationally use their skills. At present talent is stifled and growth hampered in some units. The masses criticize this, saying: "In your own unit you are a weed; outside you are a treasure," "In your own unit you are a

worm; outside you are a dragon." To change this situation, party committees should improve their discovery and selection of talented persons without conforming to one pattern. It is necessary to tackle the situation of scientific and technical personnel not fully utilizing what they have learned and to assign persons to jobs in their specialty whenever possible. It is essential to know a person, assign him to a job where he will make full use of his ability and put all manpower to its best use. We must pay attention to planning and management and do a good job in carrying out organizational work so that everyone has a job to do and each job assignment is made.

We must not use scientific and technical personnel without training them. We must be enthusiastically concerned with their growth. Particularly, we must create necessary conditions for outstanding scientists and technicians so that they will develop even faster.

An important link in giving full play to the initiative of scientific and technical personnel is to guarantee that support services and supplies are available. This should be placed on the party committees' agendas to be grasped as an important task.

We should not only concern ourselves politically with scientific and technical personnel and all workers and their work, but also be concerned about their livelihood. This is our party's glorious tradition. It is necessary to run all collective welfare undertakings such as mess halls and nurseries well.

In places where conditions permit, it is essential to develop agricultural and sideline production, improve the supply of nonstaple foodstuffs, housing, and medical care and sanitation conditions, and help scientific and technical personnel and the workers free themselves of worries so that they can concentrate on scientific and technical work.

To make rapid and great progress in science and technology work it is not enough to depend only on the initiative of scientific and technical personnel. We should give full scope to the initiative of all persons concerned with the work. It is necessary to bring the workers' wisdom and strength into full play and make a real success of the three-in-one combination of workers, scientific and technical personnel and leading cadres. The development of modern science and technology has made the relationship between science and production increasingly closer, calling for greater integration between the intellectuals and the workers. A promising scientific and technical worker must go among the worker masses and participate in trial manufacture and production so as to learn from the workers and to better link theory with practice. In science and technology departments, political work personnel, administrative personnel and support services personnel are important forces that are indispensable to the ranks of science and technology, because their work is inseparable from scientific and technological work. It

should be seen that a scientific and technological achievement is not merely the fruit of the labor of workers and technicians but also the fruit of the personnel of other trades and professions.

Party committees must be good at making overall plans and all-round arrangements and at mobilizing all positive factors. Comrades in all trades and professions, including administrators, supply and procurement workers, medical workers, nursery attendants and truck drivers, must fully realize the relationship between their own jobs and the realization of the modernization of science and technology and consciously serve scientific and technical work as well as the scientific and technical workers.

Study Well and Be Experts Instead of Laymen

Carrying out this great revolution in science and technology places greater requirements on our cadres. To adapt our thinking and daily work to the new conditions, we have to study hard and change from laymen into experts. Chairman Mao pointed out as early as 1955: "We have entered a period, a new period in our history, in which what we have set ourselves to do, think about and dig into is socialist industrialization, socialist transformation and the modernization of our national defense, and we are beginning to do the same thing with atomic energy," and "it is our task to adapt ourselves to this new situation, dig into our jobs and become experts." Over the past 20 years or more a great number of leading cadres in our science and technology departments have been assiduously digging into their jobs and studying hard in response to Chairman Mao's great call and have gradually become experts. They are well versed in both politics and their specific jobs and are the backbone force in our party charged with the scientific and technological tasks.

The "gang of four," defying Chairman Mao's instruction, spread such fallacies as "the more knowledge one has, the more reactionary one is" and accused those cadres who turned from laymen into experts of being "capitalist roaders who capitulated to the bourgeoisie," attacking and persecuting them. This caused many of our cadres to be hesitant in studying science and technology. With the gang crushed and the spiritual shackles shattered, our cadres are again marching in long strides toward the goal of being Red and expert.

In response to Chairman Hua's call, we should launch a new, long-lasting study movement to raise our study of Marxism-Leninism-Mao Tsetung Thought to a new level while simultaneously making great efforts to study culture, modern science and the management of scientific and technological work. Modern science and technology require extensive planning, comprehensive efforts and intensive coordination. It is impossible to exercise adequate leadership over modern socialized scientific and technological undertakings if we do not master the organizational and management work.

The organization and management of modern scientific and technological work has its own laws and is in itself a science. At present organizational and managerial work is one of our weak points. If it is not promptly improved and strengthened, it will act as a drag on scientific and technological work. To master the organizational and management work we have to acquire the necessary scientific knowledge and grasp the laws governing scientific and technological tasks step by step. It is indeed difficult to acquire a great deal of scientific knowledge. However, it won't do to understand too little. We should acquire some scientific knowledge and gradually dig into it. If we understand nothing at all or very little and are unable to comprehend the briefings on scientific and technological work, how can we successfully carry out the organizational and management work?

To turn laymen into experts, leading cadres must revive and carry forward the party's fine tradition and workstyle. We should go to the frontline of science and technology to mix with the scientists, technicians and masses of workers, personally conduct investigations and study, and seek out and sum up the laws governing science and technology.

We should adhere to the mass line, consult the masses when problems occur, earnestly listen to their opinions and, with an open mind, learn from the masses, specialists and experts in all fields and learn all good experiences whether domestic or foreign. We must persist in seeking truth from facts and must not hesitate to ask when we don't understand something. We should never pretend that we know something when we don't. So long as we are humble, honest and modest and are willing to learn, we will certainly be able to learn and master what we don't know now after 1, 2, 3 or even 5 years of study.

Of course, it is not easy to turn laymen into experts. We could face numerous difficulties, but to us communists, difficulties are nothing. Under the leadership of Chairman Mao, our party cadres always learned things through practice over the past scores of years. During the period of the democratic revolution we learned warfare by conducting warfare. Many comrades became military experts. For a long time we lived in the countryside and did not know how to do urban work. After we entered the cities we did our work according to Chairman Mao's instructions and gradually learned city administration and economic construction work. Now Chairman Hua has called upon us to foster lofty ideals, set high goals and march toward the modernization of science and technology. We can definitely capture the fortress of science and technology if we carry forward the revolutionary spirit of "storming the city no matter how strong its fortifications and studying books no matter how difficult" during this march. We should be firmly determined and fully confident of fulfilling the great mission that history has assigned us.

Numerous revolutionary martyrs laid down their valuable lives for the sake of socialist and communist ideals, and it pains us to think of

them. Today, carrying on the behests of the revolutionary martyrs and contributing our own strength to building a modern and powerful socialist country, we deeply feel that our responsibility is heavy and our journey is long.

Under the leadership of wise leader Chairman Hua and the party Central Committee, we must hold aloft the great red banner of Mao Tsetung Thought and maintain the same vigor, revolutionary enthusiasm and daring, death-defying spirit during the new Long March that we displayed in the years of revolutionary war and work determinedly and incessantly for the four modernizations.

MAKE MATHEMATICS BETTER SERVE THE FOUR MODERNIZATIONS--STARTING WITH THE 'OVERALL PLANNING FORMULA' AND THE 'SELECTION-OF-THE-BEST FORMULA'

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[Article by Hua Lo-keng [5478 5012 1649]]

[Text] The first session of the Fifth NPC and the National Science Conference were held successively. This signals the start of our new Long March led by wise leader Chairman Hua. Build our country into a great and powerful socialist country with modernized agriculture, industry, national defense and science and technology by the end of this century--this is the bequest of Chairman Mao and Premier Chou, the long-cherished ideal of the Chinese people and a sacred mission with which we are charged by history.

The key to the realization of the four modernizations lies in the modernization of science and technology. Mathematics plays an important part or role in the modernization of science and technology.

Mathematics is a science that has grown out of the developing social productive forces. Simple calculations required by the primitive commune in distributing the fruits of labor gave rise to arithmetic. In the prolonged period of slave society and feudal society, agricultural needs and an interest in astronomy spurred the development of mathematics. Farmland measurements gave rise to geometry. The development of commerce led to the use of algebra. With capitalism, the development of production and of science and technology brought about the introduction of calculus, etc. Fast-developing modern science has increasingly added to mathematics and led to its being used more and more extensively. The continuous development of modern means of computation has enabled it to penetrate deeper into other scientific areas. In a word, mathematics is a means used in every scientific field. The greater the scientific development, the greater the need for mathematical means and the more complicated the calculations. This makes a greater demand on mathematicians' ingenuity and the speed of the means of computation.

Engels pointed out: "Pure mathematics aimed at the relationship between the spatial form of the realistic world and quantity is unusually realistic data." ("On Anti-Duhring," "Selected Works of Marx and Engels," Vol 3, p 77) That is to say, where there is "form" there is "quantity," with mathematics involved. This is especially true of modern society. Mathematics is used to depict things as big as the universe in its form of existence and as small as an elementary particle in its structure. It is also used to portray the orbit of an electron. The quick diffusion of things like photoelectricity and slow, minute changes in things like the crust of the earth must be represented in mathematical form. Advanced chemists rely on mathematics as a means of designing or producing specially needed new molecules. Biologist Darwin said: "The ingenious structure of the beehive answers the very purpose for which it is intended. If man has no praise for it, he must be muddleheaded." The ingenuity of the beehive structure taxed the mental resources of mathematicians of the 18th century. In contemporary biology the genetic "codes" are an especially intriguing mathematical problem.

Mathematics can not only depict the law of nature and numerous changeable natural phenomena but also play a tremendous role in stimulating the development of science and technology. The well-known $E = MC^2$ formula was used by Einstein to illustrate the relationship between matter and energy and thus to predict the amount of energy produced by nuclear fission. Also, on the basis of the law of universal gravitation, mathematicians were able to figure out the existence and position of Neptune before actually discovering it, and for this reason Neptune has been referred to as a planet figured out through mathematics. As for the determination of solar and lunar eclipses, summer solstice, winter solstice, etc. by mathematical means, this has now been accepted as part of everyday life.

We can see what an important role mathematics plays in modern science and technology. In particular, mathematics is inseparably linked with the four modernizations. A high or low mathematical level has a direct bearing on the pace of achieving the four modernizations. For instance, the development of modern industry cannot be separated from electronic computers. Their installation and use reflects to a great degree the level of development of applied mathematics.

How to rapidly raise our mathematical level in an overall manner and make mathematics better serve the four modernizations--this is a weighty mission falling on the shoulders of our mathematics workers. In light of great leader and teacher Chairman Mao's consistent teachings on science and technology and his expositions on the integration of theory and practice and combination of popularization with elevation, I feel that to develop our mathematics, apart from continuously strengthening the study of mathematical theory, we must strengthen the use and popularization of mathematics. We must not only attach importance to fundamental theory but also take account of reality by being oriented toward

the masses. We must effect not only a big improvement but also a big step forward in popularization, the two complementing and stimulating each other.

Thanks to the great concern and admonitions of Chairman Mao and Premier Chou, and apart from continuing the study of mathematical theory, for over 10 years I went with my comrades to over 20 provinces, municipalities and autonomous regions to popularize the "overall planning formula" and the "selection-of-the-best formula." We tried in every way to apply mathematical theory and mathematical means to agricultural production and to make the masses grasp all there is to know. Practice shows that despite the fact that there is still something to be desired in the popularization of the "twin formulas" and even many noticeable defects, we have achieved relatively substantial results in popularizing mathematics and stimulating agricultural production. This has rewarded me with certain experiences and insights in my probing the development of our mathematics and in my attempt to solve such problems as "how specialized workers link their work with mass scientific experiments."

How did I first get involved with the popularization of the "twin formulas"? It was in the early 1950's. In 1953 a comrade had many good suggestions for me. He said: The period of socialism has begun, yet you are still doing scientific research along the lines of handicrafts! Yes, I then had only the experience of specializing in mathematics. I lacked actual experience in industrial and agricultural production and in other scientific fields. Still less did I know anything about mass scientific experimentation activities. Times had changed. In light of Chairman Mao's instructions about the integration of intellectuals with the worker-peasant masses, I felt that a scientific worker should go among workers and peasants and to the forefront of production and devote his own scientific knowledge to socialist construction. Therefore, with the support of the party organization, I started applying mathematical means--the overall-planning formula and the selection-of-the-best formula--to production and management.

The overall-planning formula is a means of carrying out scientific management. A diagram marked with arrowheads shows the various links of a given task and the proper arrangements to be made for each of them. Such a diagram allows rational arrangements to be made for many complicated segments of industrial and agricultural work. The leader is able to keep abreast of the progress of work and the existing main contradictions and main links involved. The masses are also given an idea of the whole situation and of where they stand. This formula is good for small and especially for large operations--from minor items like the maintenance of a machine tool, the building of a house, the coordination of transportation at a railway station and the building of an irrigation project to a major battle in the Taching oilfield involving 10,000 people and 1,000 machines in opening up new oil areas. There have now appeared cases of joint overall planning involving railway bureaus, steel plants, iron works and mining districts.

What is the selection-of-the-best formula? The quality and output of a product are related to how a work process is handled, and operations in every work process are related to various parameters, such as a high or low temperature, the amount of pressure, the amount of caustic soda used, strong or weak electrical power, etc. The selection-of-the-best formula allows the choice of rational parameters for the sake of good quality, high output and low consumption of raw materials. For instance, in power and chemical production we often use such unscientific means as opening the throttle valve more and more and using an increasingly larger quantity of acids and caustic soda, etc. This leads to a waste of materials and more pollution. It also often results in low output, bad quality and high consumption of raw materials. Regarding the prescriptions for proper proportion of materials, conditions for operations, tests of equipment, etc., the selection-of-the-best formula cannot be thrown away. It allows not only the discovery of good programs but also their being discovered more quickly and assuredly with the minimum amount of testing involved.

How can we make the masses master these mathematical means? At first, though I worked at lower levels, I found a lack of common language in dealing with the worker-peasant masses. To solve this problem, I came up with the "everyday language" formula. By everyday language I mean talking in everyday language. I avoided using "modern language" and "highbrow language." In simple, easy-to-understand language, I illustrated ways and means which are theoretically sound and which can be widely used by the masses and have an immediate beneficial effect on production. Only after experimenting with one item after another from one workshop to another and finding that the workers were able to understand and use such ways and means effectively did I gradually introduce them on a universal basis. "Everyday language" acted as a very good medium.

In addition, as specialized workers we must go to factories, enterprises, communes and other basic-level units to give lectures and join the workers in analyzing contradictions until they can grasp and use mathematical means to solve practical problems. Compared with cases in which specialized workers stay indoors away from the masses, this yields more extensive and impressive results.

With science and technology at their fingertips, the worker-peasant masses can be a source of tremendous material strength. Once mastered by the masses, the "two formulas" find quick acceptance and produce impressive results. In fact, their introduction in various lines and trades, including chemistry, electronics, metallurgy, coal and charcoal, petroleum, electric power, machine building, light industry, communications and transportation, building industry, building materials, medicine and public health, agriculture and forestry has already yielded splendid results, creating great wealth for the state. Here we see that once they master such a scientific means as the "twin formulas," the people can show a greater initiative in discovering the objective laws of production and

thus raise the productivity of labor and emancipate productive forces. This bears eloquent testimony to the role of science as a productive force.

Practical results obtained in popularizing the "twin formulas" show that applied mathematics has great scope in socialist society and that its potential is great. Persistently apply mathematical theory and mathematical means to industrial production and combine scientific experimentation activities by the specialized workers and the masses--this not only meets the needs of the state and the people but also provides the correct path for the development of our applied mathematics. In the course of popularizing the "twin formulas," I wrote to Chairman Mao several times, briefing him on my work and my insights. He took time out from his tight schedule to answer my letters. This greatly educated me. He said in a reply: Your letter and what you wrote about "everyday language" were received long ago when I was in another area. You have driven yourself hard and achieved something. Your working not for self but for the people is highly commendable. He not only expressed warm praise and encouragement for the work I had been engaged in but also showed the direction of advance for the masses of scientific and technical workers. Chairman Mao's words have been a source of strength to me in continuously scaling the heights of science.

There has now appeared in mathematical circles the new atmosphere of cooperation between scientific workers and production departments. Tremendous results have been achieved--for example, the solution of such problems as the roundness of a steel tube, the coupling of cogs, the laying of a keel, etc. This shows that our applied mathematics has been developed in various fields to different degrees. Its potential is unlimited.

Some people hold that the promotion of applied mathematics involves what is for "the common folk" and is much easier than the promotion of pure mathematics. This view is both right and wrong. Why? If in applied mathematics we use a readymade formula, this is easy. If double modulation and functions are applied to irrigation projects, and if the delimitation of a frontier is left to a computer, this is easier than the explorative aspect of pure mathematics. Also, as far as the overall planning and selection-of-the-best formulas are concerned, they can be mastered and applied in practice after 1 or 2 hours of study. But when it comes to the raising of mathematical problems in practice and their solution, this is relatively difficult. For instance, in contemporary chemistry and biology, who over 10 years ago knew how to use the "diagram theory" mathematically? With its use, mathematicians can sum up a principle about the facility it provides when more zeros are involved in determinant calculations. But it is no simple thing to have discovered that the diagram theory can be applied to determinant calculations.

The problems that crop up in practice often cannot be easily sorted out. There is no label affixed to tell you to which branch of mathematics to turn. If applied mathematics workers have only one or two sets of wrenches in their tool box, it is very difficult to find "what serves the purpose." Applied mathematics workers must be armed with more tools and have an ability to cope with all crises. "Specialization in one field" is not enough. This must be accompanied by "many other skills."

Some other people believe that we need not bother about theoretical studies in promoting applied mathematics. But I feel that deep involvement with reality does not mean a weakening in the role of theory. It only points to the importance of theory. Without a penetrating study of theory and without a solid grounding in theory, we cannot solve various problems posed in practice. Only those with a good grounding in theory can know things inside and out and find the proper means for a solution. It is no accident that the several basic steps of the "selection-of-the-best formula" can be mastered by the masses in a matter of 30 or 40 minutes and applied to all lines and trades. Some people say: "The 'selection-of-the-best formula' is just too simple. There's no theory involved." Facts prove the contrary. It is precisely because of a fundamental knowledge of theory that the formula is made simple and easy to understand. Deep involvement calls for theory. Thorough comprehension especially calls for theory. Without getting deeply involved theoretically, we cannot understand a formula thoroughly. The process from practice to theory is one from the special to the general. What is elevated to theory has universal significance. It guides more extensive practice. The more trained in the fundamentals of theory and the wider the knowledge of theory, the greater is the ability to judge--the ability to tell good mathematical formulas from bad and to decide which formulas should be accepted or rejected.

Through practice in promoting the "twin formulas," I realize that, with a view to the rapid development and improvement of our mathematics, we should attach equal importance to the theoretical study of mathematics and its application and popularization as two aspects of a program that should be promoted simultaneously and in an overall manner. We must realize the four modernizations in the not too long a period of 22 years and catch up with and surpass advanced world levels. Regarding the present state of our country and the trend of development of modern science and technology, I believe that we should first uphold the spirit of the party Central Committee's instructions about handling matters that call for immediate attention. By combining specialized workers with the masses, we should pass on to the workers and the poor and lower-middle peasants those mathematical means which can be immediately used, can produce quick results and are theoretically sound, so that without adding to manpower, equipment, and investment we can achieve good quality, high output and low consumption of raw materials, and make such mathematical means serve the need to grasp the key link in running the country, to

achieve substantial results in 3 years and to push the national economy forward. Meanwhile, with long-term interests in mind, we must organize forces to concentrate on initiating the study of the fundamentals of mathematics, so that the study and popularization of applied mathematics can complement and stimulate each other. We must further press on with the initial good results achieved at home and create new levels and "make foreign things serve China" by adopting good methods and experiences from abroad. Regarding needs and possibilities, we must also actively penetrate into fields other than mathematics and create new methods and new experiences.

In the coming 3 years, those themes and courses of study in mathematics that are at a world level must be broadened in scope and developed in depth. Those that fall short of advanced world levels should be developed as quickly as possible so that the gap can be narrowed. With the universal introduction of applied mathematics, the deepening of theoretical studies, the expansion of the ranks [of mathematics workers] and the popularization of instruments, meters, electronic computers, etc., all the greater are the possibilities of mathematics in serving the national economy, serving national defense and serving other fundamental courses of study. Then there will appear a great elevation on the basis of a big step forward in popularization. In the process of realizing the four modernizations, mathematics, like other sciences, will surely get ahead of production and play a leading and stimulating role in production. By that time, computers will no longer be the preserve of a minority of specialized workers and should have become common in all production and management departments. The scientific workers' logic will be gradually replaced by computers. There will appear new scientific realms in our country to allow the gradual formation of a first-class scientific and technological contingent with the most advanced means of scientific experimentation, mathematics will get further involved in the universe, particles, rockets and the puzzle of life...and there will even appear new scenes that cannot be envisioned now.

Our great motherland once shone scientifically. In mathematics it boasted of then world-known mathematicians of the first rank such as Liu Hui, Yang Hui, Tsu Chung-chih and Chu Shih-chieh. Only in recent times has our mathematics lagged behind due to the corruption of the feudal system, imperialist aggression and the rule of reactionary classes.

