REMNUNERATION OF LABOR FOR THE DEVELOPMENT
AND INTRODUCTION OF NEW TECHNIQUES

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- USSR -

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REGENERATION OF LABOR FOR THE DEVELOPMENT AND INTRODUCTION OF NEW TECHNIQUES

[Following is the translation of an article entitled "Prestroymy za razrabotku i upotreblenie novoy tekhniki" (English version above) by I. Vachlakov in Sotsialisticheskii trud (Socialist Labor), No 7, Moscow, July 1950, pages 99-115.]

The June Plenum of the Central Committee of the Communist Party of the Soviet Union (1950) has indicated that the decisive condition for the successful realization of the Seven-Year Plan is technical progress in all branches of the national economy. The Plenum has thoroughly and deeply discussed the fundamental and primary questions of technical progress, and likewise has defined specific measures for further complex mechanization and automatization of industry.

The Plenum has noted that in the practice of our economic construction the principle of material interest of workers, engineers, and technicians of enterprises, construction, scientific-research, project, and design organizations is still only slightly used in the creation of new techniques and accelerating their introduction into production. Frequently the workers who are familiarizing themselves with new techniques are in a worse position economically than those who manufacture obsolete products.

For the creation of interest among production workers in the rapid introduction of new techniques and technology, in 1956 the model statute was introduced dealing with the remuneration of machine and construction workers for working out and introducing new techniques. This statute embraces the larger part of engineering and technical personnel, workers, and other employees of machine-building industrial enterprises and project, design, technological, and scientific-research organizations.

The adoption of the above statute has significantly helped technical progress in machine building.
During this period over 5,000 new, improved types of machines, apparatus, and instruments were created and assimilated for manufacture in series production; worked out and introduced on a large scale were progressive technological processes in production; the level of mechanization rose significantly, especially in heavy and time-consuming tasks; automatization of many production processes was accomplished in industrial enterprises.

The machine-building industry has mastered the manufacture of high-powered condenser turbines, steam boilers of superhigh pressure, contemporary types of metal-cutting machines, farrier-press machines, electric and diesel locomotives, motor vehicles, excavators, combines, and other machinery and equipment having high technical and economical characteristics. The list of farm machinery produced was significantly renovated and widened. Simultaneously with the release of new machinery, more than 100,000 units of operating metal-processing equipment were modernized. For instance, in Moscow's First State Ball Bearing Plant, 1,200 units of equipment were modernized in the last years, of which 600 were made automatic and equipped with loading devices and automatic controls designed by that factory's engineers. During these years the factory has produced 600 new special lathes. The grouping of automatized lathes and mechanisms and the construction of automatically operated transportation and lifting devices made possible the creation of automatic group conveyor lines of the operating equipment. The factory collective has designed and built 12 automatic and mechanized lines.

However, the model statute adopted in machine construction on premiums for working out and introducing new techniques had substantial shortcomings. This statute provided for remuneration only for measures included in the State plan. Meanwhile, a considerable part of work in new techniques is done also in accordance with plans from design and scientific-research organizations, and therefore the development of specifically important themes and the accomplishment of a number of technical innovations was not stimulated materially.

The formerly existing system of determining premiums was rather complex. The decision on premiums passed through numerous levels in the Sovnarkhozes (Councils of People's Economy), Ministries, Departments, and other organizations. All this lead, in many cases,
to the time period before remuneration dragging out to 1-1 1/2 years.

One of the major shortcomings of material stimulation for the development and introduction of new techniques was its apartness from the general system of remuneration of labor. Even in those cases where the assignment of new technique was not carried out, the managerial, engineering, and technical personnel of the enterprise could receive in full the premium for the completion of other indices of the production plan. This lowered their interest in the technical development of production.

In the practice of applying the statute, the economic effectiveness of the new techniques and the amount of stimulation of material interest in its development and introduction were not sufficiently coordinated. In the ratification of the annual plan for work on the new techniques, the amounts of the premiums were not determined beforehand. The actual sums given for remuneration in many cases did not correspond to the actual effectiveness of the measures carried out. This clearly did not stimulate the personnel to create and introduce technical innovations.

The method of forming a fund of remuneration, likewise, did not justify itself in the new conditions of industrial management. In the machine-building industry it was formed by deductions of 0.3% from the planned net cost of goods produced. Under this system the relative importance of deliveries to cooperatives had a considerable effect on the amount of deductions to be used on the premium fund. The Sovnarkhozes and the enterprises were in unequal situations as regards to the creation of a premium fund. In addition, such a system excluded the possibility of creating a premium fund in scientific-research and design organizations, which were subordinated to Gosplan USSR, the State Committees of the Council of Ministers USSR, and other departments which did not have programs for producing goods.

It is also necessary to point out that the use of the model statute only in the machine-building industry did not stimulate the employees of other branches of industry, construction, transportation, and communication.

The Central Committee of the Communist Party of the Soviet Union and the Council of Ministers USSR have passed a resolution regarding the economic stim-
mulation of enterprises and increasing the material interest of workers in creating and introducing new techniques and technology, and the realization of complex mechanization and automatization of production.

The adopted resolution provides for the renumeration of employees of industrial, construction, transportation, and communication enterprises, as well as of geological-exploration, scientific-research, project, and design organizations for carrying out work in new techniques, depending on their economic effectiveness. Remuneration will be made for the following:

a. Creation and introduction of new, technically perfected and economically effective machines, mechanisms, apparatus, instruments and other articles; new types of raw materials; and the development and introduction of highly productive technological processes and progressive methods of conducting work;

b. Development and introduction of complex mechanization and automatization of production, electrification of production, and modernization of operating equipment;

c. Development and introduction of mechanized conveyer type assembly and erection of buildings and structures; for new, economically effective construction and technical reconstruction which would at the same time guarantee high economic effectiveness of capital investments;

d. Development and introduction of new, progressive, highly productive methods of acquiring information on the location of useful minerals;

e. Introduction of new, technically perfect and economically effective means of transportation and communication and of machines; and the development and introduction of highly productive methods of organizing transportation; and

f. Other accomplishments which required creation and introduction of new techniques, and also the successful execution of theoretical, research, and exploratory tasks, depending on the resulting economic effectiveness.
Unlike the formerly used system, the remuneration funds for the creation and introduction of new techniques must be provided by the Sovnarkhozes, ministries, departments, and kray and oblast executive committees in their production-cost plans.

The amount of such funds is determined from the wage fund of industrial and production personnel or of personnel of the basic occupation according to the following system:

1. In the industrial enterprises of machine-building and mental-processing industry... 1%
2. In the industrial enterprises of ferrous and metallurgy, petroleum extraction and processing, gas, and non-ferrous chemical industries, construction materials, lumber, paper and lumber processing industry, and electro- and thermo-energy enterprises ........ 0.5%
3. In enterprises of other branches of industry and in construction organizations ........................................ 0.3%
4. In enterprises of transportation, communication, and geological-exploration organizations .............. 0.2%

Such a system eliminates the nature of production of the various branches of industry on the amount of premium funds. It was provided that enterprises (organizations) will surrender not less than 75% of the determined fund to the Sovnarkhozes, ministries, departments, and oblast (or kray) executive committees for the establishment of a centralized fund to be used as remuneration for work in new techniques. They may retain up to 25% to be used as premiums for creating and introducing new techniques.