Under the leadership of Chairman Mao and the Communist Party and with the guidance of Chairman Mao's revolutionary line and the great development of the national economy and scientific and education undertakings, the mathematical level has been raised considerably in the 28 years since the founding of new China. In certain respects it is in the front rank of the world. Those devoted to the study of mathematical theory and functional theory resisted the interference and sabotage of Lin Piao and especially of the "gang of four" antiparty clique. They achieved results of world level and were the pride of our many workers. But due

to the "gang of four's" serious interference and sabotage, the gap that had been narrowing between our mathematical level and advanced world levels widened. Certain points we had attained in pure mathematics were partly lost. As to applied mathematics, the gap was even wider.

But in regard to our being able to catch up with and surpass advanced world levels, we are filled with confidence grown a hundredfold. This is because we have a wise, hard-working and brave people and have glorious mathematical traditions. From among 800 million people we can freely choose the kind of personnel we want. We are guided by invincible Mao Tsetung Thought and have a superior socialist system. This guarantees our victory in conquering the enemy. Great leader and teacher Chairman Mao's brilliant idea on integrating theory with practice and combining popularization with elevation, and esteemed and beloved Premier Chou's instructions on developing scientific research on the basis of deep and extensive involvement with reality--these are our powerful weapons for a simultaneous leap forward in theory and practice and for the simultaneous development of production and science. What is especially cause for jubilation is that the bugle call has sounded for a new Long March led by the party Central Committee headed by Chairman Hua. The mobilization call for concentrating forces on the modernization of science and technology has been issued. The spectacular scene of a powerful army charging forward is unfolding before us. In view of this excellent situation, I feel an indescribable sense of joy. It fills me with infinite strength. Hereafter I must continue to do well in the work of "sending goods to one's home" and do my part in helping the masses of laboring people to master modern production skills and acquire scientific knowledge. Meanwhile, I shall continue studying theory in depth, lead the students well and be "a good human ladder," so that the younger generation can, with the help of our shoulders, move forward more rapidly in scaling the heights of science and join in the struggle for the modernization of science and technology!

VIGOROUSLY STRENGTHEN TECHNOLOGICAL AND SCIENTIFIC RESEARCH

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 58-61

[Article by Wu Chung-hua [0702 0112 5478]]

[Text] The Fifth NPC sounded the clarion call of the march toward the four modernizations. This was followed by the recent holding of the National Science Conference under the direct leadership of wise leader Chairman Hua and the party Central Committee. Chairman Hua gave instructions to and Vice Chairman Teng spoke at this important and unparalleled meeting in the history of China's science, while Vice Premier Fang I made a report at the conference. This greatly inspired the people throughout the country, spurred the development of our science and culture and improved the overall prospects for building a modern and powerful socialist China.

An "Outline National Plan for the Development of Science and Technology 1978-1985," drawn up by the conference, provides a grand blueprint and specific objectives for technological and scientific development. Along with the people throughout the country, scientists and technicians, led by the party, are going all out and exerting themselves so that the outline plan can be realized.

This plan for the high-speed development of China's science and technology provides overall arrangements for research in the two major areas--the basic and the technical sciences. Many recently published articles have discussed the importance of the basic sciences. In this article I shall discuss the importance of strengthening the study of the technical sciences.

We know that natural science evolved from man's protracted involvement in the struggle for production and scientific experimentation on the basis of the knowledge gained through practical experience of the objective laws regarding the movement of matter in the natural world. It is concerned mainly with the transformation of nature, with the knowledge gained from the still undiscovered phenomena and the still unknown laws of the natural world.

The basic sciences in natural science, derived from observation and knowledge of the laws regarding the movement of different kinds of matter in the natural world, each have their own basic theories and constitute the theoretical foundation for science and technology as a whole. They played a direct guiding role in industry in the initial stages of industrial development.

However, with advances in industrial production and the increasing specialization of modern production techniques and sophistication of the applied sciences, the basic sciences, despite their usefulness in providing theoretical guidance of a general nature, are in many instances inadequate in solving specific problems.

We must analyze and sum up the concrete problems of an identical nature arising from production in various industrial departments and conduct theoretical research (including experimental work with specially designed laboratory equipment), so that the laws on the movement of matter can be discovered and the specific problems of science and technology arising in industrial departments can be solved. The development of industry can also be guided in this way. Knowledge of the laws underlying these problems has thus formed the basis of the technical sciences (known as engineering sciences in some countries), with each resting on its own basic theory.

What follows is a discussion of the connection between the discovery and development of the thermal engine and the corresponding genesis and development of the technical sciences aimed at illustrating the importance of this branch of science.

The phenomenon of heat is one of the earliest natural phenomena with which man came into contact. It is said that in remote antiquity a man called Sui Jen Shih obtained fire by boring wood; in the terminology of modern science this means transforming mechanical work into energy, with combustion taking place after an increase in temperature.

But many years elapsed before man came to use and understand heat. From obtaining fire to cooking to making some metalwares, the laboring people made many discoveries and inventions.

China's records kept in the 12th-13th centuries show that the Chinese developed a lantern adorned with a revolving circle of paper horses and a powderlike mixture which was used to propel incendiary arrows or to increase their flight. The generation of motive power arising from the combustion of this mixture later led to the development of internal combustion, rocket and jet propulsion engines. However, man's applications of thermodynamic principles as a science took place only three centuries ago. When Western countries made the transition from feudalism to the capitalist system, the development of production placed ever more pressing demands on the motive power machine. This led to the invention of steam motive power and caused the industrial revolution.

Extensive studies were made on the characteristic features of the function of the thermal engine in order to raise the efficiency of steam engines and to produce engines which were more functional. During the 19th century the practice of production and scientific experiments were summarized and elevated to the theoretical plane, thus formulating the first law of thermodynamics regarding the transformation and conservation of energy and the second law regarding the efficiency of thermal engines. It was chiefly the development of these two fundamental laws in logic and mathematics that led to the formulation of thermodynamics in physics. Apart from consistently analyzing, studying and creating the theoretical basis for all kinds of new-type thermal engines, thermodynamics also extensively penetrated into other departments of physics (such as mechanics) and other branches of natural science (such as chemistry) to become a basic science concerned with research into the general thermal properties of matter and the universal law governing the movement of heat.

The development of the steam engine and studies in related sciences laid down the basic laws of thermodynamics. Thermodynamic principles and methods were then applied to the natural sciences and other production departments. They were used by engineers in the design of thermal engines and improved versions.

However, following the appearance of various kinds of new-type thermal engines and the increasingly higher demands made on their performance, problems relating to the creation and development of new-type thermal engines could not be solved merely by relying on the two basic laws of thermodynamics. At this time it became necessary to conduct special research work on the thermal engine. Generally speaking, we first analyzed the operating process of the thermal engine with the experiences summed up from the production and use of these engines and the general laws of basic sciences such as physics. With regard to those parts we did not understand, we had to carry out, through specially designed simulated experimental equipment, deep and meticulous observation and analysis from the outside to the inside. In this way we hoped to discover the main factors, establish a physical model capable of basically reflecting the nature of the operating process, and define the problems, including the mathematical equation which delineated the problems and the limiting conditions. In this process we often had to work out some rational simplifications so that we might be able to carry out computations with existing electronic calculators. Then we conducted the analysis and sought the answers with the use of applied mathematics or computation mathematics. Sometimes it would also be necessary to study some new calculating methods and to obtain the value on an electronic calculator. Finally we had to examine the theories thus derived by means of relatively complete typical experiments and to further develop and perfect them, thereby creating special theories for various kinds of thermal engines and making them serve the design, development and

innovation of thermal engines in a direct way. This gave rise to the technical science relating to thermal engines.

Regarding the steam turbines which were invented at the end of the 19th century and which provided motive power to the large-scale electric power industry and the internal combustion engines which provided motive power for automobiles and aircraft, the scale of the technical and scientific research work on these types of thermal engines kept growing, as did its role in improving the performance of such engines. After the 1930's, the study of the gas turbine jet and the rocket jet, which provide the motive power for man's high-speed flight in the air and his entry into space, has become still larger in scale, and the work has become more penetrating. This has had a decisive effect on the success in research and production and on the vast improvement in the performance of these engines. For instance, over the past 30 years or so the massive research work done on the compression process, the combustion process, the expansion process, the cooling and heat transfer process, the reheating cycle and the compounding cycle in gas turbines has resulted in raising the maximum working pressure of the gas turbine jet from 4 atmospheres to 30 atmospheres, the maximum working temperature from 700 degrees Centigrade to more than 1,300 degrees, and the single-engine thrust from 500 kilograms to 30,000 kilograms. It has also resulted in reducing the oil consumption rate from 1.5 kilograms per hour for every kilogram of thrust to below 0.4 kilograms. Now the general efficiency of the simple-cycle aviation gas turbine engine has been raised to over 40 percent when used at high altitudes. When the aviation gas turbine engine with a complex cycle is installed on a ship or used on the ground, its general efficiency has also exceeded 30 percent.

Practice over the past 30 years or so has shown that conducting theoretical and experimental studies in the technical sciences is crucial to the development of thermodynamic systems. Only by so doing can we enhance the functions and capabilities of thermodynamic systems and meet the needs of national economic and defense construction.

To illustrate the proportion of technical sciences in overall research and development work, some industrially advanced countries have allocated approximately a tenth of the total funds appropriated for industrial research and development to aeronautical development. This includes: 1) Basic research of an exploratory nature in basic sciences such as physics, chemistry and mathematics not geared to purposes of concrete application; 2) basic research in technical sciences geared to purposes of concrete application, such as engineering thermal physics, aerodynamics, structural intensity, materials science, radio electronics and precision technology; 3) exploratory development or advance research in and production of accessories and components, as well as the combination of components without reference to specific types or models through the application of the above-mentioned research achievements; 4) research in

and production of prototypes and research in and production of the production model to meet the performance targets of the standard model; and 5) improvement in design after a model is selected for production. The ratio of expenditures on these five stages of work in the late 1960's was approximately 1:10:20:40:40.

Compared with the theories of basic sciences such as physics and chemistry, the theories of various technical sciences have a certain individual and concrete nature, but the various fields also have a certain universal and common nature. For instance, the three-dimensional flow theory of impeller aerodynamics which was derived from research into the fan, the compressor and the turbine of the aircraft engine is not a general theory of natural science, but it can also be applied to the gas turbine for use on a ship or in industry, or it may even be applied to steam turbines and water turbines used for generating electricity. Likewise, the theories of heat and mass transfer and the theories of combustion derived in conjunction with research on the aircraft engine can also be applied to other thermal engines and to chemical engineering, the metallurgical industry and environmental protection. The branch disciplines such as engineering thermodynamics, aerodynamics, the study of heat and mass transfer, and fuel technology created by the common academic theories formulated in the course of studying the transformation of energy and the process of transfer in the various kinds of thermal engines and equipment used in different production departments then combined to create the technical science of engineering thermal physics. It provides the most important basic theory for modern thermal engines and equipment. In the case of such products as thermal engines with very complex internal work processes and with very high demands on their functions, we can catch up with and surpass the advanced world level only after we have built sufficiently strong foundations for the various technical sciences concerned.

In the foregoing passages we have illustrated, with the example of thermal engines, the process of development of the technical sciences relating to the thermal engine as well as their importance. This process is a spiral rising from practice to theory and then going back to practice, from the steam engine to the basic laws of thermodynamics to the thermal engine and to the technical sciences such as engineering thermal physics and then back to the thermal engine. This process is exactly as Chairman Mao taught us: "Discover the truth through practice, and again through practice verify and develop the truth. Start from perceptual knowledge and actively develop it into rational knowledge; then start from rational knowledge and actively guide revolutionary practice to change both the subjective and the objective world."

Similar conditions and technical sciences exist in other industrial and agricultural sectors, in the field of medicine and in other fields. Theoretical studies in both the technical sciences and the basic sciences embrace the broad base of scientific research. Without this

broad base it is impossible to gain significant results in both a tactical and strategic sense. This is true not only for the independent design, trial manufacture and production of a new product, but also for the introduction of advanced technologies from other countries. In assimilating technologies from abroad, many countries have found it necessary to have adequate research and technical forces to digest them and know their "whys." In this way it is possible to develop and improve foreign technologies in accordance with the conditions and needs of one's own country and so that one's own country will be able to catch up with and surpass other countries. The present plan takes these problems into account and makes overall arrangements for the research tasks in the basic and technical sciences. It also selects a number of key projects. This has insured that our country's scientific and technological work will be developed proportionately and appropriately in the future.

In the socialist period, great leader and teacher Chairman Mao repeatedly called on us to study Marxism-Leninism, study natural and technical sciences and carry out research in socialist construction, national defense construction and atomic energy. Esteemed and beloved Premier Chou also instructed us time and again: "Without a certain amount of research in theoretical sciences as the basis, it will be technically impossible to achieve fundamental progress and reform." "The Chinese Academy of Sciences must, on the basis of extensively going deep into realities, push scientific research to a higher level, conduct some basic research, raise practice to the necessary theoretical level, and apply Mao Tsetung Thought to critically inherit and develop the theories of natural science."

We must follow Chairman Mao's and Premier Chou's instructions and attach importance to theoretical studies regarding various branches of the technical sciences while conducting theoretical research in the basic sciences such as mathematics, physics and chemistry. We must realize that vigorously strengthening the theoretical study of the basic and technical sciences is crucial to maintaining independence, keeping the initiative in our own hands and relying on our own efforts in developing China's science and technology, as well as to overtaking and surpassing the world's advanced levels. It is a strategic task for achieving the four modernizations within this century and raising the entire nation's scientific and cultural levels.

Over the past 28 years Chairman Mao's revolutionary line has always occupied the dominant position on the scientific and technological front. However, due to the interference and sabotage of the counterrevolutionary revisionist line pushed by Liu Shao-chi, Lin Biao and especially the "gang of four," the forces for conducting theoretical studies in the basic and technical sciences have, comparatively speaking, fallen behind those for conducting specialized research and production in various fields of endeavor. This has affected the pace of our theoretical research programs.

In the present excellent situation and in order to strengthen research in the technical sciences, the various departments concerned, besides giving serious attention to it, must adopt effective measures to demonstrate the superiority of the socialist system, to strengthen party leadership and to organize and channel available forces toward fulfilling the key projects outlined in the 8-year plan for the accelerated development of China's science and technology. They must also make overall arrangements with coordinated efforts, rational division of work, the highest possible speed and the best possible results.

The following tasks in the field of technical sciences should be undertaken in earnest:

1. It is necessary to systematically and appropriately establish technical science research systems which are comprehensive, rounded out in different sizes and rationally located, and which combine the efforts of the military and civilians. These should be run by the Chinese Academy of Sciences, institutions of higher learning, industrial departments and various provinces and municipalities. Attention must be paid to avoiding unnecessary overlapping and wasting of manpower and material resources.
2. A variety of ways must be found to speed up the training of as many Red and expert researchers as possible. It is necessary to tap potentials and open up various study channels to allow serious selection of the outstanding and talented from among the masses, to train large numbers of research students, university students and secondary and post-secondary students, and to raise the level of the existing personnel as quickly as possible so that they will be able to engage in research work of a higher level in order to meet the needs of the high-speed development of science.
3. It is necessary to formulate unified plans and make overall arrangements for the whole country, as well as to solve as quickly as possible problems of design, production, allocation and use of standard equipment for general experiments, nonstandard and specially designed experimental platforms and parts, modern observation and testing apparatus and high-speed, large-size electronic computers for theoretical work. It is necessary to vigorously raise the utilization rate for all kinds of equipment.
4. In light of the urgent needs of national economic construction and national defense construction, it is necessary to organize the existing forces of various units to jointly wage a battle of annihilation, to pay attention to fully developing the role of the theories of technical sciences, and to basically solving as soon as possible key problems relating to science and technology so as to help the relevant quarters to catch up promptly. These problems of science and technology can hardly be solved thoroughly by relying only on the accumulation of experience and the mastery of phenomena.

5. It is necessary to energetically step up research work in technical sciences involving the modern advanced science and technology of the principal production departments, to obtain from theoretical research in the technical sciences a number of fine achievements of advanced world standard, to walk in the front ranks of production and construction, and to spur the high-speed development of the national economy and national defense construction so as to catch up with and surpass the international level.

The Chinese people have the redoubtable tradition of revolutionary struggle. The Chinese nation is a diligent, courageous and clever nation and once created its own brilliant science and culture, making indelible historical contributions to world civilization. Due to the decadent feudal system and colonial and imperialist inroads in recent centuries, China's science and culture have fallen behind.

However, under the CCP's leadership over the past half century, earth-shaking changes have taken place in China. Not only have the three big mountains been overturned and the new China founded, but great victories have also been won in socialist revolution and construction. Our advance cannot be stopped by the reactionaries abroad or the class enemies at home.

We firmly believe that in the new historical period, guided by Chairman Mao's great banner and led by the party Central Committee headed by wise leader Chairman Hua, we will definitely win new victories in the new Long March. Under the condition of greatly raising China's scientific and cultural levels, we will be able to storm the heights of science and scale the heights of the world's advanced science and technology. With massive contingents of scientists and technicians marching toward the modernization of science and technology, our fighters in the technical sciences will also surmount every difficulty to contribute to achieving the four modernizations at an early date.

ON YAO WEN-YUAN'S OUTLOOK ON NATURAL SCIENCE

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 62-70

[Article by the criticism group of the Shanghai Municipal Publication Bureau]

[Text] Yao Wen-yuan has at last fallen from the seat of "theoretical authority" and has been taken to the court of history to stand trial. During those years when Yao Wen-yuan, that overlord in the literary world who constantly played on words, viciously expanded his political influence, he arbitrarily extended his tyranny into scientific and technological circles in an attempt to bring the scientific-technological field under his control. In those days he manipulated Shanghai by remote control from Peking, gathering his forces and sending them out on strike missions everywhere. Every academic subject of natural science was the target of annihilation, every theory of natural science came under attack, and group after group of natural scientists was toppled. Indeed, where the horses had trodden, flowers withered, and where the bludgeons reached, ten thousand horses fell mute. The reason Yao Wen-yuan became such a lunatic was that he wanted to draw the scientific and technological circles into the "gang of four's" "united empire" by taking advantage of the party and state power the "gang of four" had usurped. Together with his disciples he fabricated many absurd arguments and fantastic theories, thus forming their own special view of natural science. Using this as a weapon, he tried to take control of the scientific-technological field, which he regarded as a "fortified village."

Yao Wen-yuan had the audacity to evolve a set of "new" natural science concepts. Wasn't this absurd? This literary crook had marched into the sphere of natural science with a "blank paper." In January 1974 he flaunted his scholarship to several of his cronies in Shanghai: "Do you know why there is morning glow in the sky? There is a kind of cloud which rises very high. These clouds actively absorb the red rays in the sunlight and then actively reflect them to form the morning glow." An ordinary phenomenon of optical diffusion in the atmosphere was thus presented as the simultaneous "absorption" and "reflection" of sunlight

by the clouds, and, moreover, this was done "actively." What a funny tale of physics! But Yao Wen-yuan did not stop here and boastfully said: "Now there is also the reproduction science, which is concerned with man imitating living things," "for instance, thinking from the bat to the infrared rays." It was his ignorance to present the reproduction science as "man imitating living things," and for bats to emit not ultrasonics but infrared rays must have been a major "discovery" on Yao's part. But fortunately these cronies were people who could not differentiate between the figure 8 and ∞ , the great symbol of infinity, and in any case he was not embarrassed then and there. Furthermore, since Yao Wen-yuan had made no discovery in the field of natural science, nor had he written any work about it, it is not easy to comment on his outlook on natural science. Nevertheless, we know that he did express a lot of high-sounding theories privately. During the period RED FLAG was under his control, it was he who arranged for the production of a number of articles concerned with the "study of the history of science," and when editing the manuscripts he also left behind many of his own words. Then there was also that magazine DIALECTICS OF NATURE published in Shanghai. The main topics were selected by him, many viewpoints were advanced by him, articles were revised and finalized by him, and he also built up a huge stock of internal "reference materials." If those materials that express Yao Wen-yuan's viewpoints are analyzed synthetically, it will not be difficult for people to discover the origin and outline of his outlook on natural science.

The Core of Yao Wen-yuan's Outlook on Natural Science Is the Theory That "Natural Science Has a Class Character"

The core of Yao Wen-yuan's outlook on natural science was that natural science has a class nature and that modern theories of natural science are bourgeois theories. Quite a number of arguments were put forward in Yao Wen-yuan's writings as well as in articles written under his direction. For example, Darwin's theory of evolution was slandered as a "bourgeois theory of natural science" (DIALECTICS OF NATURE, No 3, p 56); Einstein's theory of relativity was attacked as "a typical reactionary, bourgeois, idealist, metaphysical world view within the sphere of contemporary natural science" ("Comment on Einstein's Theory of Relativity," Manuscript No 10, p 2); "Copernicus' theory is very clear in its class character" (Yao Wen-yuan's talk on 14 January 1974); Morgan's genetics became "one of the most reactionary bourgeois theories of natural science that has exerted a wide-ranging pernicious influence since the beginning of the 20th century" ("Introduction to Modern Western Theories of Natural Science and Its Principal Schools: 'Genetics'"); cybernetics "is a fashionable theory that has proved most popular in the West over the last 20 years," "serving as the theoretical basis for U.S. imperialists and the Soviet revisionists to sabotage revolution" ("Introduction to Modern Western Theories of Natural Science and Its Principal Schools," p 6); and so on and so forth.