The money from the centralized premium fund will be used for the encouragement of employees for accomplishing important jobs provided for in the national economic plan for new techniques and also provided for in the annual plans of Sovnarkhozes, ministries, departments, and kray and oblast executive committees. The money from the enterprise (organization) fund will be used as premiums for such jobs as were outlined in the plans for new techniques of the enterprises (organizations), if their economic effectiveness has value only for the given enterprise or organization.
The award of premiums to the employees of scientific-research, project, or design organizations will be made from the money provided in the estimates of these organizations in the amount of 4-8% of the annual wage fund. Scientific-research, project, and design organizations will be surrendering up to 50% of this money to their superior organizations, will remain at their disposal. The money from the central fund will be used for the encouragement of personnel of scientific-research, project, and design organizations to create and develop new models of machines and equipment, new types of raw materials, highly productive technological processes, and other works in new techniques; for the development of projects for new construction and technical reconstruction; and also for the completion of highly important scientific-research and project work in new techniques, depending on the amount of economic effectiveness received. The money remaining at the disposal of the heads of scientific-research and design organizations is intended for the encouragement of employees to fulfill the thematic plans of the scientific-research and experimental-design work; the money of the project organizations is intended for the encouragement of employees for ensuring the high quality completion of projects and other work, for the successful development of model projects, for completion of project and research work ahead of time, and also for the completion of thematic plans. In scientific-research organizations which are basically engaged in work not directly connected with working out scientific-research problems in new techniques, the organization of the premium fund and the remuneration of employees will be conducted according to the old system. The money for remuneration which is not all used up in the current year is not subject to confiscation and can be used by the enterprises and organizations, Sovnarkhozes, ministries, and departments in the next year.

The following amounts of premiums have been determined for the creation and introduction of new techniques, depending on the annual economic effectiveness:
<table>
<thead>
<tr>
<th>Annual Economic Effectiveness</th>
<th>Money Set Aside for Remuneration of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 100,000 rubles</td>
<td>Up to 25% but not more than 20,000 rubles</td>
</tr>
<tr>
<td>From 100 to 200,000 rubles</td>
<td>up to 20% but not more than 34,000 rubles</td>
</tr>
<tr>
<td>From 200 to 500,000 rubles</td>
<td>up to 17% but not more than 60,000 rubles</td>
</tr>
<tr>
<td>From 500,000 to 1,000,000 rubles</td>
<td>up to 12% but not more than 100,000 rubles</td>
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<tr>
<td>From 1 million to 5,000,000 rubles</td>
<td>up to 10% but not more than 350,000 rubles</td>
</tr>
<tr>
<td>From 5 million to 20,000,000 rubles</td>
<td>up to 7% but not more than 800,000 rubles</td>
</tr>
<tr>
<td>From 20 million to 50,000,000 rubles</td>
<td>up to 4% but not more than 1.5 mil. rubles</td>
</tr>
<tr>
<td>Over 50 million rubles</td>
<td>up to 3% but not more than 2 mil. rubles</td>
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The size of the premiums for the accomplishment of every undertaking must be brought to the attention of the enterprise and organization collectives working on these projects simultaneously with the plan for new techniques.

When no possibility exists of calculating the economic effectiveness of the work of creating and introducing new techniques, or for the effective completion of theoretical research project and experimental work, the amount of premium will be up to 20% of the wages, calculated according to the position of employees engaged in this work for the period determined by the plan. Remuneration is made to such workers, managers, technicians, scientific workers, and other specialists who participated directly in the creation and introduction of the new techniques. Workers who actively aided in the completion of these tasks as planned or ahead of time, can be remunerated by the heads of enterprises and organizations within the limits of the premium sums established for the completion of work on new techniques; however, not more than
10% of the entire sum may be used for this purpose. The premium for directors and chief engineers of the enterprises, scientific-research, project, and design organizations, as well as for the heads of other economic organizations, and their deputies (for production and scientific work), will be determined by the superior organization.