They said that all these important theories of natural science had a class nature. What was the basis for their conclusion? One of their arguments was that, since the basic theories of natural science were invented by Western bourgeois scientists, they therefore have a definite class nature. They ordered intensive investigations into the family backgrounds of foreigners over the past century and more, defined their status, and put the "bourgeois" label on all of their natural science theories before denouncing them. It is true that many scientists throughout history were not born of working-class families but were scholars. The fruits of their labor were exploited by the ruling classes, but this was not by their own choice. Some scientists and technicians played a part in creating surplus value, but they were only exploited mental laborers. How could they all be grouped into the "bourgeois" category? Even if their world outlooks were bourgeois, one still shouldn't conclude that natural science has a class nature.

Chairman Mao explicitly said: "As for the natural sciences, there are two aspects. The natural sciences as such have no class nature, but the question of who studies and makes use of them does." ("Beat Back the Attack of Bourgeois Rightists") In other words, what the natural sciences reflect, describe and study is the natural world; what they reveal are the objective laws of nature and the basic relationships among various natural phenomena. Class nature does not exist as far as natural phenomena and laws of nature are concerned. If the proletariat and the bourgeoisie want to produce atomic bombs, they both must base the manufacture of their bombs on the same scientific principles. To launch an artificial satellite into space, it is necessary for it to attain first cosmic velocity [ti i yu chou su tu 4574 0001 1342 1352 6643 1653]. The speed of a satellite must not be reduced just because a revolutionary class launches it.

In a class society, those who understand and use the laws of nature do, of course, have a class nature. But it still can't be said that natural science has a class nature, too. As machines and weapons are "natural science in material form" and in themselves are devoid of a class character, can we say that spears and sabers were the property of the slave-owning class, homemade guns and homemade cannons were that of the landlord class, and tanks and atomic bombs belong to the bourgeoisie? The point is that natural science serves the class which controls it under certain historical conditions.

Because natural sciences are precise studies which struggle against natural phenomena, they are definitely not accumulations of perceptual material. Natural science studies never end with intuitive descriptions of phenomena and will eventually provide us with rational knowledge. They gain expression through viewpoints, doctrines and theories. Viewpoints may be either correct or erroneous; doctrines may describe the essence of something or merely describe a fallacy which distorts the essence; and theories must be tested repeatedly in order

to determine whether or not they conform to objective laws. Only those viewpoints, doctrines and theories whose contents are proved, through repeated practical application, to be in conformity with nature are scientific viewpoints, doctrines and theories; and these do not have a class nature. To be sure, scientific doctrines and theories are also relative truths, because they are applicable to a certain scope, and their contents will be continually revised and strengthened in the wake of the development of human knowledge. However, the basic contents of those viewpoints, doctrines and theories which distort the essence of things and are disproved by practice are not abstracted from nature but are imposed on nature from the outside; in a strict sense they are not part of natural science. For instance, such hypotheses as the "phlogistic theory," the "photon theory" and the "caloric theory" played a certain role in the history of science as forms of the development of scientific thought and in their days were regarded as science. However, practice proved that their basic contents were not realistic, and although they might have certain rational elements, they were eventually discarded by natural science as doctrines. When the mouthpieces of the "gang of four," such as Li Ko, advocated "a complete destruction" of the law of transformation and conservation of energy, and when that sworn follower of the gang in Liaoning had people work on a "perpetual motion machine" that could never be realized, this was not at all natural science but pseudoscience or antiscience. Influenced by a class bias, a natural scientist working in a class society sometimes will unavoidably add some erroneous philosophical explanations to his natural scientific discoveries. The erroneous explanations are merely unnecessary appendages, not part of natural science itself, and will inevitably be eliminated during repeated practical application. For instance, although Newton added the "first impulse" of divine power to his mechanical system, Newtonian mechanics, as the correct reflection of the objective law of low-speed mechanical motion, still effectively guides the present-day practice of men and is applied extensively in science and technology. For another example, Darwin erroneously linked his theory of evolution with the Malthusian theory, yet as Engels pointed out in "Anti-Duhring," "the struggle for existence can take place in nature, even without any Malthusian interpretation." The theory of evolution correctly reflected the law of development of the organic world in our planet and for the first time put biology on an entirely scientific basis. These instances can only show that the world outlook of natural scientists has a class character, but the same cannot be said of natural science itself.

Natural scientific achievements are the results of practice in production and scientific experiment. Their wealth is shared by all mankind, because they are products of the labor and wisdom of many people, including scientists. Under the pretext of criticizing the bourgeoisie, Yao Wen-yuan willfully wanted to ascribe these fruits, for which all of mankind worked for a long time, to the bourgeoisie. This thoroughly exposes the reactionary nature of Yao Wen-yuan and his ilk, who are sham leftists and genuine rightists.

The second argument they used to prove the class nature of natural science was: Natural science is a superstructure; a superstructure relies upon the economic base of society and serves that specific economic base. Therefore, natural science has a class nature. For instance, the sinister article "From Bourgeois Democrats to Capitalist Roaders," carried in the 1976 No 3 issue of RED FLAG, looked upon science and technology as part of the superstructure. Stalin clearly pointed out in "Marxism and Problems of Linguistics": "The superstructure is the political, legal, religious, artistic, philosophical views of society and the political, legal and other institutions corresponding to them."

According to Marxism, the base of a certain era is decided by the social and economic structure of that time; in the final analysis, the superstructure is defined by the base. However, this does not apply to natural science; natural science is not a product of the economic base of a society, although its development is affected by certain economic conditions. Quite a few examples of this exist throughout the history of science. Sometimes a scientific law or theory is discovered or established by people of different classes in different societies. For instance, someone in ancient Greece asserted, as early as the 3d century B.C., that the sun was the center of the universe and that the earth revolves around the sun; this was a very primitive form of the heliocentric theory. The heliocentric theory, which has a scientific basis, was proposed by the Polish astronomer Copernicus in 1543. Can we say that the development of the heliocentric theory changed the class nature of this theory? Stalin also said: "The superstructure is the product of one epoch, the epoch in which the given economic base exists and operates. The superstructure is therefore short-lived; it is eliminated and disappears with the elimination and disappearance of the given base." ("Marxism and Problems of Linguistics," p 4) This also is not the case with natural science.

When economic bases and old superstructures are toppled, theories of natural science are not overthrown but are carried on to serve mankind's struggle to transform nature. Natural science is mankind's intellectual weapon in the struggle against nature. Before natural science enters the production process it is a productive force in the form of knowledge. If "natural science is practically applied during production and becomes a factor or function of the production process" (Marx, "Machinery. The Application of Natural Force and Science," p 206), then it is converted into a concrete productive force. Marx pointed out a long time ago: "Productive forces certainly contain scientific factors." This shows that natural science is not a superstructure but a productive force that does not have a class nature.

The third argument which Yao Wen-yuan and his disciples used to affix a class nature to many important natural science theories was: "Although these theories deal with natural science, they are also influenced by certain philosophical thoughts. Natural science is also natural

philosophy," they argued; "therefore it is either materialistic or idealistic, either dialectical or metaphysical." ("Commenting on the 'Factional Struggle' in Natural Science") Because human thought has a class nature, natural science theories can be divided into two categories: those of the bourgeoisie and those of the proletariat.

What kind of serious argument was that? They tried to fool people with tricks. First, they called natural science a "natural philosophy"; then they said the two philosophical lines in natural science divide natural science into "materialistic" and "idealistic" categories; finally, they labeled "idealistic natural science" as "bourgeois," and so a superb verification process was accomplished.

Because natural science didn't develop fully from the 17th to the early 19th century, many natural phenomena could not be explained scientifically, the interrelationships among various phenomena were not clear, and the basic relationships among various fields of study could not be grasped. This gave rise to a kind of philosophical theory which some people maintained could "transcend, include and become a substitute for natural science." Some people called this theory "natural philosophy." It used the imaginary relationship of ideas to replace the real relationships among incomprehensible phenomena, fictionalization to replace realities that were still unknown, and abstract arguments to replace scientific experiment. "The science of science," as some people called it, was not a natural science but a kind of empiricist philosophy.

Therefore, when Yao Wen-yuan and his ilk mixed natural science with natural philosophy so that they could argue that natural science had a class nature, they engaged in a mean and deceptive sleight of hand. Their allegation that natural science is divided into materialistic and idealistic categories is complete hogwash. Natural science is basically materialistic; while it admits that the world is beyond our ken, it also maintains that knowledge of the objective world can be acquired through practice. Regarding this basic issue, Lenin said: "Materialism and natural science are totally compatible." ("Selected Works of Lenin," Vol 2, p 40) Engels also pointed out that natural science "itself was thoroughly revolutionary." ("Dialectics of Nature," p 8) Thus, how can there be "idealistic natural science"?

It was indeed true that many "outstanding scientists and small philosophers" emerged in the history of science. Their world outlook was idealist, but in their own fields of research they made great contributions. How should we explain this phenomenon? The reason is that when they were engaged in the study of natural science they started from empirical facts. They acknowledged the necessity of nature and derived from it the necessity of thinking. Thus, they went against their own idealist philosophical precepts and unwittingly followed the materialist principles of natural science. They might have been subjected to certain influences of the idealistic world outlook when they were making

theoretical generalizations of natural science, but the basic contents of their scientific theories were materialistic. As Engels pointed out long ago in his book "Dialectics of Nature": "Many natural scientists have proved to us that they are firm materialists in the sphere of their science, but beyond that they are not only idealists but even pious believers."

The world outlook of natural science has a class nature, but Yao Wen-yuan changed this to "natural science has a class nature." Under his attack, mankind's brilliant accomplishments in natural science were totally negated, and scientific nihilism inevitably resulted from his concept that "natural science has a class nature." The "gang of four" widely distributed the article "Introduction to Modern Western Theories of Natural Science and Its Main Schools" (this article was arranged by Yao Wen-yuan and examined by him). In it the principal theories of the six major basic academic subjects--mathematics, physics, chemistry, astronomy, geography and biology--were negated and given all sorts of labels of "classes" or "doctrines." In introducing the schools engaged in the study of the movement of the earth's crust, they even presented the geomechanical school represented by our scientist Comrade Li Ssu-kuang as one of the "principal schools" which "now enjoy relatively great influence in the West (including the Soviet revisionists), have shown their bourgeois world outlook prominently, and have produced relatively deep poisonous effects in our country." Sakata's theory of basic particles, which was highly admired by Chairman Mao for its dialectical thought, likewise came under attack. In the eyes of people like Yao Wen-yuan, the contemporary development of natural science, rather than defending and proving the Marxist theory of dialectic materialism, was bogged down by outdated idealism; the situation was so bad that natural science was "incurable" and would not survive unless they performed a major operation. No wonder they so arrogantly proclaimed that they would create a "brandnew natural science" to serve the proletariat! ("Comment on Einstein's Theory of Relativity") What ignorance! And how frantic!

The Philosophical Basis of Yao Wen-yuan's Outlook on Natural Science Is Idealist Transcendentalism

How did Yao Wen-yuan create the "proletarian theoretical system of natural science"? Let us refer to an "important talk" he gave to his cronies of the former Shanghai Writing Group in October 1972. He said:

"If there is something about mathematics you don't understand...find another way."

"Light can be explained, but it is more difficult to explain traction power. If you can't draw a conclusion about something, don't do it. You won't have conclusive results even if you study these problems for

several more decades. I would not lead you to do them... I look at the matter from the world outlook."

A follower of the "gang of four" in Shanghai, echoing Yao, said: "If you can't explain something clearly in terms of natural science, then explain it in terms of philosophy."

"I look at the matter from the world outlook"--this was "another way" that Yao Wen-yuan had to "find" in establishing his "new" natural science system. It was also what he repeatedly emphasized when he was talking about the theoretical problems of natural science. One might not have to understand the theories of natural science or could even be ignorant about them. What one must do was simply to "look at the matter from the world outlook" and "explain it in terms of philosophy." How free one was! As Engels said of Duhring, sarcastically: "Freedom of science is taken to mean that people write on every subject they have not studied and proclaim this as the only strictly scientific method. Herr Duhring is one of the most characteristic exponents of this bumptious pseudoscience which is nowadays forcing its way to the front everywhere in Germany and is drowning everything with its resounding, sublime nonsense." ("Anti-Duhring," p 4)

Wasn't it precisely by stepping into Duhring's shoes that Yao Wen-yuan proclaimed this "subline nonsense" as the "only strictly scientific method"? Yet Yao after all was bent on creating a "new system," and he wanted to develop the "natural philosophy" that was so popular in Germany in those days. One way of doing this was that, whereas the old "natural philosophy" substituted imagination for unknown scientific facts, Yao Wen-yuan wanted to refute known scientific facts with imagination. Another way of "developing" the "natural philosophy" was that, whereas the old "natural philosophy" replaced natural science with an all-embracing "philosophy," Yao wanted to clearly replace natural science with the "world outlook," thereby finding a simple method of certifying the "class nature" of scientific theories as well as securing a shortcut to creating their own "new system of natural science." Subsequently, Yao made this method of substitution even more concrete when he said, "The fundamental theory of natural science is the dialectics of nature." (Speech to the leaders of the former Shanghai Writing Group in October 1972) If the dialectics of nature were the fundamental theory of natural science, would it then mean that no fundamental theory of natural science was needed? Thus, Yao finally accomplished his notorious "theory of substitution."

The dialectics of nature is the summation and generalization of natural science by Marxist philosophy. It is of tremendous significance as a guide to the development of natural science. It is for this reason that we encourage the study of Marxism and its use in consciously transforming our world outlook and in overcoming antiscientific class prejudices.

However, Marxism and its philosophy do not and cannot replace natural science itself. Therefore, Yao Wen-yuan's absurdities must of course be severely criticized by the proletariat. As the "Outline of the Work Report of the Chinese Academy of Sciences" solemnly pointed out, the "theory of substitution" was a violation of the teachings by the revolutionary teachers, and philosophy could not replace natural science. Resentful of this, Yao Wen-yuan waited for his chance to counterattack. In June 1976, in a conversation with his faithful followers working for RED FLAG, Yao Wen-yuan, referring to this outline report, said: "It is said that Marxism cannot replace natural science, and that in the field of natural science one must conduct one's own research and experiments before one can speak. In that case, when Lenin criticized Mach, did it mean that the former had to carry out his own experiments? When Engels criticized Duhring's mechanics, did it mean that he had to prove what he said with an experiment?" Here, in most sophistic terms, he defended his "theory of substitution." Let us ask: Did Engels criticize the so-called "mechanics" as a component part of Duhring's "natural philosophy," or did he criticize the mechanics of natural science? Did Lenin criticize the idealist Machism in philosophy or did he criticize Mach's theory of physics? To secretly change the concepts with such a "half-poetic" type of language of "natural science," to divert the conversation to another subject, and to find the basis for the "theory of substitution" by unscrupulously misrepresenting materialism--such is precisely the characteristic style of Yao Wen-yuan the crook.

When Yao Wen-yuan so frantically trumpeted and upheld the "theory of substitution," what kind of philosophy did he and his ilk want to use to replace natural science?

Marxism has always maintained that the difference between materialism and idealism is that the former gives highest value to physical matter while the latter regards mental contemplation as having the greatest importance. Physical matter exists objectively, independent of human consciousness. It can be changed from one form of energy to another but "cannot be created from nothing or be destroyed." (Engels, "Anti-Duhring," p 62) But Yao Wen-yuan and his ilk said: "Physical matter exists in the eternal process of generation and destruction." In their view, physical matter can appear from nowhere and can vanish into nothing. This shows that their world outlook was totally idealistic. They wanted to thoroughly shatter the law of energy conversion and conservation and overturn the theory of relativity and all modern theories of natural science. They didn't want any scientific rules. All they needed was "a view from the angle of the world outlook." Isn't this also a typical example of subjective idealism?

When they advocated replacement of natural science with dialectics, what kind of dialectics did they use. The No. 2 chieftain of the former Shanghai Writing Group put it very clearly: "Dialectics means sophistry."

Let us look at what they said: "A compound is in fact also divisible" ("Introduction to Modern Western Theories of Natural Science and Its Main Schools: 'The Theory of Molecular Structure'"); "conservation also implies lack of conservation" (DIALECTICS OF NATURE, No 8, p 9); cancer "is not only man's disaster but will also be the motive power for the evolution of the human body" (DIALECTICS OF NATURE, No 11, pp 93-94); "a human being is a human being and yet not a human being" (DIALECTICS OF NATURE, No 6, p 7).... Such phrases filled the journal DIALECTICS OF NATURE controlled by Yao Wen-yuan. In their articles, everything in the world was said to be precarious, paradoxical, ambiguous and uncertain, and right was wrong. If man could no longer distinguish between things, how could mankind understand everything?

Chairman Mao taught us: "When considering each energy form of matter, we must observe the qualities which are found in other forms of energy. But what is especially important and necessary--because it is the foundation of our knowledge of matter--is to observe the unique qualities of this form of energy, that is, to observe the qualitative difference between this form and others. Only when we have done this can we distinguish between things." ("On Contradiction") Failure to recognize differences between things and failure to pay attention to the conditions necessary for reciprocal conversion of two opposites is relativism and sophistry, not materialist dialectics.

After the "theory of substitution" was put into practice, the "brandnew natural science" they created was only a hodgepodge of philosophical terms. For instance, the basic particles "seem to break and yet remain intact, neither break nor remain intact, break while remaining intact, and remain intact while breaking," "they divide but not break, and though they break they are linked by a thread," "the divisions may get smaller but they also can get bigger." (DIALECTICS OF NATURE, No 2) What is this? The more one looks at it, the more confused one becomes. For another instance, the evolutionary theory they "created" was this: "Any disease is the motive power for the evolution of the human body." (DIALECTICS OF NATURE, No 11, p 93) What kind of science were they talking about? And yet they carried these nonsensical words in their journal without feeling a bit ashamed. They vainly attempted to replace natural science with the idealist "philosophy" and let their transcendentalism engender a kind of "new" nature. But the result was nothing but a lot of rubbish. What else could it be?

Philosophy and natural science are both related and different and cannot become substitutes for one another. When philosophy is replaced by natural science, natural science becomes positivism; when natural science is replaced by philosophy, philosophy becomes apriorism. Both positivism and apriorism are idealistic. In this regard, Chairman Mao said a long time ago that "Marxism can only discuss but not provide substitutes for realism in literature and art; in the same way, it can only discuss and not provide substitutes for atomism and the electron

theory in physical science." ("Selected Works of Mao Tse-tung," Vol 3, p 831)

Regarding this, Engels provided a very interesting analogy: "I can no more grow barley successfully or differentiate and integrate with the bare knowledge that the barley stalk and infinitesimal calculus both come under the negation of the negation than I can play the violin right off by the bare laws of the determination of sound by the dimensions of the strings." ("Anti-Duhring," p 140)

It is very clear that Marxism long ago put forward a precise conclusion concerning the relationship between philosophy and natural science. But Yao Wen-yuan brazenly violated our revolutionary teachers' instructions by putting forward the "theory of substitution," an apriorist principle which totally distorted the actual relationship between philosophy and natural science and gravely undermined the guiding role of Marxist philosophy for natural science.

The Essence of Yao Wen-yuan's Outlook on Natural Science Is Opposition to the Three Great Revolutionary Movements

Yao Wen-yuan alleged that natural science has a class nature. This naturally led to the assertions that theories of natural science should be replaced by philosophy and that scientific practice should be replaced by class struggle. He therefore negated the function of natural science theories, the existence of scientific experiment and Chairman Mao's theory that class struggle, struggle for production and scientific experiment are the three great revolutionary movements for building a powerful socialist state.

In his various talks on the history of science, Yao Wen-yuan repeatedly stressed the two arguments that scientific theories are directly derived from the production process and that the development of natural science is propelled by class struggle. When he edited articles on the history of science to be published in RED FLAG, he did so in accordance with this principle. For instance, when editing the article "How Was the Theory of Calculus Derived?" he deleted from the original text the following sentence, "The motive power for building the theoretical basis of calculus came from the requirements of physics." In the case of such articles as "The Struggle Between Two Kinds of World Outlook on the Understanding of the Human Body" and "Winds and Storms Can Be Predicted," he added a lot of words purporting to show that the development of natural science was impelled by class struggle. However, he was absolutely silent about scientific experiments. One fallacy within his theory of scientific development is that scientific experiment is completely excluded from man's social practices. Chairman Mao repeatedly pointed out that scientific experiment is one of man's sources of correct thinking, and that it is one of the three great social practices and one of the three great revolutionary movements for building a powerful socialist state. In the

early days of human society, owing to the low level of productive forces, man's understanding of nature was shallow and crude. Although there were primitive scientific experiments at that time, most were not entirely detached from production practice to constitute an independent practical activity. After the middle of the 15th century, with the appearance of the capitalist mode of production, the dark night of the Middle Ages was over and the productive forces were liberated. The large-scale machine industry "demands that the natural forces replace human power and that the conscious application of natural science replace the rules obtained from experience." ("Collected Works of Marx and Engels," Vol 23, p 423) Modern industry promoted the development of science, and scientific development "provided other means of experimenting than previously existed and allowed the construction of new instruments; it can be said that really systematic experimental science now became possible for the first time." (Engels, "Dialectics of Nature," p 163) Scientific experiment then became a kind of social practice independent of production practice, and its main purpose was to discover new natural phenomena and natural laws in the course of exploring unknown processes of nature and to provide production practice with a new scientific theoretical basis and new technical means. Separation of scientific experiment from the production process was a great leap forward in man's efforts to understand the world. The history of scientific-technological development has shown that scientific experiment, once it is separated from production, becomes a favorable way for man to explore, understand and transform nature. The more he understands natural phenomena and laws, the more he relies upon scientific experiment. Through handicraft production and through the direct observation of natural and production processes, people developed astronomy, mechanics, mathematics and other classical sciences. But to know the universe beyond the earth, to know the internal structure of matter and its laws, and to acquire such knowledge of the natural sciences as is required in modern production--this is possible only through reliance on specialized scientific experiments. Thanks to the means of scientific experimentation, people now can observe the universe with the yardstick of 10 billion light years and detect an atomic nucleus which is one-10,000 billionth of a centimeter. In the laboratory, people can simulate ultrahigh temperature up to a hundred million degrees and ultrahigh pressure up to a million atmospheres, and achieve ultrashort impulses one-10,000 billionth of a second, charged particles of several hundred billion electronvolts, and so on and so forth.

Scientific experiment has greatly expanded man's senses and has broadened and deepened his knowledge of nature. Most modern scientific theories--like the theory of relativity, quantum mechanics, the theory of basic particles, molecular biology and the theory of information--have been established on the basis of scientific experiment. The development of modern natural science has become more dependent on scientific experiment; we could say that the former cannot exist without the latter.

Another fallacy in Yao Wen-yuan's theory is the complete distortion of the dialectical relationships between science and production and between theory and practice. Production is the most basic of man's social practices. "The birth and development of science has been determined by production." (Engels, "Dialectics of Nature," p 162) The development of production has provided many subjects for study through which man seeks to reveal the mysteries of nature, has prompted man to conduct specific experiments and research on natural phenomena and laws, and has resulted in the separation of scientific experiment and production. The development of production has also provided more elaborate equipment, without which scientific experiment cannot advance.

Yet, in the production process man deals with only a limited portion of infinite nature. Production itself usually cannot solve the research problems it encounters. Only through scientific experiment can we obtain the large amounts of natural scientific knowledge, especially modern natural scientific knowledge, which are necessary for production and essential for solving new production problems. Moreover, scientific experiment is a bridge which links natural science theories and production and is indispensable in correctly applying these theories to production. Therefore, scientific experiment is an important method of changing production and is an indispensable factor in its development.

Theories are derived from repeated practical application and, in turn, actively direct and promote this application. Common sense tells us that progress in science and technology will improve production. The profound changes in production brought about by the introduction of cybernetics and electronic computers into the area of production are there for all to see. Facts tell us that scientific experiments can not only help solve various scientific and technological problems arising in production but also blaze new trails in production and decide the direction of technical advance in production. It is impossible to modernize production without theories of natural science. This is precisely why we say that scientific research must be in the van of production and construction. The "gang of four" only permitted discussions of how production promoted science, not the converse. They indiscriminately pinned the labels of "scientific determinism" and "scientific supremacy" on people who discussed science's direction and promotion of production. This was another example of how they ran rampant with metaphysics.

Science has been a promotive and revolutionary force throughout history and a weapon for man in his struggle for freedom. The development of natural science is determined mainly by the methods man uses to understand nature. It also hinges on the level of production and the level of scientific experiment. It is a product of the combination of the struggle for production and scientific experiment, not of class struggle, although it is conditioned by class struggle. All perishing reactionary classes always try to hamper scientific development that violates their

class interests. Every time a reactionary class is overthrown by an advanced class, with profound changes in the relations of production, productive forces will show new development. This provides a stronger material foundation for scientific experiments, helping to remove the ideological shackles imposed on scientists by the reactionary class and thus stimulating the development of the natural sciences. The development of the natural sciences will in turn stimulate the raising of the productivity of social labor and at last lead to a change in the relations of production. All classes try to grasp natural science, a component part of the productive forces, and use it as a means of waging class struggle. In ideological struggle, the achievements of the important social activity of scientific experiment have constantly enriched, substantiated and developed dialectic materialism and have promoted a continuous struggle between the two world outlooks. Dialectic materialist philosophy also provides a progressive world outlook and methodology for natural science and insures that natural science will develop along the correct path.

Holding high Chairman Mao's great banner, Chairman Hua has repeatedly called upon us to simultaneously grasp the three great revolutionary movements--class struggle, the struggle for production and scientific experiment. We must take class struggle as the key link, consciously conduct scientific experiment as a revolutionary movement, push science and technology forward as quickly as possible, and vigorously carry out technical innovations and the technical revolution. All this is aimed at continuously strengthening the material foundation of the dictatorship of the proletariat, continuously improving the people's material, cultural and living conditions and building a modern and powerful socialist country. Yao Wen-yuan prated about class struggle while negating scientific experimentation. He appeared very revolutionary, but actually he harbored very reactionary motives. He used the fake left but real right trend of thought to disavow scientific experimentation and emasculate the three great revolutionary movements. All his talk about socialist revolution and construction was just empty lipservice.

Yao Wen-yuan's concept of the natural sciences was a natural product of the political line pushed by the "gang of four" to usurp party and state power. For a long time they did everything possible to wildly attack the proletariat on all fronts. They opposed great leader and teacher Chairman Mao's revolutionary line in science and technology and maliciously branded the science and technology front as the "dictatorship of the sinister line." Doing everything they could to oppose the four modernizations, they rabidly undermined socialist science and culture, viciously attacked esteemed and beloved Premier Chou, wise leader Chairman Hua and Vice Chairman Teng, and exercised all-round fascist "dictatorship" over the vast number of intellectuals. They did so in a vain bid to open a breach in science and technology circles and to restore capitalism. To achieve their criminal objectives, this bunch of political

swindlers had to disguise themselves as Marxist-Leninist "theoretical authorities" to deceive the world.

On 18 October 1972, Yao Wen-yuan told his confidants in Shanghai: "In a party there are always a few people to look after ideological matters, such as developing our own philosophy, literature and art, political economy and the natural sciences..." He acted as if he were proclaiming himself a "theoretician" "in charge of ideological matters."

The "gang of four's" pawns in the former Shanghai Writing Group at a meeting also transmitted Yao Wen-yuan's views, saying: Engels summed up the advances made in the natural sciences before the 19th century, and Lenin summarized the new discoveries made in this field from the late 19th century to the early 20th century. Since then, nobody has summed up the advances in the natural sciences... The implication was that this "blank" should be filled by them.

Didn't they wildly advocate the "introduction of completely new natural sciences in the service of the proletariat"? Didn't the gang's publication that Yao Wen-yuan controlled, the journal DIALECTICS OF NATURE, provide some black specimens for what they called "completely new natural sciences"? The "Chang Chun-chiao's thought" conceived by Chang Chun-chiao himself was acclaimed to be "the fourth milestone in the history of the development of Marxism." Furthermore, his "close comrade-in-arms" Yao Wen-yuan came forward with a new philosophy to provide "Chang Chun-chiao's thought" with a "scientific basis." All these anti-Marxist fallacies, fake left but real right, established the "theoretical basis" for the counterrevolutionary revisionist line pushed by the "gang of four."

Since the collapse of the "gang of four," Yao Wen-yuan's concept of the natural sciences has become a laughing stock of history. But we must not underestimate their reactionary influence. In the excellent situation that has prevailed since the National Science Conference, we must carry through to the end the struggle to expose and criticize the gang. We must thoroughly repudiate their counterrevolutionary revisionist line and their reactionary world outlook, eliminate their pernicious influence and clear the way for fulfilling the task of raising China's scientific and cultural levels. Led by the party Central Committee headed by wise leader Chairman Hua, we must continue the revolution under the dictatorship of the proletariat, promote the three great revolutionary movements of class struggle, the struggle for production and scientific experiment and strive to fulfill the great historical mission of building China within this century into a modern and powerful socialist country.

EXPOSE AND CRITICIZE YAO WEN-YUAN'S CRIMES OF USING 'RED FLAG' TO SABOTAGE SCIENTIFIC AND TECHNOLOGICAL WORK

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[Article by Ko Wei-jan [2688 3634 3544]]

[Text] Although Yao Wen-yuan knew nothing about the natural sciences, he was quite an "expert" in sabotaging scientific and technological work, such as by using RED FLAG to conduct a series of counterrevolutionary misdeeds. In the name of "criticizing the revisionist line in scientific research," he rabidly opposed Chairman Mao's revolutionary line on science and technology, viciously attacked esteemed and beloved Premier Chou, wise leader Chairman Hua and other leading central comrades. Wildly slandering a great number of scientific and technological workers thus ideologically, politically and organizationally created great confusion in scientific and technological circles. In order to bring order to the chaotic situation and speed up the development of the socialist cause of science and technology in our country, it is imperative to completely reckon with Yao Wen-yuan's counterrevolutionary crimes in this regard.

Yao Wen-yuan long ago used RED FLAG to disrupt scientific and technological work and conduct antiparty activities. Back in 1973 he wrote an article about weather to oppose Premier Chou's instructions on the study of unusual weather conditions. Attacking Premier Chou obliquely, Yao said that unusual weather symptoms "plunged him into inexplicable fear and flabbergasted him."

Subsequently, he introduced in RED FLAG a special supplement on "Studying the History of Science." He did so to distort the history of the development of science and technology as he pleased and to peddle his antiparty and anti-Marxist trash. In 1976 the "gang of four" were so blinded by personal gain that they totally misjudged the balance of class forces and thought they were the dominant group.

In order to act in concert with the "gang of four's" attempt to "ferret out at every level," Yao Wen-yuan wildly proposed "criticizing from one

realm to another." This meant usurping party and state power from one front to another. After the sinister article "The Orientation of the Education Revolution Brooks No Alteration" was published in RED FLAG, he charged against the science and technology front. Between giving instructions and making comments, he would direct his faithful followers at RED FLAG to concentrate on problems of science and technology and to write articles based on representative materials.

Taking the cue from their master, Yao Wen-yuan's pawns at RED FLAG lost no time keeping in touch with Liang Hsiao and Tang Hsiao-wen. They met secretly to draw up plans. In just a few months Yao Wen-yuan used RED FLAG to publish many antiparty articles wildly attacking the science and technology front with considerable vehemence. The two very poisonous articles, one dished up by Liang Hsiao and entitled "Hitting Back at the Right Deviationist Wind To Reverse Verdicts in Science and Technology Circles," and the other concocted by the "gang of four's" pawns in the Chinese Academy of Sciences under the title "A Program for Restoring Capitalism in Science and Technology Circles," engulfed science and technology circles with the crushing impact of tidal waves.

The first article by Liang Hsiao directed the spearhead at esteemed and beloved Premier Chou. It was Premier Chou who countered the fallacy of "negating all" advocated by Lin Piao and the "gang of four" with the clearly defined "general orientation for advance based on the revolutionary line represented by Chairman Mao," basically upheld in science and technology circles before the Great Cultural Revolution.

Liang Hsiao's antiparty article openly challenged Premier Chou's directive and asserted that science and technology circles had "pushed a revisionist line" to "counter Chairman Mao's revolutionary line," a line that "is no less obvious than the one that exists in education circles." What the "gang of four" termed the theory of "dictatorship of the sinister line" on the science and technology front was dished up for the first time right there.

After the antiparty article was completed, our esteemed and beloved Premier Chou passed away. Acting wildly and with an ulterior motive, Yao Wen-yuan instructed RED FLAG editors to publish Liang Hsiao's article as the "lead" article in the next issue of the journal. He did this in a vain bid to heighten the article's reactionary influence and to dilute the nationwide mourning of Premier Chou.

The publication of Liang Hsiao's article angered the masses. A certain comrade of the Chinese Academy of Sciences furiously questioned the editorial department of RED FLAG, pointing out that the published assessment of works regarding science and technology was at variance with the facts and contradicted Premier Chou's directives.

But Yao Wen-yuan's pawns at RED FLAG adhered to the "gang of four's" reactionary stand and defiantly ignored the protests raised by the readers. They shouted angrily: "We have our point of view. This is a new direction in the class struggle." How arrogant and reactionary was the RED FLAG controlled by Yao Wen-yuan in opposing Chairman Mao's revolutionary line, opposing esteemed and beloved Premier Chou and opposing the socialist cause of science and technology!

Not long afterward Yao Wen-yuan again used RED FLAG to converge counter-revolutionary attacks on "An Outline Report on the Work of the Chinese Academy of Sciences" and to attack and frame Comrade Teng Hsiao-ping and direct the spearhead at Comrade Hua Kuo-feng. He clearly realized that the "outline report" was drafted by Comrade Teng Hsiao-ping, who was then in charge of the work of the State Council, in conjunction with Comrade Hua Kuo-feng, who was partly responsible for the work dealing with science and technology. However, Yao Wen-yuan insisted that the document, aimed at consolidating the Chinese Academy of Sciences and approved by Chairman Mao, be branded a very poisonous weed.

Calling black white, the sinister article "A Program for Restoring Capitalism in Science and Technology Circles" attacked the "outline report" for "preaching the theory of the dying out of class struggle and the theory of productive forces" and "writing off the dictatorship of the proletariat." Even after Chairman Mao passed away, Yao Wen-yuan continued to order his underlings to write articles attacking the "outline report." His criminal objective was to bring down Comrade Hua Kuo-feng, personally selected by Chairman Mao to be his successor. At the same time, Yao Wen-yuan kicked up a big fuss over the Young Pioneers and claimed they could also tackle big jobs. He even asked that an "editor's note" be inserted for publicity purposes. This was no different from the myth fabricated by the "gang of four's" remnants in Shanghai and aimed at glorifying Wang Hung-wen, who bragged about being a Young Pioneer in his childhood and at creating counterrevolutionary public opinion for the "assumption of power" of the so-called "Young Turks" among the "gang of four's" conspirators and careerists.

In order to disrupt the science and technology front, Yao Wen-yuan, in the name of "criticizing absurdities," did not scruple to alter basic Marxist-Leninist principles on questions regarding the relationships between science and technology on the one side and productive forces on the other, between philosophy and the natural sciences and between politics and vocational work. He did this to peddle his revisionist fallacies. By "criticizing absurdities" he was clearly concocting "absurdities."

That science and technology are part of the productive forces is considered by Marxism to be common knowledge. Marx said in explicit terms: "Productive forces naturally embraces science, which is a part of the general social productive forces." Yao Wen-yuan arbitrarily identified

science and technology with the superstructure, not the productive forces. He even distorted the Marxist point of view expounded by the leading central comrades to mean that "productive forces is science." He also asked his pawns to write articles "criticizing" this view.

Marxism views science and technology as part of the productive forces; it is not independent of the social productive forces but permeates it to become its basic element. This comprises the means of production and labor. In history the means of production and labor are related to science and technology. Even in primitive communist society in which the level of production was very low, people used tools made of stone to battle against nature. This was related to their production experience and labor skills. In the course of the accelerated development of the social productive forces to the present day, science and technology have played a particularly prominent role as the basic elements of productive forces. No one can deny this concrete and objective fact.

In the Marxist view the development of science is determined by production. Counteracting upon production, it generates immense social productive forces to propel society as a whole forward. With the steady rise in productivity, scientific research leads the way in production construction, and this assumes important proportions as it advances. It is often due to significant results achieved in scientific research that many new industries have been developed, such as electronic technology, automation technology, atomic technology as well as computer and space technologies. They are without exception the products of the conscious application of scientific research. According to statistics, while only 5 to 20 percent of the rise in labor productivity in world industrial production in the early 20th century was due to the application of new advances in science and technology, today 60 to more than 80 percent of the rise in labor productivity is attributable to the application of such advances in science and technology.

In negating the role of science and technology in the development of history and alleging that their leading role in production construction resulted in the "rejection of class struggle as the key link" and caused "counterrevolutionary politics to come to the fore," Yao Wen-yuan's logic was absurd in the extreme.

We affirm the role of science and technology on the premise of upholding class struggle as the key link. This precludes the question of giving higher priority to scientific research than to class struggle or of replacing it. It is very important that in accelerating the development of social productive forces we must raise China's scientific and cultural levels and develop science and technology. It is abundantly true that scientific research must take precedence over production construction.

The relationship between Marxist philosophy and the natural sciences has been clarified. Chairman Mao pointed out in explicit terms when referring to literary and art creation: Marxism can only embrace but not replace atomic and electronic theories explained in physics. Yao Wen-yuan twisted Chairman Mao's assertion to mean "supplanting" and to defend what he himself had in mind about supplanting. He said: "It is said that Marxism-Leninism cannot replace the natural sciences and that one must dig into them and conduct experiments before one can speak for them. In that case, had Lenin conducted experiments when he was criticizing Duhring's views on dynamics?"

As a matter of fact, Yao Wen-yuan himself was not clear about those elementary things concerning Duhring and Mach of which Engels and Lenin were critical. He only made himself ridiculous by brazenly defending his "theory of substitution."

We know that the polemics between Engels and Duhring on the one side and between Lenin and Mach on the other mainly involved criticism from a philosophical angle of the idealist and metaphysical problems arising in the natural sciences, not the question of right and wrong regarding the natural sciences. Even in such criticism Engels and Lenin did not lose sight of the need to seriously study problems regarding the natural sciences. Engels was at home with such subjects as dynamics, mathematics and biology. He spent about 3 years summarizing the dialectical and materialist aspects of the natural sciences before proceeding to write "Anti-Duhring." Lenin did the same thing. In criticizing Machianism he perused voluminous works related to the natural sciences, apart from studying philosophical writings. From the book "Materialism and Empirio-Criticism" and the wealth of references to the natural sciences, we can see that Lenin went to great lengths to study these problems. It is precisely because Engels and Lenin delved into problems regarding the natural sciences that they were in a position to speak critically of idealist philosophy and to write about subjects that won the admiration of even the bourgeois scholars. In vainly trying to come to the conclusion that Marxist philosophy could "replace" the natural sciences, Yao Wen-yuan was clearly going nowhere at all.

The relationship between Marxist philosophy and the natural sciences is one between the leader and the led. In assuming the leading role, Marxist philosophy provides the only correct point of view and method for studying the natural sciences. Using this sharp weapon, we can consciously follow the laws governing the development of objective things in studying the natural sciences, eliminate idealist and metaphysical interference and avoid taking unnecessary detours and bypaths.

However, we must discover the "secrets" and laws from the changing manifestations of the natural world, and this calls for prolonged and painstaking efforts. If one merely repeats some of the basic principles of Marxist philosophy without bothering to discover the specific laws

regarding the object of one's study, one will be a failure. The "theory of substitution" preached by Yao Wen-yuan thus denied the guiding role of Marxist philosophy and disavowed the need to study the natural sciences. This is very harmful to the development of science and technology.

Yao Wen-yuan also did everything he could to distort the relationship between politics and vocational work and believed that conducting research on science and technology would lead to revisionism. He alleged nonsensically that "those who have achieved prominence in the field of natural sciences practice revisionism."

From the Marxist point of view, objective things develop dialectically, while the development of the natural sciences keeps pace with the dialectical materialist world view. Despite the fact that some prominent natural scientists have not established such a world outlook, they always subconsciously conform with materialist dialectics while conducting scientific research. In their professional pursuits, scientists often pursue a course that will lead to a materialist dialectical world view. Of course, there are giants in science and dwarfs in philosophy. What is considered absurd does not lie in the achievements made in the field of natural sciences but in coming to the wrong conclusions in a philosophical sense when new problems arise in the natural sciences.

What seems particularly vicious is that Yao Wen-yuan equated conducting research in science and technology with practicing revisionism. He said: "Brezhnev is an engineer, while many Soviet revisionists have studied technology." He meant that those who pursued science and technology would inevitably practice revisionism. This was a gross insult to the vast number of scientists and technicians.

Brezhnev has restored capitalism at home and pushed a policy of expansion abroad because he has betrayed Marxism-Leninism and renounced the fundamental interests of the proletariat. He has not done this because he is an engineer. Yao Wen-yuan uttered the gross lie that scientists and technicians would become revisionist for the explicit purpose of dealing blows at the vast number of scientific and technical personnel and sabotaging science and technology in our country.

Illuminated by the radiance of Mao Tsetung Thought since liberation, the vast number of scientific and technical personnel in our country have continued to make progress politically. They have achieved encouraging results in transforming their world outlook, cherishing the party, cherishing Chairman Mao and Premier Chou, and cherishing socialism. In the 11th line struggle, in particular, they did well in struggling against the "gang of four." They have contributed significantly to closely following Chairman Hua's strategic policy decision on grasping the key link in running the country well. This has dealt a forceful rebuttal to Yao Wen-yuan's shameful slanders.