It was provided that the premiums would be awarded at two or three stages. The first is the project stage. At this stage the person remunerated will be the designers, constructors, and other engineers and technicians engaged in completing the project and experimental work, with consideration being taken of the timeliness and quality of the technical documentation. The basis for granting the award is the document of delivery of the technical documentation. The second stage is the preparation and testing of the experimental model. Here, premiums will be awarded to the workers who participated in the preparation, testing, and completion of the experimental model. The remuneration will be paid out on the condition that the model is prepared on time, answers the demands of the technical assignment, and has been adopted for the series production. The technical-economic indexes will be checked carefully, and if they differ from those assigned, the premium sums will be changed accordingly. The basis for this remuneration is the certification document of the interdepartmental commission on acceptance of the experimental model (experimental party). The third stage is the series production. At this stage are remunerated the engineers, technicians, and workers who took part in the preparation for production and working-out of the series technical documentation. The basis for this award are the plant documents on the production output of the finished products. At present the primary index of remuneration for the completion of a factory's plan is the net cost of production. In connection with this, the role and significance of introducing new techniques has grown as one of the primary factors guaranteeing the rise of the productivity of labor and the decline of the net cost of production. It has been provided that managers, engineers, and technicians of enterprises and shops who do not carry out the approved plans on new techniques will be deprived of the premiums even if the cost of production is lowered. Such a stipulation increases even more the dependence of premium remuneration for completion of current plans of the enterprise on
the degree of realization of the assignment as regards new technics.

In the decree of the June Plenum of the Central Committee of the CPSU it is indicated that many Sovnarkhozes and enterprises do not complete their assignments on modernization of antiquated equipment, which is a primary reserve for further increasing production. Modernization of antiquated equipment often demands great effort from designers, managers, engineers, technicians and workers. Often the effect of modernization surpasses that of introducing new techniques. Taking all this into consideration, the statute provides for the material reward to employees for completion of modernization assignments in the same degree as for the introduction of new techniques, depending on the economic effectiveness.

The premium sums for the creation and introduction of new techniques will be paid over and above the established maximum premiums for fulfillment and overfulfillment of the plan for lowering net costs, and must not exceed six [months?] basic wages per year per manager and engineering-technical employee in the machine-building industry, scientific-research, project, and design organizations. It must not exceed three [months?] the basic wages per year in all remaining branches of industry, construction and transportation, and communication and geological-exploration organizations.

The Sovnarkhozes, ministries, and departments in agreement with the State Scientific-Technical Committee of the Council of Ministers USSR has the right in individual cases to remunerate employees of the specified branches of industry in the amount of six [months?] basic wage for the fulfillment of exceedingly important assignments in new techniques which have national importance and which were included in the national economic plan. The entire amount of the premiums paid to one employee cannot exceed 12,000 rubles a year.

The payment of premiums to workers who directly participate in the creation and introduction of new techniques in production is provided for in the amount of, and not more than, three months basic wages per year over and above the maximum amounts established by all other premium statutes for the respective fields and professions of the workers.

Of major significance in the premium system for new techniques is the timely payment of remuneration.
The new statute establishes a time limit, within which the premium must be paid, namely not more than two months after completion of the corresponding stage of work. The premium for new techniques will be paid over and above the amount of the plan wage fund, established for the enterprise, because it is also simultaneously a reward.

Oftentimes the mastering of new types of production puts workers, engineers, and technicians in a worse position, as regards monetary compensation for their labor, than other employees. In connection with this situation, the managers of enterprises and organizations are granted the right in necessary cases to transfer workers during the period of introduction and familiarization with the new techniques (not more than 6 months) to an hourly premium wage scale, applying to them a piece-work wage scale, and also to pay them premiums of up to 40% of their salary for high-quality work and fulfilling their assignments ahead of time.

Taking into consideration the growing difficulty in fulfilling the production-cost plan and the more strenuous nature of work in the period when the new types of articles and technically more perfect products are being mastered, the size of premiums for fulfillment and overfulfillment of the plan for lowering production costs and the plan for overfulfillment of production, for engineers and technicians of the enterprises (shops, sectors) of the machine-building and metal-processing industries — may be increased 50%, depending on the relative importance of the new products in the entire production scheme during the time it is being mastered. It cannot be higher than the amounts specified in the statute now in force.