Science and technology have been emancipated since the collapse of the "gang of four." But the reactionary influence resulting from Yao Wen-yuan's use of RED FLAG to push the gang's ultrarightist line and to sabotage scientific and technological work has spread far and wide. Following the convocation of the National Science Conference, we must continue to penetratingly criticize the gang's counterrevolutionary revisionist line, reckon with the fallacies spread by Yao Wen-yuan, firmly advance along the orientation indicated by Chairman Mao and strive to scale the heights of world science.

A COUNTERREVOLUTIONARY 'GANG'S BOOK' UNDER A REVOLUTIONARY DISGUISE--
COMMENTING ON THE 'GANG OF FOUR'S' CONCOCTION 'SOCIALIST POLITICAL
ECONOMY'

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 75-81

[Article by the mass criticism group of the Shanghai Municipal CCP
Committee]

[Text] The 1976 edition of the book "Socialist Political Economy," organized and written by the writing group of the former Shanghai Municipal CCP Committee on the direct orders of Chang Chun-chiao and Yao Wen-yuan and under the supervision of Ma Tien-shui, is a counter-revolutionary book under a revolutionary disguise which was meant to spread the "gang of four's" revisionist theories. This book negates the basic theories of Marxist political economy, alters the targets and tasks set forth in the section on "socialism" in "Political Economy," totally slanders the socialist system and fabricates a whole set of theories to serve as the basis of the "gang of four's" fallacy that "the bourgeoisie exists inside the party." In the struggle to deepen the exposure and criticism of the reactionary theoretical basis of the "gang of four's" counterrevolutionary revisionist line and to smash their reactionary ideology, it is absolutely necessary to thoroughly repudiate this book in order to eliminate its pernicious influence.

The "Gang of Four's" Self-Confession of Counterrevolution

In September 1976, when the "gang of four" were entertaining their fond dream of changing dynasties shortly before and after the death of the great leader and teacher Chairman Mao, the revised 1976 edition of "Socialist Political Economy" was published. The chieftain of the writing group of the former Shanghai Municipal CCP Committee, a follower of the "gang of four," said smugly: "Theories are basic issues. If this book can hold its ground, other problems can be dealt with easily." This immediately revealed the "gang of four's" counterrevolutionary wolfish ambition in concocting this book.

Mincing no words, the book's preface also declares: "The primary purpose of this book is to analyze the birth, growth and decline of the bourgeoisie, particularly the bourgeoisie inside the party, under conditions of socialism." In other words, the book intends to create a bourgeoisie inside the party by analyzing the socialist relations of production in order to alter the task of socialist revolution in a way that can be described in one sentence--overthrow the bourgeoisie inside the party. Thus, we can see that the main purpose of this book is to change the party's basic line during the entire historical period of socialism, distort the theory of continuing the revolution under the dictatorship of the proletariat, reverse the relationship between the enemy and ourselves in the period of socialism and fabricate a theoretical basis for the "gang of four's" usurpation of party and state leadership.

For a long, long time the "gang of four" had wanted to dish out a book on political economy to meet their needs in usurping party and state leadership and establishing a fascist dictatorship. As early as August 1969 Chang Chun-chiao delivered a speech in which he wildly attacked the great achievements in economic construction during the 17 years before the Great Proletarian Cultural Revolution, alleging that our national economic front had been deeply influenced by feudal, capitalist and revisionist management, that things of the past could easily reappear and that veteran cadres had not successfully criticized these conditions. He shouted at the top of his voice: "We should open up the battlefront of political economy."

In 1971, on the orders and following the plans of the "gang of four" and their followers, the writing group of the former Shanghai Municipal CCP Committee established a research and writing group for "Socialist Political Economy." The following September a draft of this book was disseminated for review and solicitation of opinions. In October Chang Chun-chiao and Yao Wen-yuan sneaked into Shanghai to preside over a so-called discussion meeting on "Socialist Political Economy." At this meeting Chang Chun-chiao did his utmost to distort the nature of the socialist relations of production and clamored for a recognition of the capitalist factors in the socialist relations of production. With ulterior motives, he put forth the question: "Where have the capitalist roaders entrenched themselves?" He alleged that "these are new problems which Marx and Lenin failed to foresee" and "we must study and analyze them." He thus set the stage for "preparing a textbook that reflects our level (meaning the "gang of four's" level)." From 1971 onward the draft was revised as many as five times under the direct control of the "gang of four" and their followers; each revision made the book more sinister and more fitting to the "gang of four's" needs in usurping party and state leadership. The last two revisions were most sinister.

In early 1975 the Fourth NPC was successfully held. This foiled the "gang of four's" plot to form a cabinet. The "gang of four" rabidly

launched a counterattack. Between March and April the same year, Yao Wen-yuan and Chang Chun-chiao dished up a sinister article that totally altered Chairman Mao's instructions on theoretical problems about the dictatorship of the proletariat. An important head of the writing group of the former Shanghai Municipal CCP Committee ordered that "the spirit of the article be contained in the book." Hastily included therein, therefore, were such sinister arguments by Chang Chun-chiao and Yao Wen-yuan as "bourgeois rights" and "overall dictatorship." In early 1976 esteemed and beloved Premier Chou En-lai passed away. The "gang of four" could not wait to avail themselves of what they saw as an opportunity. They openly dished up a counterrevolutionary political program and quickened their pace to usurp party and state power. In March Chang Chun-chiao devoted himself to issuing sinister instructions on the revision of "Socialist Political Economy." He attacked and framed Comrade Teng Hsiao-ping. With ulterior motives, he vilified Stalin and cried, "It must be noted that the influence of Stalin's mistakes is still not to be taken lightly. Our political economy should help cadres become emancipated from the influence of revisionism and the influence of the bourgeoisie and to advance from democratic revolution to socialist revolution." Chang Chun-chiao's sinister instructions were a murderous counterrevolutionary mobilization order. The important head of the writing group flexed his muscles and placed himself in the forefront. Many times he ran to the writing group frenziedly crying, "Pay attention to taking up current affairs" and "Stalin may be criticized." He stressed "dictatorship over everything," "slavish compradore philosophy," etc. Under the personal command of this head, the book frenziedly attacked Stalin. Through criticism of Stalin it attacked Chairman Mao's proletarian revolutionary line. Through criticism of Trotskiy and Bukharin the book attacked esteemed and beloved Premier Chou and other proletarian revolutionaries of the older generation by innuendo. The book is filled with various sinister materials that frame and attack Vice Chairman Teng; he is openly attacked by name as many as 100 times. Extremely wicked tactics and vile language are used in striking out at Vice Chairman Teng.

To bring down the proletarian revolutionaries of the older generation is to "put in power /new leaders/ full of platitudes and full of fallacies." ("Leftwing' Communism, an Infantile Disorder," "Selected Works of Lenin," Vol 4, p 199) The remnants of the "gang of four" in Shanghai had long advocated Chang Chun-chiao as a "theoretician," and once again they boasted, "An authority on theory will naturally turn into an authority on organization." Their concoction of the book "Socialist Political Economy" was a vain attempt to dedicate monuments to Chang Chun-chiao theoretically and bring about this "change." With this end in view, they devoted the book to preaching so-called "Chang Chun-chiao's thinking" in regard to both its contents and layout. The book originally began with the chapter "A General View." In a revision in 1976 that important head ordered its complete removal and gave prominence to Chang Chun-chiao's view on "bourgeois rights" in the opening chapter.

Meanwhile, to the last part of the book was added the chapter "Conclusion," which advocated Chang Chun-chiao's reactionary viewpoints such as "new changes in class relations" and "overall dictatorship." It made much of the point that "the bourgeoisie within the party," formed and developed on the basis of bourgeois rights, had become "the main target of the revolution under the dictatorship of the proletariat." This was intended to strengthen the argument in the "Preface" about "general tasks."

The "gang of four" originally wanted to publish this "great classical work" in celebration of their "grand festival" for the assumption of power. However, developments usually take a course contrary to the wishes of reactionaries. When the "gang of four" were swiftly smashed, this counterrevolutionary book, which served their interests but which had not yet been released, was brought to the bar of historical justice, just as were the "gang of four."

Antisocialist "Socialist Political Economy"

The section on socialism in the book "Political Economy" deals with relations of production in the socialist period. With the aim of explaining the objective laws of economic development under socialism, it is an important theoretical basis for proletarian parties in making decisions on programs, lines and policies and in leading socialist revolution and construction.

The "gang of four" opposed the Marxist book "Political Economy." First of all they tampered with the Marxist theory on the target of socialist revolution. That reactionary literary scoundrel Yao Wen-yuan distorted Chairman Mao's teaching on the theory of the dictatorship of the proletariat and fallaciously stated that the main issue was bourgeois rights and that the purpose of studying political economy was to grasp this key issue. The book "Socialist Political Economy" echoed Yao Wen-yuan's tone and changed the target of attack in studying political economy under socialism into so-called bourgeois rights, which are mentioned throughout the book. 'It was pointed out that "in the three aspects of the relations of production and in the process of production, exchange, distribution and consumption, there exist bourgeois rights, to different degrees" and that "bourgeois rights are a concentrated expression of the traditions or traces of the old society in the socialist relations of production, and are the soil yielding capitalism and the bourgeoisie."' The book clamored that we should "grope for the melon along the vine," i.e. grope for "the bourgeoisie within the party" as a "melon" along the "vine" provided by bourgeois rights. This was a far cry from an analysis of the socialist relations of production. It was an obvious attempt to "prove" from various angles the point that the socialist relations of production will naturally engender "the bourgeoisie within the party." It was a malicious attack on the socialist system. Just a look shows that this is an antisocialist book of political economy flaunting the

socialist banner. Many reactionary fallacies are found in the book. Here we will just criticize the following points:

First, the book attacks the socialist system of ownership by all the people and describes it as ownership by capitalist roaders. Following Chang Chun-chiao's fallacy that bourgeois rights have not been completely wiped out in the system of ownership, the book asserts that bourgeois rights still exist in the system of ownership by all the people since, under the system of ownership by all the people, a division of labor as in the old society still exists, namely, mental and physical labor. Cadres control the power by handling and managing the means of production, while workers are actually powerless. In formal terms, cadres and workers are equal with regard to ownership of the means of production; in reality, they are not on an equal footing. Therefore, the socialist system of ownership by all the people still carries some vestiges of private ownership.'

All these ideas are anti-Marxist thoughts and sheer nonsense. All people know that ownership by all the people means ownership of the means of production by all laboring people. 'Cadres who lead the work of the enterprises and the workers are different only in the type of work they do; but they are all masters of the enterprises. Cadres are not allowed to own any means of production because of their leading power. No differences exist between the cadres and the workers in the ownership of the means of production.' Then how can it be said that the system of ownership by all the people still carries some vestiges of private ownership? Lenin pointed out: "'Bourgeois rights' recognize the means of production as an individual's private property. Socialism takes the means of production as /public/ property. /Within these limits,/ and only within these limits, do 'bourgeois rights' exist." ("The State and Revolution," "Selected Works of Lenin," Vol 3, p 252) Advocation of the fallacy equating the cadres' exercise of leadership with the existence of bourgeois rights in the system of ownership by all the people is an open alteration of Marxism-Leninism.

The book follows Chang Chun-chiao's logic that people, power and the system of ownership should all be changed. It relates the fallacy that bourgeois rights still exist in the system of ownership by all the people in order to slander this kind of ownership by saying that it's a system in name only and has degenerated into a system of ownership by capitalist roaders. This is extremely absurd.

It cannot be denied that there may be bad people in the leading groups of our individual enterprises. Leadership for a time was usurped. This was a situation that did exist. An economy with socialist ownership by all the people is a single entity. The ownership of the means of production is not changed if the state reassigns cadres to oversee the operation of an enterprise. An enterprise's operation and production follow the state's unified plan, are correctly led by the party and state

and are protected by socialist laws while simultaneously being supervised by the broad masses of the people. All embezzlers, grafters, speculators and degenerates, as well as those who vainly attempt to take the capitalist road, will eventually be exposed to the light and subjected to due punishment. The socialist education movement constantly launched in our rural and urban areas is an important measure guaranteeing the advance of enterprises along the socialist road and guaranteeing them against change. Therefore, "as long as the supreme power of the party and state are in the hands of a leading core that adheres to the Marxist-Leninist line, the nature of ownership by all the people can never suffer any basic changes and result in ownership by capitalist roaders, even if the activities of a handful of bad elements interfere with economic growth in some way and cause the serious spread of capitalism instead." The book only trumpets this fallacy in order to create public opinion for the "gang of four's" scheme to usurp the leadership of socialist enterprises. Under the banner of "consolidating and developing the socialist system of ownership by all the people" and breaking down "the native fortifications of the bourgeoisie," the "gang of four" can thus freely make false charges branding our leading cadres as "capitalist roaders." By declaring that a change has taken place in the system of ownership, they can bring them down and put in power those little brothers of Wang Hung-wen with horns on their heads and thorns on their bodies such as Chen Ah-ta and his ilk.

Secondly, the book distorts the relationship between cadres and workers as one between the bourgeoisie and the proletariat. How do the relations between cadres and workers change into antagonistic class relations? The book once again bases its arguments on bourgeois rights and the idea of bourgeois rights. It says: In production the majority of the mental laborers direct and organize production. This bourgeois right, which reflects the old division of labor, constitutes the economic foundation for the mental laborers to rule over the manual laborers. Once the leading cadres of enterprises are subjected to erosion from bourgeois rights and ideas, the relationship between cadres and masses changes from one between revolutionary comrades to one between rulers and subjects. The book thus concludes that in the production process under the conditions of socialism, the most fundamental thing is still the class relationship between the proletariat and the bourgeoisie, including the bourgeoisie within the party. This is another out-and-out antisocialist fallacy.

Socialized mass production calls for proper managing authority. Engels pointed out: "On the one hand there must be a certain authority, no matter how it is created. On the other hand there must be a certain obedience. No matter how the social organization is set up, these two things are necessary under the progressing material condition of producing and distributing products. ("On Authority," "Selected Works of Marx and Engels," Vol 2, p 553) However, the social nature of management is decided by the system of ownership. The nature of management

differs according to the different types of system of ownership." Under the condition of public ownership in socialism, although cadres and workers do different kinds of work, they are nevertheless socialist laborers participating in a fixed form of labor in the course of production and fighting shoulder to shoulder for the common goal of building socialism. This kind of management reflects the relationship between cadres and workers in mutual socialist assistance and cooperation and fundamentally differs from the antagonistic class relations between the ruling capitalists and the workers being ruled. Of course, individual bad people may have wormed their way into the ranks of cadres. There may also appear individual degenerates. The contradictions between them and the masses of workers are antagonistic contradictions. But how can what involves a handful of people represent the relationship between the masses of cadres and the masses of workers? Among the ranks of cadres, certain people influenced by bourgeois ideas and affected by bureaucratic and other bad styles to different degrees do not treat the masses on an equal footing. This really impairs the relations between the cadres and the masses. The cadres' shortcomings and mistakes in regard to thinking, style and work must be rectified by every means. But...in general the contradictions between cadres and the masses are contradictions among the people, whose fundamental interests are identical. These contradictions differ in nature from those between the antagonistic proletarian and bourgeois classes. Putting the subject of the system of ownership aside, the book dwells in isolation on the old division of labor, saying it is the economic foundation for the mental laborers to rule over the physical workers, and so on. It replaces the Marxist way of scientific analysis with lies designed to confuse and poison the people's minds and slanderously dubs the relationship between cadres and workers in socialist enterprises as a relationship between rulers and subjects. Its aim is to stir up anarchist thoughts to meet the demands of the "gang of four's" plot to usurp party and state power, smear the leaders of socialist enterprises as so-called "capitalist roaders" controlling, curbing and suppressing workers, undermine production and disrupt the enterprises so as to seize power in the resulting confusion.

Third, the book vilifies the socialist commodity system as a capitalist commodity system. It wantonly smears the socialist commodity system by alleging that bourgeois rights existing in commodity production and exchange under socialism will inevitably give rise to capitalism and a bourgeois system. How will this happen? The tactic used in the book is this: treating commodities reflecting the characteristics of private ownership as general commodities and confusing this concept with the concept of commodity production and exchange under socialism. The book says: "So-called 'commodity production' means value production. Since socialist production is still commodity production, values and profits are still necessary. Therefore, capitalist production will emerge along with a mania for values under the guidance of the concept of putting value of output and profits in command." *

The book imposes "a mania for values," a term used by Marx to portray capitalists, on leaders of socialist enterprises. This is despicable slander. Those who have made a cursory study of the Marxist political economy realize that the features of commodity production differ under different systems of ownership. Only capitalist commodity production is value production aimed at achieving profits. Only capitalists who are capitalism personified have a mania for values. "The objective of socialist commodity production based on public ownership is to produce values to satisfy the people's needs. Although socialist commodity production involves values and profits, this is only a means of producing more and better values for use. As far as profit itself is concerned, the nature of profit is completely different under the two different social systems."

However, this book first equates socialist commodity production with value production and then confounds the attaining of values and profits with putting the value of output and profits in command. In so doing the authors of the book only seek to vilify socialist commodity production as capitalist commodity production and to slander leaders of socialist enterprises as capitalists. To achieve this purpose, the book advances the "general connection" theory, alleging that "only through the general connection between social production and commodity exchange can people understand that when an enterprise embarks on the road of seeking profits it actually engenders something capitalist and bourgeois. Even though the leader of a socialist enterprise has not earned a penny for himself in such a process, his activities are bourgeois in nature and he himself has become or is becoming a bourgeois element within the party." This is indeed what is called "giving a dog a bad name and hanging him." How can there be anything in the world like the bourgeoisie existing in what is called "the general connection"? How can there be anything like the bourgeoisie not going after money? The only purpose of such confusing logic is to use the sickeningly left big stick of "theory" to bring down a large number of revolutionary veteran cadres in order to fake a scientific basis for the "gang of four" to drag out so-called "capitalist roaders diligently devoted to production" and "capitalist roaders open and aboveboard with no personal mistakes."

Fourth, the book equates the difference in income distributed on the principle of "to each according to his work" with the exploitation of one class by another. It tries in every way to attack the principle of "to each according to his work" by equating the difference in income distributed according to this principle with the exploitation of one class by another. A follower of the "gang of four" in Shanghai raved that "when a leading cadre gets such a high salary as 200 or 300 yuan a month, in addition to a Western-style house, a car and servants provided by the state, does this not constitute exploitation? I think it does, for he appropriates the fruits of labor of the working people."

This book puts a theoretical tinge on such sheer fallacies by alleging: "By extending bourgeois rights to the aspect of 'to each according to his work,' the bourgeoisie within the party appropriate a large amount of social commodities and grab a portion of the net social income and turn it into surplus value." This allegation runs diametrically counter to Marxism.

'Under the socialist system of public ownership, the labor performed by individuals is used as a unified yardstick in distributing consumer goods to them. The laborers' income is proportionate to the amount of work performed. Although this right, which reflects an exchange for equal amounts of work, has not yet gone beyond the scope of bourgeois rights, it does in fact involve inequality. However, it does not admit any class differences and bears no resemblance at all to the class differences in distribution resulting from the inequality in the relationship of the ownership of the means of production under the capitalist system. Under conditions marked by public ownership of the means of production and the treatment of labor no longer as a commodity, those laborers with a relatively strong capacity for labor, a relatively high technical level and relatively few family members to support are relatively well off. But they cannot take personal possession of the means of production and thus cannot gain free possession of others' labor and cannot gradually rise to be capitalists. Those laborers who are less well off remain the owners of the public means of production. Their basic livelihood needs are guaranteed by society. In no way would they be reduced to proletarians who have nothing they can call their own and who must rely on selling their labor as the sole means of making a living. It can be seen that the income differences arising out of distribution according to one's work would only lead to different degrees of personal prosperity and not to the extremes of richness and poverty. It was a preposterous conspiracy of the "gang of four" to utilize high positions and high wages as economic criteria for defining the bourgeoisie within the party. They are extremely reactionary politically and have nothing new theoretically. Putting the relations of distribution first and turning to income differences as the sole basis for the generation of classes the way they did was just a repetition of vulgar socialists' "theory of distribution" repeatedly denounced by Marx and Engels and a carbon copy of what had been discarded by old revisionists,

Fifth, the book slanders socialist relations of production and reproduction as capitalist relations of production and reproduction. Through an analysis of socialist reproduction, the book also concocted the "process of development" of "the bourgeoisie within the party." It said: "In the process of expanded reproduction in the socialist relations of production, the traditions or vestiges of capitalism will appear with reproduction in the concentrated form of bourgeois rights." This would "continuously engender capitalism and the bourgeoisie." With the development of the "bourgeoisie within the party," the bourgeoisie outside the party will naturally develop. "The bourgeoisie within the

party" will "be hatching the new bourgeoisie on the one hand and protecting the old bourgeoisie on the other." * Using this formula, the book describes the process of socialist reproduction as a vicious circle: bourgeois rights engender the bourgeoisie, and the bourgeoisie in the party expand bourgeois rights, which in turn hatch out more bourgeois elements. * According to this reactionary theory, the socialist reproduction process is not one in which the three major differences left from the old society are gradually reduced and finally eliminated with the development of the productive forces, but a process in which bourgeois rights are continuously expanded. It is not a process in which socialist relations of production correspond to the development of productive forces and are improved with each passing day for the ultimate transition to communism, but a process in which capitalism and the bourgeoisie are increasingly engendered and continually grow in strength. This is obviously a malicious attack on the socialist system. * Its aim was to dress up Chang Chun-chiao's fallacy about "the satellite going up to the sky" and "the red banner falling down to the ground" as "scientific truth."

From the above analyses it is not hard to see that this book concocts a theoretical system with the bourgeois right at the center. It equates the bourgeois right with capitalism and implants it in the socialist system of public ownership, thereby basically negating Chairman Mao's important thesis that the system of ownership has been changed. At the same time it creates a fictitious bourgeoisie within the party and further distorts the socialist relations of production as bourgeois capitalist relations of production within the party. According to the allegation of the "gang of four," Chairman Mao did not solve the question of class relations in the socialist period, and only the thinking of their Chang Chun-chiao elucidated the question of the so-called bourgeoisie within the party in an all-round way. In their eyes, Chang Chun-chiao thought is a milestone in the new historical period. The preposterous way in which the gang's book turns things upside down and confuses black with white indicates that they certainly racked their brains and spared no efforts in attempting to usurp party and state power.

A Pseudoscience Represented by the Idealist Conception of History

Political economy is one of the three components of Marxism and is a science characterized by a high degree of party spirit. Its scientific nature is based on the theoretical foundations of dialectical materialism and historical materialism. On the one hand this antisocialist "Socialist Political Economy" bragged about its increasing success, from edition to edition, in analyzing "the motion of contradictions" in the socialist relations of production. On the other hand it threateningly imposed on others the label of so-called idealism and metaphysics. Anyone who took issue with their way of "analyzing contradictions" was accused of promoting the "modern revisionist economy." In fact, the line promoted in

the book exactly represents a world outlook and methodology that completely run counter to dialectical materialism. The antisocialist book "Socialist Political Economy" dwells on the self-contradictions inherent in the relations of production; preaches voluntarism, which alleges that the superstructure decides the economic base; and fabricates various laws of socialist economic movements so as to fulfill its basic task of proving the existence of the bourgeoisie within the party. As such it is bound to be an anti-Marxist pseudoscience.

Marxism tells us: The contradictions between productive forces and the relations of production and between the economic base and the superstructure are the fundamental contradictions of human society. Only by linking the decisive action of productive forces with the reaction of the superstructure can the part of the political economy dealing with socialism reveal the objective laws governing the development of the socialist relations of production and thus make clear the party's basic line for the historical period of socialism and the theoretical basis for continuing the revolution under the dictatorship of the proletariat. Leaving aside productive forces, this book made much of the "motion of contradictions" in the socialist relations of production. As a result, such a "motion" is made out as something isolated and untraceable to its origin or source. It is not the dialectical development of an objective thing but only a motion governed by people's subjective will. *The book said: "The basic proletarian task in the historical period of socialism" is to "restrict bourgeois rights" and "make the relations of production and the superstructure head for increasing perfection and make the communist consciousness of the masses rise continuously, so as to stimulate the high-speed development of productive forces." It seems that only through the "increasing" "perfection" of the relations of production and the superstructure will productive forces develop automatically. It must be asked: What is the basis for the "increasing" "perfection" of the relations of production and the superstructure if they are divorced from the development of productive forces? * Such an approach is essentially one of replacing the motion of the fundamental contradictions between the productive forces and the relations of production in socialist society with the "motion of contradictions" in the socialist relations of production and thus basically negating the objective inevitability of continuous revolution under the dictatorship of the proletariat. Guided by nothing but this fallacy, the "gang of four" smeared our doggedly upholding the dialectical unity between productive forces and the relations of production as promoting the "theory of productive forces" and branded the cadres doggedly devoted to socialism as "the bourgeoisie within the party" promoting "the theory of productive forces."

This book of the gang also describes the relations of production as relations of rights and goes all out to advertise the decision-by-bourgeois-rights theory, which states that the superstructure decides the economic base. It rants that private ownership is an expression of

bourgeois rights, value is an embodiment of bourgeois rights, and even the law of values manifests itself as a kind of bourgeois right. "It regards private ownership, value and the law of values as manifestations of bourgeois rights; that is, it holds that the relations of production and material relations in society are governed by relations of rights and intentions. This completely reverses the relationship between the subjective and the objective and violates historical materialism, thereby degenerating into voluntarism..

In criticizing Proudhon's vulgar economics, Engels said: "Proudhon's judgment of all economic relations is based not on economic laws but only on whether these economic relations suit his conception of eternal equality." Therefore, "Proudhon's whole doctrine is built on the lifesaving leap from economic realities to legal verbiage." ("On Housing," "Selected Works of Marx and Engels," Vol 2, pp 536, 475) This book concocted by the gang judges and explains all economic phenomena in socialist society according to the yardstick of bourgeois rights and the abstract concept of equality and inequality, as if the section on political economy dealing with socialism only needed to determine which economic phenomena belonged to the category of bourgeois rights. It reduces the solution of all problems in the socialist economy to a so-called "question of restricting bourgeois rights." The book flagrantly advances the reactionary argument that "restricting bourgeois rights means progress." It alleges that "the struggle between those restricting bourgeois rights and those extending them is the focus of class struggle and the struggle between the two lines in the historical period of socialism." The book regards one's attitude toward bourgeois rights as the yardstick for judging whether or not one is a bourgeois element within the party. As far as the whole book is concerned, its arguments are clearly "built on the lifesaving leap from economic realities to legal verbiage."

In the final analysis, the "theory of bourgeois rights" is an offshoot of the reactionary viewpoint of "ownership being actually the problem of power" put forward by the "gang of four" and scoundrel adviser Chang Chun-chiao in particular. The chief "merits" of the book "Socialist Political Economy" written under the auspices of the writing group of the former Shanghai municipal party committee are that it scrapes together the sinister fallacies of the "gang of four" and develops them into a theory by tampering with the basic principles of Marxism, distorting the meaning of classic works and making such classic works serve the gang. Under the cloak of science, the book tries to deceive, overawe and repress people and to ultimately achieve the aim of assassinating people with a pen.

Marxist political economy has developed and grown out of struggle. In the 100 years or so since its birth, anti-Marxist class enemies of all kinds have concocted various "theories" in a vain attempt to revise

Marxist political economy. Its manifestation has assumed right and ultra-"left" forms. In former years, Bukharin of the Soviet Union advocated removing the part of the political economy dealing with socialism. Trotsky and his flunkies vigorously smeared the socialist relations of production. They raved that "a very powerful privileged class" had already formed within the Soviet Communist Party, the Soviet Government and the Red Army. They raised the antirestoration banner to advocate the "theory" of restoration. In our country, Liu Shao-chi, Lin Piao and the "gang of four" in particular revised Marxist political economy in various forms. The "gang of four" always promoted revisionism under the guise of Marxism. They shouted communist slogans in opposing socialism and used proletarian party spirit to cover up the counterrevolutionary "nature of their gang." In their eyes, since the term "bourgeois rights" involves the two Chinese characters for "bourgeois" and "rights" and has been made a subject of discussion by authors of Marxist classics, its being borrowed, distorted and added to as a "system" would help most in passing off what is right as left and covering up their counterrevolutionary activities; it would help most in their concocting a counterrevolutionary political program and accusing a large number of veteran cadres adhering to Chairman Mao's revolutionary line of being "the bourgeoisie within the party." In a word, this, in their eyes, would help most in realizing their vicious aim to usurp party and state power.

The book "Socialist Political Economy" concocted by the "gang of four" is a representative collection of their reactionary ideas. It is a big anti-Marxist, antisocialist and counterrevolutionary poisonous weed, a book for the purpose of creating a theoretical basis for the "gang of four" to usurp party and state power.

Penetratingly criticizing this counterrevolutionary book is a hard battle to thoroughly smash the "gang of four's" reactionary ideological system, a serious struggle to defend the purity of Marxism. It is highly necessary to do so in order to carry out the socialist revolution and construction.

The part of Marxist political economy dealing with socialist is still in its early stage of development. Many theoretical problems call for further study and discussion. In regard to the different academic viewpoints among the people, we must adhere to the party's guideline of letting a hundred schools of thought contend, discuss things with each other, draw on each other's strengths and seek mutual progress. This will help in better mastering the fundamental principles of Marxism and in fighting the "gang of four's" counterrevolutionary revisionist line.

A LAYMAN TALKS ABOUT PROFIT

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 82-83

[Article by Chang Cho-yuan [1728 0587 0337]]

[Text] In the past, whenever profit was mentioned, capitalist exploitation was often called to mind. Aren't capitalists working exclusively for profits? Here profit refers to capitalist profit. Socialist profit is something else. The baneful "gang of four" arbitrarily obliterated the difference between socialist profit and capitalist profit and slandered the making of profit by socialist enterprises as a capitalist way of doing business. Such obliteration and slander were absurd.

Maintaining commodity production in socialist society also means maintaining price, cost and profit--the categories related to commodity production. The economic category is the theoretical expression of the relationship of social production. A socialist society differs from a capitalist society in that "the system of ownership has changed," the relations of production have changed and the social nature which embodies the general profits category of commodity economy has accordingly changed. This is elementary knowledge of political economy. How can the profit category which expresses socialist production relations be equated with that which expresses the relations of exploitation of the workers by the capitalists?

We cannot take whether or not there is need for profit as the criterion for differentiating between capitalist production and socialist production. Neither can we categorically put the fact that socialist enterprises must make profits in opposition to socialist production, the aim of which is to satisfy the needs of society. Here let's review Lenin's criticism on Bukharin. Bukharin wrote in his work "Economy in the Transitional Period": "On the premise that capital rules, production provides surplus value and is undertaken for the sake of profits. Under the proletarian rule, production is undertaken to offset social needs." In this regard, Lenin made the following comment: "He did not succeed. Profit also satisfies 'social' needs. He should put it this way--under

such a condition, the surplus product belongs not to the class of private owners but to all the laborers and to them alone." ("Comment on Bukharin's 'Economy in the Transitional Period,'" single volume, People's Publishing House, p 40) Lenin analyzed the question from the essence. He taught us that the fundamental criterion for differentiating capitalist production from socialist production was who had the surplus product (and profit is an expression of surplus product in money form). Under capitalism, profits go to capitalists, enabling them to intensify exploitation of the working people. Socialist profits go to all the working people for their well-being. For this reason, Stalin wrote in his article "Problems of Socialist Economy in the Soviet Union" that in socialist societies both labor for making socialist profits and labor for satisfying the consumption needs of the working people and their families are necessary.

After human society had passed through the lengthy stage of the primitive commune, surplus product existed in all societies, and only in capitalist society has it been expressed in terms of surplus value. Engels said, "A surplus of the product of labor over and above the costs of subsistence of the labor, and the formation and expansion of a social production and reserve fund out of this surplus--these were and these are the basis of all social, political and intellectual progress." ("Anti-Duhring," "Selected Works of Marx and Engels," Vol III, p 233) Engels' idea is totally valid for socialist society. Socialist profit is the value form of surplus product provided by laborers of material production departments in the socialist system of ownership by the whole people. It finds its roots in what Engels said--"a surplus of the product of labor over and above the costs of subsistence of the labor." In an enterprise under the socialist system of ownership by the whole people, the surplus over and above the cost of the products sold is the net income of the enterprise. The profit is part of the surplus. The enterprise hands to the state profits and taxes--the other part of the net income. From the angle of political economy, there are no essential differences between profits and taxes.

Profits (including taxes) turned in by the state enterprises are the major source of state revenue. One part of the state revenue is used to satisfy the needs of the non-material production departments, while the other part of the revenue becomes the state accumulation which is used for expanding reproduction. This means that production units of the material production department must make profits in order to keep the non-material production department going. Production units of the material production department, besides keeping the non-material production unit going, must have a surplus which can be put aside as an accumulation fund for expanded reproduction, thus serving as "a basis of all social, political and intellectual progress."

Therefore, it is an honorable duty for every socialist enterprise to proceed from the interest of building socialism and make its income

balance its expenditure with a surplus. The more profits the enterprise makes, the greater the contribution to the country and revolution.

The "gang of four" and the public opinion tools they used had something up their sleeves. They put the fact that socialist enterprise must make profits in opposition to making production for revolution. They completely opposed the people to profits. It seemed that the two were mutually exclusive. This showed their wild metaphysics. Can a socialist enterprise that goes into production for the people and revolution do without profits? Can a socialist enterprise make profit for the people and for revolution?

Obviously, a socialist enterprise making no profits will not only find it impossible to develop the socialist economy but will also eat away its own resources; then the country under the dictatorship of the proletariat cannot be consolidated and cannot grow strong. Also, the absence of an essential material foundation makes it unable to live on. Without profits, socialist accumulation will lose its source of income, and the accumulation will be insufficient for socialist expanded reproduction. The growing needs of the socialist country and the people cannot be satisfied. Only enterprises in such conditions will harm the revolution and the people.

Since the profit category exists in socialist society, we must have a good grasp of it and make good use of it so as to raise our standard of economic management, strictly enforce the economic accounting system in enterprises, estimate and compare the effects of economic activities in enterprises, encourage the advanced and spur on the backward.

In socialist enterprises, profit is a value index. Like cost, profit is a comprehensive reflection of the effects of economic activities in enterprises. But profit is even more comprehensive than the cost index, because it can express effects of some economic activities which the cost index cannot express. In socialist economy, the only way to increase profit in enterprises is to strive to increase production, strictly practice frugality, improve the conditions of business and management, lower the material consumption of products and raise the rate of labor productivity. In general circumstances, a good profit means that the individual labor consumption to produce each piece of a product is lower than the average labor consumption of society, that the enterprise is running a good business and that the effect of the economic activities is great. Conversely, the case will be the opposite.

The profit level is an important index for comparing the different periods of time, the different departments and the different effects of economic activities in the enterprises. We can test the effects of economic activities from different angles with various profit rates. The wage profit rate is the important ground upon which we calculate

the value of various products and upon which we determine changes in labor productivity. By calculating and auditing the cost and output value profit rates, people will be encouraged to save labor and material, and they will be able to test relatively comprehensively the economic effects in the socialist enterprises. The capital profit rate can reflect the effect of capital used, prompting a rational distribution and use of capital so as to improve the effects of investment, and so forth.

The "gang of four" opposed the practice of strengthening economic accounting of enterprises by means of value including cost and profit. They babbled that "the smaller the profit, the better it is," that one "must not talk about making money" nor "talk about cost" in running the socialist enterprise. They babbled that "a state farm has no fear of losses, and this is precisely the advantage of the system of ownership by the whole people." They spread such a theory of pampered sons with the intention of confusing socialist economy and undermining the material foundation of socialism.

Some of our comrades dare not talk about profit or grasp profits. This is solely because they fear the label of "putting profit in command." Here we must make a clear distinction.

"Putting profit in command" is to make profit the only index for testing the quality of work of the enterprises and departments. It encourages "work in a big way for big profit, make smaller efforts for smaller profit and quit when there is no profit at stake." As a result, it goes against the ends of socialist production and undermines the socialist economy. Surely this idea should be opposed. Socialist profit is gained when the enterprise meets the needs of the state plan under the dictatorship of the proletariat, follows the general and specific policies of the state and follows the financial and economic rules of the state. The profit goes to all working people. With this as a precondition, increasing profits is ultimately not "putting profit in command."

The "gang of four" slandered the demand for all-round fulfillment of state plans, including the profit index, as "putting profit in command." It showed that they were not really criticizing the idea of "putting profit in command" but were only using this idea as an excuse to attack the revolutionary cadres and people and upset the socialist enterprise. Their perverted actions had very serious consequences. Their actions affected the state revenue and the development of the socialist construction cause. We must throw away the "gang of four's" rubbish, proudly grasp profits for socialist enterprise and strive to increase accumulation funds for the country.

ON THE COSTS OF FARM PRODUCTS

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 84-85

[Article by Chou Cheng [0719 6134]]

[Text] Is it necessary to compute the costs of farm products? This should pose no problem at all. Chairman Mao pointed out long ago: "All cooperatives must raise labor productivity and reduce production costs." ("The Debate on the Cooperative Transformation of Agriculture and the Current Class Struggle")

Without computing costs it is impossible to reduce them. Due to the fallacies about the use of economic accounting spread by the "gang of four" and their cohorts a few years ago, there was confusion in a number of communes and production brigades about increasing production at the expense of thrift. This resulted in varying degrees of increased production without corresponding increases in revenue and affected expanded reproduction and the living conditions of the commune members.

Marx said: "Bookkeeping, as the control and ideal synthesis of the process, becomes more necessary the more the process assumes a social scale...." ("Das Kapital," Vol 2, "Collected Works of Marx and Engels," Vol 24, p 152) What is called bookkeeping means economic accounting, and computing costs is an important part of the existing commodity system.

In the socialist economy, cost as an economic category and an important economic index is closely related to production, exchange and distribution. The costs of farm products consist primarily of the following:

- 1) Seeds, fertilizer, insecticides, fuel, electricity and other means of production directly consumed in production.
- 2) Depreciation of fixed assets (such as draft animals, farm implements, equipment, buildings, etc.) caused by wear and tear in production.
- 3) Remuneration for producers.

4) Administrative and production management expenses, including those for office equipment, travel, depreciation of office furniture and fixtures, etc. In addition, damage to seeds, fodder and fertilizer and loss of products due to improper handling and management are to be included.

In a nutshell, cost is the amount or equivalent paid or charged for things expended in production. After cost is deducted, the value of a product created by the laborers for society is expressed in terms of money and is called profit.

In computing the cost of an agricultural product, attention should be paid to its economic content--that is, excluding expenses not considered as working costs. For instance, some communes and production brigades have charged to cost accounts every outlay for such things as investment in capital construction involving soil improvement and the leveling of fields and even the acquisition of farm implements, as well as such improper charges as entertaining guests at lavish receptions.

Proper charges should of course be entered into cost accounts. For example, some communes and production brigades have charged to cost accounts only those cash outlays for operations conducted in the current year, without accounting for the means of production like seeds, farm implements and fertilizer. Failure to ascertain the actual costs of farm products will thus produce the false impression of having increased or reduced costs.

Most rural communes compute their current year's production expenses without accounting for labor remuneration or depreciation of buildings and the means of production. While this form of cost estimate is incomplete, it helps in checking waste and promoting thrift and is thus beneficial to increasing revenue. One reason some communes and production brigades have increased output without increasing their revenue is the high outlay for comparing estimates of cost made in advance with actual costs subsequently determined. It is of course impractical to determine actual costs on the basis of overhead expenses incurred in production. With the improvement of the accounting systems of the collective economy, cost accounting will provide broader bases for cost analysis, cost comparisons, cost planning and cost control.

The costs of farm products are characterized by their different functions. The costs of individual farm products which take into account the operational costs of each basic-level production unit provide an important index for measuring the economic gains of various production units. Ascertaining the specific causes of increases or decreases in cost on the basis of conducting cost analysis and cost comparisons is beneficial to improving the production operation and to promoting increased production and revenue. The social costs of farm products indicate the costs

at the social level in a particular economic area--the lowest price level fixed by the state for purchasing farm products.

In order to increase the social and economic gains of farm production and achieve rational planning by territory or production unit, the state must make cost comparisons when allocating production tasks in various areas. Therefore, the costs of both must be accounted for.

The problem of fixing labor remuneration is a complicated one in computing the costs of farm products. This is because there is no basis for making cost comparisons among production brigades each year if valuation is based on a brigade's actual workday in previous years. To solve this problem, the equivalent "valuation of a workday norm" was fixed for some localities in the past. This calls for the use of cost comparisons and cost analysis to fix the value of an average workday over the years on the basis of the costs of different kinds of products handled by a production brigade over those years. This is then taken as the "valuation of the workday norm" so that this representative estimate worked out in a particular period in a commune can be determined. Further study is of course necessary to make the cost estimate conform with objective reality.

Reducing the costs of farm products is important to accelerating the development of agricultural production. There are two ways to do so--increasing production and promoting thrift. Under the condition of consuming equal amounts of direct materials and direct labor, increasing the output of farm products is conducive to reducing their costs. While promoting thrift implies less consumption of direct materials and direct labor, this does not mean reducing the overall consumption of direct materials and direct labor in farm production as a whole.

With the progress achieved in modernizing farming, the overall consumption of direct materials and direct labor will definitely rise in the course of increasing production, raising labor productivity and reducing costs.

Marx said: "The increase in labor productivity consists precisely in that the share of living labor is reduced while that of past labor is increased, but in such a way that the total quantity of labor incorporated in that commodity declines; in such a way, therefore, that living labor decreases more than past labor increases." ("Das Kapital," Vol 3, "Collected Works of Marx and Engels," Vol 25, p 290)

Economical consumption of materials and labor calls for careful planning and running all enterprises with industry and thrift so as to stop reckless buying, make full and rational use of the means of production and reduce losses and waste to the extent possible. Economical use of direct labor is aimed at reducing the labor consumption per unit of product and is in accord with raising the utilization rate of labor. Not making full and rational use of labor, even if the costs of existing

products are reduced without correspondingly increasing the overall output, total revenue and profits of the production unit, is not in keeping with the requirement for achieving greater, faster, better and more economical results. Economical use of direct labor calls for efforts to increase labor efficiency and improve the quality of the operation on the basis of vigorously raising the utilization rate of labor so that output can be further increased and the costs of products reduced. In this way unused labor can be profitably diverted into productive channels.