The reduction of the time required for creating and introducing new, highly productive types of equipment, technological processes, and methods having especially high technical and economic characteristics is of great significance for the national economy. An important role is played in this by engineering and technical workers. In order to stimulate their initiative, the chairmen of Sovnarkhozes (chairmen of committees, ministers, and heads of departments) are granted the right to pay additional one-time lump-sum premiums of up to 10,000 rubles to the chief designer.
of the project (the director of the project), the leading designer, the manager of the technological development, the leading technologist and other chief and leading specialists, who have played the deciding role in completing the assignment. One-time remunerations are paid only for creation of especially important work or for exceptional achievement in the field of new techniques. For example, such a premium may be paid for creating a new and highly economical rolling mill, high-power turbine, boiler, press, or other types of equipment; for unique calculating and problem solving apparatus; for new technology of production; and for new types of raw and other materials, which would permit a considerable rise of labor productivity, the lowering of the cost of production, improvement of the quality of production, and an increase in quantity in the same production areas.

Premiums will be distributed among the enterprises and organizations which participated in the development and introduction of one and the same measure by the appropriate Sovnarkhozes, ministries, and departments on the basis of the scale of the work carried out and its effectiveness. If the development and introduction of new techniques are being carried out by the organizations and enterprises which are subordinated to the various Sovnarkhozes, ministries, committees, departments, or oblast and kray executive committees, then the payment of premiums to employees will be conducted from the fund of the Sovnarkhoz, ministry, or department in whose plans for new techniques these undertakings were provided for. They will transfer the funds necessary for premiums directly to the enterprises and organizations. The size of the premiums as well as the time period of their transfer, must be given in the agreements on fulfillment of various assignments concluded between enterprises and organizations of various subordination. The introduction of such a system makes it possible to remunerate all the enterprises and organizations which took part in the development and introduction of new techniques. It is known that under the former model statute, scientific-research and design organizations which were not subordinate to Sovnarkhozes were deprived of premiums.

The determination of the economic effectiveness and the making of appropriate calculations must be done on the basis of the method of determining the effectiveness of capital investments, which was affirmed
by the Academy of Sciences USSR, and also on the
basis of the method of determining effectiveness result-
ing from the introduction of new techniques which was
developed by the GNTK (Gosudarstvenny nauchno-tek-
nicheskiy komitet -- State Scientific-Technical
Committee) USSR.

The new system of remunerating employees of
industrial, construction, transportation, communi-
cation, scientific-research, design, and other orga-
nizations, was developed through extensive partici-
pation of the Councils Ministers of the Union repub-
lics, a number of Sovnarkhozes, ministries, state com-
mittees of the USSR, departments, and individual enter-
prises of the country.

All funds to be used for the material rewarding
of employees for technical improvement of production
may be spent only on condition that the national eco-

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omy receives real economic benefit. Putting the new
system of remuneration into practice will allow the
tempos of technical progress to be speeded up consider-
ably and the economic effectiveness of introducing new
techniques to be raised. Preliminary calculations show
that in 1958 the economic effect of undertakings
for which premiums were given constituted about 3-4 1/2
billion rubles in the national economy. Under the new
premium statute, the economic benefit will constitute
approximately 20 billion rubles.

It is necessary for the heads of Sovnarkhozes,
ministries, and departments to look into the plans for
new techniques, to affirm the list of work for which
 premiums are given, and to submit them to the collective
of enterprises and organizations. It will be expedient
to conduct wide explanatory work in enterprises and
organizations on the significance of the new system
of stimulation for the development of new techniques.
FOR REASONS OF SPEED AND ECONOMY
THIS REPORT HAS BEEN REPRODUCED ELECTRONICALLY DIRECTLY FROM OUR CONTRACTOR'S TYPESCRIPT

THIS PUBLICATION WAS PREPARED UNDER CONTRACT TO THE UNITED STATES JOINT PUBLICATIONS RESEARCH SERVICE A FEDERAL GOVERNMENT ORGANIZATION ESTABLISHED TO SERVE THE TRANSLATION AND RESEARCH NEEDS OF THE VARIOUS GOVERNMENT DEPARTMENTS