CULTIVATE A SENSE OF RESPECT FOR SOCIALIST LAWS

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 86-89

[Article by the theoretical group of the Kwangtung Provincial CCP Committee]

[Text] The Constitution of the People's Republic of China adopted by the Fifth National People's Congress is comprised of a set of general rules for managing the affairs of the state in the new period of socialist revolution and construction for the people of our country. If we are to bring about great order across the land, we must fully enforce these general rules, from the guidelines to the various articles. Chairman Hua has pointed out: "It is essential to strengthen the socialist legal system if we are to bring about great order across the land. We should widely publicize the significance of cultivating a sense of respect for socialist laws." "Cadres should be law abiding, as should the masses and indeed everyone." We must conscientiously study and strictly obey the new constitution, understand the great importance of respecting socialist laws and effectively strengthen our sense of respect for socialist laws.

The Marxist view holds that the strengthening of the socialist legal system is an important guarantee for consolidating the proletarian state organ and carrying out the various tasks for the dictatorship of the proletariat. Law is a manifestation of the intention of the ruling class and is an important part of the superstructure. It serves the economic base. In order to consolidate their political power and maintain and develop the economic base on which their political power is built, all ruling classes invariably establish, under a system of laws, a social order and economic and political systems which conform to their interests, and they use the powerful state organ to insure the enforcement of the law.

Lenin said: "After seizing political power, the working class, like any other class, must control, preserve and consolidate this power by transforming the system of ownership and enforcing a new constitution." ("The

9th All-Russian Communist Party (Bolshevik) Congress," "Collected Works of Lenin," Vol 30, p 454)

If we don't establish a socialist legal system, we won't be able to effectively exercise dictatorship over our class enemies and cannot successfully guarantee the fundamental rights of the proletariat and the broad masses of people in being the masters of the country or guarantee their other democratic rights. Furthermore, after seizing political power the proletariat are still faced with the arduous tasks of organizing the socialist economy, developing socialist culture and generating higher productivity than that of the old society. Lenin pointed out: "If we don't want to fall into utopianism, we cannot hold the belief that people will automatically labor for the society without any laws and regulations after overthrowing capitalism." ("State and Revolution," "Collected Works of Lenin," Vol 25, p 454) Therefore, we can see that the strengthening of the socialist legal system is needed not only to suppress the resistance of class enemies and develop socialist democracy but also to insure the normal operation of socialist production and to speed socialist construction.

In the course of leading our country's revolution, Chairman Mao always paid close attention to the building of a revolutionary legal system and stressed that everyone should observe this system and constantly fight against all activities which undermined it. Since the founding of the People's Republic of China, the people of our country have drafted their own constitution and various socialist laws and regulations under Chairman Mao's personal leadership and guidance. Chairman Mao said: "Our laws are drafted by the laboring people themselves. These laws protect revolutionary order, the interest of the laboring people, the socialist economic base and our productivity. We demand that everyone observe the revolutionary legal system." "We must obey laws and must not undermine the revolutionary legal system." ("Speech at Meeting of Provincial, Municipal, and Autonomous Regional CCP Committee Secretaries")

In discussing the draft Constitution of the People's Republic of China in 1954, Chairman Mao emphatically pointed out: "Once the constitution is approved, the whole nation, one and all, should observe it. State personnel in particular should take the lead in observing it." "To fail to observe the constitution is to violate it." ("On the Draft Constitution of the People's Republic of China") During the Great Proletarian Cultural Revolution, in the face of the serious situation in which the revolutionary legal system was trampled underfoot in some places and units due to the interference and sabotage of Lin Biao and the "gang of four," Chairman Mao asked sternly: Who demands such fascist methods of interrogation? They should all be abolished. Faithfully implementing Chairman Mao's instructions, Premier Chou repeatedly stressed that it was necessary to abrogate all fascist ways and methods of interrogation and do away with ill-treatment and assault. The resolute measures of Chairman Mao and the party Central Committee dealt a heavy blow at the

scheme of Lin Piao and the "gang of four" to persecute revolutionary cadres and the masses and effectively safeguarded the socialist legal system.

Now the party Central Committee headed by Chairman Hua has made a major move in continuing the Long March toward the great goal of building China into a powerful modern socialist country. The new situation calls for efforts to further strengthen the socialist legal system, establish a social order of stability and unity and create a lively political situation. This is because only by strengthening the socialist legal system can we deal steady, accurate and hard blows at the enemy--with the emphasis on accuracy--launch a forceful struggle against newborn bourgeois elements, and defend the socialist system. Moreover, only by strengthening the socialist legal system can we positively protect the people's democratic rights, fully develop socialist democracy, mobilize all positive factors, unite with all forces that can be united, whip up a new high tide in socialist economic and cultural construction, and successfully fulfill the general task for the new period.

Further strengthening the socialist legal system is a major measure put forward by the party Central Committee headed by Chairman Hua to fulfill the general task for the new period. It is also a task assigned to the vast number of cadres and masses after summing up the experience of struggling against the "gang of four." The "gang of four" spared no efforts in sabotaging the socialist legal system, because they regarded it as a major obstacle in realizing their counterrevolutionary scheme to usurp power during chaos. They slandered the socialist legal system set up under the leadership of Chairman Mao since the founding of the country as a copy from capitalist countries and as revisionist. They rabidly clamored for smashing judicial and public security organs and actually smashed them. They trampled on the socialist legal system in an unbridled way, spared no efforts to egg on people to engage in beating, smashing and looting, and even secretly made laws and set up a court of law. They indiscriminately arrested and suppressed and treated human lives like grass. As a result, a seriously chaotic situation which defied both human and divine law emerged in some areas. Of course, the "gang of four" did not mean to abrogate all legal systems. They wanted to set up a counterrevolutionary legal system which relentlessly suppressed the people. While they were directing the spearhead of dictatorship against inner party, did they not atrociously rave, "It is regrettable that there is no law which can be cited to execute the veteran cadres"--cadres whom they slandered as capitalist roaders?

What merits our attention is that the "gang of four" sabotaged and abrogated the socialist legal system and were ultrarightists, yet they often appeared as ultra-"leftists" by holding the revolutionary banner. With ulterior motives, they launched political campaigns which conflicted with the observance of the revolutionary legal system, spared no efforts to

stir up anarchism, trumpeted "suspect everything, overthrow everything," and confused a certain number of people's minds about the legal system. We must make every effort to educate the people in publicizing the socialist legal system by linking it with the deep exposure and criticism of the "gang of four," set straight all rights and wrongs confused by the "gang of four" on the question of the legal system, and correct the erroneous attitude of ignoring the socialist legal system that exists among the cadres and masses.

"Making revolution means rebelling by the masses, and there is no need to observe any legal system." This is to confuse revolutions under different conditions and legal systems of a different nature. The proletariat and the working people, rising against the landlord and capitalist classes of the old society, of course must not observe the exploiting classes' legal system. Instead they must thoroughly smash the old state apparatus and destroy all old legal systems. However, when the people have their own political power and continue the revolution under the dictatorship of the proletariat, the situation is different. The socialist revolution is aimed at eliminating all antagonism and differences between classes. Undoubtedly this is a very profound revolution. However, this does not mean that state power led by the proletariat is not needed, but that such power must be counted on to fully mobilize the masses to deepen the revolution in accordance with the laws enacted by them. This is a revolution which is carried out in total accord with the revolutionary legal system. Clearly outlined in the new constitution are the need for perseverance in continuing the revolution under the dictatorship of the proletariat, the tasks for carrying forward the three great revolutionary movements, and a series of other principles and policies. Only by following the constitution, the laws and decrees can we continue the revolution. It is obviously and absolutely wrong to think that "there is no need for those devoted to revolution to abide by the law" or that "the legal system can be ignored with the arrival of political movements." It is also wrong to act this way.

Historical facts since the founding of the PRC show that the need for "land reform laws" arose from the great agrarian reform movement. The campaigns against the "three evils" and "five evils" and the movement to suppress and wipe out counterrevolutionaries gave rise to the need for regulations regarding punishment of those who were corrupt and who were counterrevolutionaries. How could anyone think that with the arrival of a movement the legal system could be ignored? During the Great Cultural Revolution Chairman Mao and Premier Chou persisted in struggling against various violators of the socialist legal system. In some places, cases of trampling the revolutionary legal system underfoot emerged as a result of the interference and sabotage of Lin Biao and the "gang of four." This is exactly what we want to criticize and correct. The "gang of four" deliberately violated the personal freedom of citizens and their other rights under the pretext of "needs for the movement." They even instigated some people to smash, beat and loot; to invade

other people's homes and put them under arrest; and to cruelly and illegally wage a struggle against the old revolutionary cadres and other cadres and masses. Their wrongdoings severely tampered with the Great Cultural Revolution and damaged it. Practice in struggle tells us that the need to follow the socialist legal system must be stressed with the arrival of the revolution under the condition of the dictatorship of the proletariat. This need stands even if the revolution is a large-scale movement. Only by doing so can we guarantee the healthy development of the movement, deal accurate blows at the enemies, effectively protect good people, and prevent careerists and conspirators from getting their fingers into the pie.

"Since we are the masters of our country, why should we be bound by laws?" This view reflects the fact that some people in our midst have been influenced by the anarchic trend of thought spread by the "gang of four." Our dictatorship of the proletariat is a dictatorship exercised by the majority of laborers over the minority of exploiters. It requires that laborers become a unified entity with ironlike discipline. It calls for strict enforcement of democratic centralism among the people rather than anarchism. If we cannot successfully make democratic centralism prevail among the people and cannot act according to the revolutionary legal system, we will find ourselves unable to carry out production and live orderly lives or to effectively exercise dictatorship over the class enemies. Vice Chairman Yeh Chien-ying said in his report on the revision of the constitution: "The socialist legal system is a deterrent to, and a restraining force upon, lawbreakers and offenders; for enemies who sabotage socialist revolution and construction it is a merciless iron fist, but for the masses of the people it is a code of conduct which they voluntarily observe." This tells us that the socialist legal system obviously has a class and militant character. It treats various classes differently, but this difference does not mean that some people must follow the system while others do not have to follow it. In the law-abiding sense, the only difference lies in the fact that bad elements are forced to observe it while others do so voluntarily. Not only must we force all class enemies to obey the laws of the state, but we ourselves must voluntarily observe the constitution and laws, take an active role in defending the revolutionary laws, and resolutely struggle against lawbreakers and offenders.

Certain people think that self-education will be sufficient for the people and that obeying compulsory laws is not necessary. This is very one-sided thinking. Chairman Mao pointed out a long time ago: "In order to effectively engage in production and study and live in an orderly way, the people demand that their own government, the leaders of production and those of cultural and educational organs promulgate various kinds of appropriate and compulsory administrative rulings. Without these administrative rulings, social order cannot be maintained. This has been understood by the people for a long time, and it complements the use of

persuasive education to solve contradictions among the people." ("On the Correct Handling of Contradictions Among the People")

The socialist legal system is a tool used by the people to educate themselves. The emphasis on everyone obeying socialist laws complements the conduct of persuasive education among the people. The small number of lawbreakers and offenders among the people must be subjected to punishment under the law, and in no case should they be allowed to run wild. The broad masses of society demand that these people be punished, and failure to do so will run counter to the people's wishes.

"Laws are to be obeyed by the commoners and do not affect cadres." "What do you mean by 'law'? As long as I have the power, I make the law." This is the very harmful thinking of feudal and privileged classes which is found among a small number of our cadres. In feudal society the landlord class enforced the laws of the privileged class. Their criminal laws were used exclusively to deal with the commoners. The privileged people on the upper stratum were not subjected to laws but could do whatever they wished. Inheriting all reactionary things in history, the "gang of four" defied party discipline and state laws and even tried desperately to push their own factional rules and laws, acted rapaciously, injured the public interest to profit their own interest, did harmful things against the people and lorded it over others. Their criminal actions brought about very adverse effects, and certain people among our ranks also think that whoever has power in his hands may disregard party discipline and state laws. We must thoroughly criticize the "gang of four's" crimes, eradicate their pernicious influence and correct the ideology of the privileged classes existing among a small number of our cadres. Chairman Mao said: "Who has given us our power? It has been given to us by the working class, by the poor and lower-middle peasants and by the broad laboring masses who account for more than 90 percent of our population." We can only strictly abide by the constitution and laws in accordance with the people's wishes and serve the people with the power given to us by them. Under no circumstances can we assume that we can disobey the law. As manifestly provided under the new constitution, "the leading personnel of state organs must be models in observing the constitution and the law, correctly implement state policies, seek truth from facts, and must not use deception or exploit their position and power to seek personal gain." Cadres of the state who assume certain leadership responsibilities in particular should be models in observing the law. Nobody has the right to formulate his "own rules" and "own policies" that run counter to the constitution and state laws. Anybody who has violated and broken the law must be dealt with sternly in accordance with the law.

The key to strengthening the people's sense of respect for socialist laws lies in strengthening party leadership. It should be pointed out that the broad masses of cadres and people ardently love our socialist motherland and support our new constitution. As long as party leaders at all

levels conscientiously do a good job in publicizing and educating the people in the socialist legal system, genuinely rely on the broad masses and cadres and people, and wage resolute struggle against all acts violating socialist laws, we can surely strengthen everybody's sense of respect for socialist laws and create a good habit among all the people to observe and defend the new constitution. Party organizations, mass organs and judicial organs at all levels should take a clearcut stand to wholeheartedly commend good deeds by honest people who dare to defend the revolutionary legal system and firmly expose and punish bad people who break laws and violate discipline. Chairman Mao sternly pointed out: "All instances of bureaucracy, commandism and violations of law and discipline should be extensively exposed in newspapers. Serious violations must be dealt with in accordance with the law. If the violator is a party member, he must be subject to party discipline. Party committees at all levels should punish and expel from party and cadre activities those persons who break the law and violate discipline and who are, thus, hated by the masses. Serious law violators should receive capital punishment in order to assuage the people's anger. Such cases can be used as examples to educate the cadres and people." ("Oppose Bureaucratism, Commandism and Violations of Law and Discipline") Only by carrying out the above measures can evil be suppressed, justice prevail, and the dignity of socialist laws be maintained.

It is our firm belief that, led by the party Central Committee headed by Chairman Hua, the new constitution adopted by the Fifth NPC will definitely be completely implemented. An excellent situation in which there is stability, unity and great order across the land will definitely emerge in our country, and the general task for the new period of socialist revolution and construction will definitely be carried out successfully.

DEVELOP THE GLORIOUS TRADITION OF OBSERVING REVOLUTIONARY DISCIPLINE

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 90-92

[Article by Kueitung County CCP Committee, Hunan]

[Text] Kueitung is an old revolutionary base lying in the middle of the Lohsiao Mountain range. Great leader and teacher Chairman Mao 50 years ago led the 1st Division of the 1st Army of the Chinese Workers and Peasants Revolutionary Army from the towering Ching kang Mountains to Shatien in Kueitung. Here in Shatien he promulgated the well-known "three main rules of discipline and eight points for attention" (then called "three main rules of discipline and six points for attention"), showing the way to build a new-type People's Army and writing a brilliant chapter in the annals of building our army.

After the failure of the first revolutionary civil war, Chairman Mao personally led the Autumn Harvest Uprising, of great historic significance, and marched on the Ching kang Mountains. In so doing, he built the People's Army led by our party and the first rural revolutionary base. But due to our army having just been established, its composition of a fairly large number of peasants plus a number of workers and some wandering proletarians and mercenaries, and due to the frequency of fighting, penetrating political and ideological education was out of the question. This, coupled with the enemy's ruthless killing of people in the base area, aroused bitter class hatred and a vengeful sentiment among the masses of fighters of the Workers and Peasants Revolutionary Army. The "left" putschist line for a time took over the party Central Committee's leading role. Chairman Mao's correct ideas about the building of the base and the people's army were excluded. The wrong line affected the army. Military discipline relaxed. Party policies, especially those concerning cities, were not fully and firmly implemented. Merchants' goods and peddlers' wares were sometimes confiscated. When the fighters were hungry, they were not above taking sweet potatoes, corn, eggs and the like from the people. There existed the old army's bad system, the militarist's style, inequality between officers and men and the practice of beating and swearing at soldiers. This impaired relations between

armymen and civilians and between officers and men. Meanwhile, local tyrants and evil gentry and the "door-to-door corps" availed themselves of the opportunity to fabricate rumors, discredit the Workers and Peasants Revolutionary Army and intimidate the masses. For the above reasons, everywhere army units went, people dared not stay near. Struggle became very difficult.

To build our army into a new-type People's Army capable of shouldering revolutionary political tasks, in Sanwan Chairman Mao revamped the army, affirmed party leadership over it and subjected it to a number of democratic reforms. For instance, the old army's mercenary system and its redundant ceremonies were abolished. Officers were not allowed to beat soldiers. Officers and men must be united as one. Those up and down must act in concert. Other democratic practices in the army were also promoted. Chairman Mao often addressed the army. He criticized the evil practice of encroaching upon the interests of the masses and preached the revolutionary goals of our army. He laid down three rules of discipline: 1) obey orders in your actions; 2) turn in all money raised; 3) don't take a single sweet potato from the masses. In 1927, our army withdrew from Chaling to the Ching Kang Mountains. Chairman Mao summed up experiences and lessons about the Chaling battle. He again set forth three main tasks for the Workers and Peasants Revolutionary Army: annihilate the enemy when we fight a battle; fight the local bullies to raise money and conduct publicity among the masses; organize the masses and organize revolutionary committees. In early 1928, our army moved to Suichuan City in Kiangsi. During this period, Chairman Mao announced an urban policy. He also constantly solicited opinions from the masses. He taught the armed forces discipline and set forth six points for attention: 1) put back doors you have taken down for bedboards; 2) put back straw you have used for bedding; 3) speak politely; 4) pay fairly for what you buy; 5) return everything you borrow; and 6) pay for anything you damage. On the evening of 30 March 1928, as soon as the Workers and Peasants Revolutionary Army moved into Shatien, Chairman Mao called a cadres' meeting in Longevity Hall. He instructed the cadres and fighters to organize propaganda teams immediately. Such teams were to go deep among the masses to preach the nature of our army and its goals. On 3 April, the morning sunshine bathed the mountains of Shatien in its red glow. Standing on the side of a hill in Shatien, stalwart Comrade Mao Tse-tung in his gray uniform solemnly promulgated the three main rules of discipline and eight points for attention in a resonant voice before the Workers and Peasants Revolutionary Army, the Red Guards and the Young Pioneers. In simple everyday language, he explained the document, point by point, word by word. He made it clear that without discipline an army would collapse and without unified orders we could not win. His speech was occasionally interrupted by applause. "Obey orders in your actions," "Long live the Communist Party" and other slogans reverberated through the valley. The cadres and fighters made the stipulated rules of discipline into the "Red Army Discipline Song" which they sang everywhere. They also wrote the rules on walls and knapsacks, so they could be

reminded of them and see they were observed by everyone. After 1929, with the needs of actual struggle in mind, Chairman Mao added two more to the six points for attention: "Don't bathe within sight of women" and "don't search the pockets of captives." Thus the three main rules of discipline and the eight points for attention were gradually formed. In October 1974, at a crucial moment when the war of liberation was switching over to a strategic offensive, Chairman Mao again personally drafted "On the Reissue of the Three Main Rules of Discipline and Eight Points for Attention--Instruction of the General Headquarters of the Chinese People's Liberation Army." The contents of the three main rules of discipline and eight points for attention were unified. The whole army was ordered to "conduct penetrating education and strictly observe the three main rules of discipline and the eight points for attention."

The three main rules of discipline and eight points for attention personally formulated by Chairman Mao profoundly reflected our party-led People's Army revolutionary goal of wholeheartedly serving the people and represented the fundamental interests of the proletariat and the laboring people. After the promulgation of the three main rules of discipline and eight points for attention, the masses of commanders and fighters of the Workers and Peasants Revolutionary Army consciously observed them. Their organizational discipline was considerably strengthened. Political enthusiasm throughout the army reached an unprecedented height. The army thought of the people and protected their interests in every way. When a runaway horse damaged a peasant's newly built ridge, the fighters immediately fixed it, soiling their own hands with mud. The masses often brought the Workers and Peasants Revolutionary Army tea and wine. When the fighters declined and unintentionally broke a receptacle in the process, they immediately paid for the loss. Many touching cases of fighters observing discipline and caring for the people were known. From our fighters' exemplary acts, the masses realized more deeply that the Workers and Peasants Revolutionary Army was the people's fraternal army. They wholeheartedly supported it, showed infinite love for it and encouraged their relatives to join it. They fervently acted as its guides and sentries. They acted as one with the armymen. A spectacular mass movement to fight local tyrants and distribute land unfolded. With the help of the army, revolutionary regimes and local armed forces were established. Party organizations consolidated and expanded. On the eve of the Workers and Peasants Revolutionary Army's departure from Shatien, some 100 people joined the army leaving for the Ching Kang Mountains. Even now, on both sides of the Ou River under the Ching Kang Mountains, a Red folk song can still be heard: "The Red Army shows perfect discipline and obeys orders in its actions. The members of the Red Army love the people and are welcome everywhere. They consult the masses on all matters and play fair in buying and selling. They never take anything from the masses."

The Chinese revolution has in the past 50 years been moving from a democratic revolution to a socialist revolution. The three main rules of

discipline and eight points for attention formulated by Chairman Mao have increasingly demonstrated their might in the revolutionary struggle. Every one of the three main rules of discipline and eight points for attention must be clearly borne in mind and carried out. This is especially true of the first of the three main rules of discipline: "Obey orders in all your actions. Only by acting as one can we win." This is historical experience and revolutionary truth. Only by obeying the party's orders in all our actions can we unite hundreds of millions of people and act as one in insuring the thorough implementation of Chairman Mao's revolutionary line and policy and fighting for the realization of our common goals. Every time the revolution was at a crucial historical moment, Chairman Mao always stressed the need of strictly observing discipline. On the eve of national liberation, Chairman Mao stressed: "To strengthen discipline is to insure the victory of the revolution." Between August and September 1971, Chairman Mao on an inspection of south China issued the great call: "Use the three main rules of discipline and eight points for attention to educate the fighters, educate the cadres, educate the masses and educate the party members and the people." He also personally directed leading party, government and military leaders to sing aloud the song, "Three Main Rules of Discipline and Eight Points for Attention" and to discuss its contents. He taught everyone to "not only sing it but discuss it and act accordingly." Under the party Central Committee headed by Chairman Mao, the army and people throughout the country obeyed orders in all their actions. They thoroughly smashed the Lin Piao antiparty clique and won a great victory in the 10th line struggle. History shows that through obeying the order of Chairman Mao and the party Central Committee headed by him in all our actions, we continuously got rid of the interference and sabotage from the "left" and right opportunist lines and defeated enemies much stronger than we. This enabled our revolutionary cause to triumphantly advance along Chairman Mao's revolutionary line. Hereafter, so long as we obey the orders of Chairman Hua and the party Central Committee headed by him in all our actions, we can continuously achieve still greater victories on the new expedition.

To carry out antiparty activities, the chieftains of many opportunist lines have always tried to disrupt party discipline and centralized party leadership. This is especially true of the "gang of four" antiparty clique who rabidly practiced revisionism, created divisions and intrigued and conspired. They firmly resisted the instructions of Chairman Mao and the party Central Committee and wantonly disrupted party leadership and trampled on party discipline. They energetically incited anarchism among the masses and slanderously described proletarian discipline as "an inhibiting charm" and "spiritual shackles" and discipline consciousness as "slavism" and "lack of strength of character." They even raved that "the three main rules of discipline and eight points for attention can be used to make people meek as lambs." They respectfully called those political bums, counterrevolutionary clowns and gangsters with horns on their heads and thorns on their bodies "heroes going against

the current" who were "conscious of the line." This was a malicious distortion of Marxism-Leninism-Mao Tsetung Thought. Party discipline is determined by the party's political line. It in turn insures the thorough implementation of the party's political line. The three main rules of discipline and eight points for attention are an important part of Chairman Mao's army-building line and the fine tradition of our party and army. The higher the level of consciousness the more consciously one observes revolutionary discipline and obeys the party's orders. On the other hand, through failure to obey the party's orders and observe revolutionary discipline, one is liable to fall into the quagmire of anarchism, run counter to proletarian revolutionary principles and interfere with and sabotage the implementation of Chairman Mao's revolutionary line. Every Communist Party member and revolutionary fighter should consciously obey the party's orders, and fight against those acts of violating revolutionary discipline. Concerning the instructions of the party and the higher authorities, we can never do as we wish--carrying out ones we like and not those we dislike. Still less should we feign compliance and do something else. Of course, observance of discipline does not mean giving up democracy. Democracy and centralism, freedom and discipline are two sides of a question. Without democracy, we cannot possibly have consciousness of discipline. In promoting democracy, we should aim at consolidating discipline and not at weakening it.

Wise leader Chairman Hua is a shining example in implementing Chairman Mao's revolutionary line. During his work in Hunan, Chairman Hua not only set a personal example in carrying out the three main rules of discipline and eight points for attention but also persistently used the three main rules of discipline and eight points for attention in educating the party members, cadres and the masses. As far back as 1965, Comrade Hua Kuo-feng seriously summed up and popularized the experience of the militia battalion of the Taping commune of Hsiangtan, a worksite of the Shaoshan irrigation area, in carrying out the three main rules of discipline and eight points for attention. He personally awarded this unit the pennant "A PLA Force Not in Uniform." When Chairman Mao came to Hunan on an inspection of south China, Comrade Hua Kuo-feng sang aloud the song "Three Main Rules of Discipline and Eight Points for Attention" under the personal direction of Chairman Mao. He also instructed the provincial Revolutionary Committee to immediately issue a circular about launching a provincewide movement to sing the "Internationale" and the song "Three Main Rules of Discipline and Eight Points for Attention." This made the strains of revolutionary songs fill Hunan. When Comrade Hua Kuo-feng came to the 4th Company of a certain army unit on an inspection, he personally recounted traditions and told everyone about the need for discipline. He taught the cadres and fighters to consciously act according to the three main rules of discipline and eight points for attention. He encouraged everyone to resolutely carry out Chairman Mao's army-building line. After he led the whole party to smash the "gang of four," Chairman Hua again clearly pointed out: We must take the three main rules of discipline and eight points for attention as an important part of the

training program for the army. Under the leadership of the party Central Committee headed by Chairman Hua, the song "Three Main Rules of Discipline and Eight Points for Attention" has been reissued and taught on a universal basis. The three main rules of discipline and eight points for attention personally formulated and promulgated by Chairman Mao have been carried forward and developed as an inherited treasure from the revolution.

The party Central Committee headed by Chairman Hua recently issued a battle call to go on a new expedition and urged us to concentrate forces on realizing the great goal of a modern and powerful socialist country. We must raise high the great banner of Chairman Mao, restore and carry forward the glorious tradition of observing revolutionary discipline personally cultivated and advocated by Chairman Mao, obey the orders of the party Central Committee headed by Chairman Hua in all our actions, give full play to the wisdom and strength of hundreds of millions of people, and act as one fighting for the realization of the general tasks for the new period. In realizing this great historical mission, the song "Three Main Rules of Discipline and Eight Points for Attention" must become the war song of victory on our continuous expedition. In the past 50 years, we sang aloud this war song from the Chingkang Mountains to the journey on the Long March, from the banks of the Yen-an River to Tienanmen. We at last overthrew the three big mountains and built a poor and backward old China into an initially prosperous new China. Hereafter, we must continue to sing aloud this war song, overcome all hazards and obstacles in our advance and build our country into a modern and powerful socialist country. Let us take big strides toward communism amid the strains of this war song!

BE AN OLD OX FOR THE REVOLUTION

Peking RED FLAG in Chinese No 4, 4 Apr 78 pp 93-94

[Ideological commentary by Li Hsuan [2621 6513] of Ssu Hung, Kiangsu]

[Text] Great leader and teacher Chairman Mao taught us to be an "ox" of the proletariat and the masses, "exerting all your strength until you die."

The spirit displayed by the ox is indeed commendable. All year round, from spring sowing and summer planting to autumn harvesting and winter cultivation, the ox does not take a rest. Despite the rigors of the elements in the summer or winter, it never holds back. Without any complaint, it subsists on sewage outflow and grass. From dawn to dusk, year after year, it works in the field tirelessly, with no thought of getting credit for what it has done. It is unsparing as a provider of meat for food and hide for leather goods. To a revolutionary, the ox symbolizes one not given to empty talk but dedicated to more hard work in a down-to-earth way and to steadfast pursuance of an aim one has already set at any risk and under any circumstances.

Lu Hsun once said: "I am like a cow fed with grass which gives milk and blood." He meant that the revolutionaries should ask little from the people but give more to them. Shouldn't the communists and all revolutionary cadres do the same thing?

In continuing the Long March under the leadership of wise leader Chairman Hua, we should all the more carry forward the spirit of trying to be an old ox for the revolution. This means that we must build our country into a modern and powerful socialist state in less than 25 years. This is a great undertaking and a formidable task as well.

Achieving this grand goal requires that we exert ourselves so that the difficulties before us can be overcome and the heights of science and culture can be scaled step by step. We must therefore rid ourselves of the mentality of flinching before difficulties and of pulling ourselves

together commonly found in cowards and laggards; we must work hard like an old ox and vigorously build socialism.

The "gang of four" accused those comrades dedicated to the cause of socialism of adhering to the "theory of productive forces" and slandered the concept of achieving the four modernizations as "restoring capitalism." We must criticize such fallacies and eliminate their pernicious influence. We must stand firm and not be daunted by misleading concepts. Like an old ox, let us bear hardships without uttering any complaints. We must never turn back while taking the broad socialist road.

An important requirement for revolutionaries to do their work well is to be an old ox for the revolution. This is a concrete embodiment of Chairman Mao's teaching regarding wholeheartedly serving the people. Educated by the party over a long period, most of our comrades have been able to do so.

However, due to the erosion of bourgeois ideas and workstyle, and especially the serious corruption of people's thinking by the "gang of four," such as blurring the distinction between right and wrong and upsetting the criteria for honor and dishonor, some comrades have no longer kept to the traditional spirit of the old ox and have even lost it.

Instead of asking very little from the party and the people and giving more to them, these comrades have avoided working hard and shouldering responsibility but have taken to enjoying life as much as possible. This mental outlook is out of step with the march toward the four modernizations in the direction of grasping the key link in running the country well along with the whole party and the people throughout the country!

In the struggle to expose and criticize the "gang of four" we hope that these comrades will pull themselves together in smashing the spiritual fetters and join the contingent on the new Long March without turning back.

We must learn from Comrade Li Su-shou, who has worked like an old ox in order to quickly develop farming. We must learn from such comrades as Chen Ching-jun and Chen Fu-tung, who have displayed the spirit of the old ox in scaling the heights of science and in selflessly battling against hardships. We must unreservedly contribute all we have to achieving the four modernizations. In this great struggle we must hold nothing back.

"Be an old ox for the revolution." This simple expression is fraught with meaning, in that it accurately portrays the political features of communists and revolutionaries. For whenever we recall "being an old ox for the revolution" in one's lifetime, our thoughts turn to the towering stature of those proletarian revolutionaries of the older generation who exerted themselves and gave their lives for the revolution and for the

people--to the familiar features of Liu Hu-lan, Tung Chun-jui, Huang Chi-kuang, Lei Feng, Chiao Yu-lu, Wang Ching-hsi.... They are examples of having truly lived up to the great but ordinary pledge--"Be an old ox for the revolution"--until they laid down their lives.

Let us bravely advance, with one heart and one purpose, toward the splendid prospect of building China into a modern and powerful socialist country while shouting ever louder the slogan "Be an old ox for the revolution" all our lives!

BAD TRENDS MUST DEFINITELY BE OVERCOME

Peking RED FLAG in Chinese No 4, 4 Apr 78 p 94

[Ideological commentary by Hsieh Tso [6200 0146] of Anhwei]

[Text] There are trends in society as there are in the natural world. Fundamentally speaking, this means the fine style of work of the proletariat in contrast to the bad trends fostered by the bourgeoisie. Doing good things can boost the people's morale and propel society forward. Doing bad things corrupts the cadres and masses and will hold back revolution and production. We must therefore promote good trends and overcome bad trends.

Bad trends originate in the old society and from the landlord and bourgeois classes. In the new China practicing socialism, bad trends are kept from the public but continue in a figurative sense in the gutter.

But Lin Piao, and especially the "gang of four," being anxious to stir up trouble, did everything possible to spread fallacies and foster bad trends. Consequently, bad trends persist in society, and their pernicious influence has spread far and wide throughout our political and economic life.

Although the "gang of four" have collapsed, bad trends have not completely disappeared and are spreading their odious effects: for instance, living extravagantly and squandering public funds and state assets, erecting buildings and guest houses without authorization, entertaining on a grand scale and giving lavish receptions, and indulging in luxury at the expense of the state. In some cases, culprits resort to deception or falsify records to gain recognition. Others take advantage of their positions to feather their nests, to take the back door or to suppress democracy so that they can take revenge and violate law and discipline.

These bad trends have seriously undermined our party's fine tradition and workstyle and have impaired its prestige among the masses, apart from

wrecking socialist revolution and construction. Bad trends corrupt the revolutionary ranks and delay the implementation of the policy decision on grasping the key link in running the country well. If bad trends are allowed to prevail, it will be impossible to arouse public enthusiasm for building socialism, to achieve the four modernizations and to consolidate the socialist system and the dictatorship of the proletariat.

Therefore, bad trends are irreconcilable to the party, to the state and to the people. That is why "bad trends, i.e., mistakes which are not those of a few individuals but which have developed into trends, must definitely be overcome." ("Selected Works of Mao Tse-tung," Vol V, p 350)

Overcoming bad trends and fostering a fine workstyle first of all call for publicizing the party's fine traditions with fanfare and conducting ideological education in a persuasive way. As Chairman Mao pointed out: "The way to do so is through reasoning. So long as the reasoning is convincing, it is possible to overcome bad trends." (Ibid.)

We must follow Chairman Hua's directives and broadly and penetratingly conduct reeducation in the party's fine traditions and foster devotion to the public good and the idea of wholeheartedly serving the people. In addition, rules and regulations should be drawn up and strictly enforced so that there is a basis for facilitating education through persuasion.

The "gang of four" and their bourgeois factional network are the source of bad trends and bad deeds. This calls for intensified efforts to penetratingly expose and relentlessly criticize the gang so that their pernicious influence and effects can be effectively eliminated. At the same time, offenders in cases of graft and corruption should be severely dealt with according to law as object lessons in order to educate the cadres and the masses. Since leading cadres have been educated by the party for many years, they should be able to distinguish between the party's fine traditions and bad trends. They should therefore set examples for the younger generation by fostering good trends and opposing bad trends. If offenders at the leadership level are dealt with strictly, the party's prestige will only increase among the masses.

As in doing other work, we must also arouse the masses and rely on them to overcome bad trends and foster a fine workstyle. As victims of bad trends, the masses feel strongly about them and are quick to spot them. The leadership at all levels should be earnest in dealing with the views of the masses and their demands as made known in letters to newspaper editors or visits to newspaper offices. They should humbly accept the supervision of the masses, firmly supporting them in exposing bad trends and overcoming them. Repressive measures such as blocking and retaliatory moves must be checked. This is very important for safeguarding the democratic rights of the masses, curbing evildoers and creating a lively political atmosphere.

Like a paper tiger, bad trends can be curbed so long as we criticize undesirable practices and put this on the agenda so that it will become part of the great struggle to expose and criticize the "gang of four." Such an effort should be followed by setting the cadres and the masses in motion until bad trends are overcome by the fine workstyle upheld by the proletariat.

FROM ANGOLA TO THE HORN OF AFRICA

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[International commentary by Chu Yu [2806 1342]]

[Text] After provoking an armed conflict in the Horn of Africa, Soviet social imperialism threw a 10,000-man-strong expeditionary army of mercenaries into the region to directly participate in the war there.

After Somali troops were withdrawn from the Ogaden and favorable conditions for peaceful settlement of the conflict in the Horn of Africa were established, the Soviet Union lost any pretext for its military intervention. However, Soviet mercenary troops based there have incited public opinion and are preparing for a new adventure. The Soviet Union is repeating tactics it used in Angola, where it committed aggression against Angola, occupied it, and then initiated an armed invasion of Zaire.

Events in Angola and the Horn of Africa even more clearly expose the global strategy of the Soviet Union and the Soviet Union's clever expansionist tactics. As a result of these local wars the Soviet Union occupies one strategic area after another. These are important steps in its intensive preparations for a new world war. To prepare for a global war, the Soviet Union gradually establishes a network of military bases and completes a strategic deployment of forces on a worldwide scale. Europe is the strategic center of the Soviet Union's struggle against the United States for world hegemony and the Middle East and Africa are the important flanks of Europe. The Soviet Union not only covets oil and other strategic resources of the Middle East and Africa--sources vital to the West, particularly Western Europe--but strives to seize Western Europe in its pincers and isolate the United States by establishing control over the two supply routes to the West: from the Indian Ocean to Western Europe through the Red Sea and from the Indian Ocean to Western Europe and the United States via the Cape of Good Hope and the Atlantic Ocean.

Combat operations provoked by the Soviet Union in Angola, Zaire and the Horn of Africa and other places are in fact wars on external lines in the

Soviet Union's struggle against the United States for total supremacy in Europe and throughout the world.

After its failures in Egypt, Sudan and Somalia the Soviet Union centered its activities on the Horn of Africa and has a big stake in the area. This can be explained by the fact that the Horn of Africa occupies a key position in the Soviet Union's strategy to seize Western Europe through devious methods. By establishing a base in the Horn of Africa the Soviet Union can do harm to the West. At the same time the Soviet Union also is striving to transform the Horn of Africa into a base of operations for further expansionist campaigns against Africa and the Middle East. If it establishes itself there it would not only regain its lost prestige in northwest Africa but could move into southern Africa and the Arabian Peninsula as well. The fact that the Soviet Union delivered arms to southern Africa and the southern edge of the Arabian Peninsula at the same time it was engaged in armed intervention in the Horn of Africa is evidence of its schemes.

In waging local wars in areas from Angola to the Horn of Africa the Soviet Union spares no effort to sow dissent and provoke conflict among countries in the Third World. Generally, the Soviet Union follows this line: It sows hostility among Third World countries or among national liberation movements; it intentionally broadens these differences and controversies and fans emotions; it takes advantage of a favorable opportunity to send in its forces; it provokes armed conflict among nations and organizations, even financing subversive invasions by brigands from certain countries; by capitalizing on the need for arms and other aid it intensifies control over these countries; it sends a mercenary expeditionary army to the area of conflict and initiates a war of aggression which it commands directly; and, to cap it all off, it establishes itself in the troubled area and uses the area as a base for new wars of aggression.

These tricks by the Soviet Union can be clearly seen in the Horn of Africa. Under the banner of "disinterested assistance" it interferes in the ancient controversy between Somalia and Ethiopia. It supports one side and then the other. While rendering a nation assistance it schemes to establish bases in that nation and secure for itself the right to commit outrages against it. Facts show that the side that receives Soviet assistance as well as the side that opposes it are both victims of social imperialist aggression and objects of the Soviet Union's colonial enslavement.

The new tsars stop at nothing to achieve their goals in the struggle for world hegemony. Their rubles and weapons are warm with the blood of people of various countries. From Angola to the Horn of Africa the Soviet Union has provoked more than one local war and has accelerated the implementation of its plans by taking advantage of the appeasement trend in the West. Shortly after the conclusion of the conference on

security in Europe, the events in Angola cropped up; shortly before the meeting between the new U.S. Government and the Soviet Union in March last year--a meeting the United States hastily sought--the events in Zaire emerged; and in September last year the incidents in the Horn of Africa followed U.S. concessions to the Soviet Union on strategic arms issues.

On the one hand the Soviet Union provokes war while on the other it shouts that internationalization of conflicts should be avoided. It intimidates its rival in the struggle for hegemony in an effort to bind that rival's hands and feet. Having discovered the weaknesses of its rival, the Soviet Union has begun to pursue its expansionist policy even more furiously. Yesterday it provoked wars in Angola and Zaire. Today it provokes war in the Horn of Africa. Tomorrow wars such as those in Angola and the Horn of Africa will occur in other areas of the world.

Soviet social imperialism is following the same path that led to the downfall of fascism: the path that begins with local wars and ends with world war. The policy of appeasement only accelerates the approach of war. This has already been proved by facts.

Events in Angola, as with events in the Horn of Africa, clearly reveal the growing danger of a new world war. To delay this war, the entire world must unite into the broadest possible international united front against hegemonism, strengthen its forces, intensify preparations, counter the policy of appeasement, and wage a relentless struggle against Soviet social imperialism.

In the events in Zaire last year the international antihegemonic united front waged a persistent struggle and successfully frustrated Moscow's plot. It must also be frustrated in the Horn of Africa. If resolute blows are dealt to every Soviet military plan, its global strategy will be effectively frustrated and there will be more opportunities to smash its plan to initiate a world war. Thus, the world's revolutionary people will be in a favorable position if war breaks out.

The Third World is the main force on the international antihegemony united front. It was principally because of the Third World which fully demonstrated its united power against hegemony that the Soviet Union has suffered frustrations in its adventures in the Middle East, South Asia and Africa, making it unable to easily complete its global strategic deployment. That is why the Soviet Union has racked its brains to find ways and means to sow discord among members of the Third World, in a vain attempt to dam the torrential flood of their united struggle against hegemony. To counter this scheme, states of the Third World should be united even more earnestly against their common enemy, and try to solve their disputes and other differences inherited from history through consultations on equal footing, and overcome the intervention and splittist

activities of the superpowers. If the states and people of the Third World would persist in their unity and struggle, they would most assuredly be able to smash the schemes of the superpowers to split and, once again, enslave them. Uniting itself with all the antihegemony forces, including the Second World, the Third World is certainly able to deal a more devastating blow to the war plans of the superpowers.

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