Carl Beck Papers

in Russian & East European Studies

Number 1508

Clayton Black

Answering for Bacchanalia:
Management, Authority and the Putilov Tractor Program, 1928-1930

Clayton Black is an assistant professor of history at Washington College in Chestertown, Maryland. He earned his B.A. from Denison University in 1986 and his Ph.D. from Indiana University in 1996. Much of the research for this paper was made possible by an IREX long-term grant to St. Petersburg in 1990-91.

No. 1508, April 2002

© 1999 by The Center for Russian and East European Studies, a program of the University Center for International Studies, University of Pittsburgh

ISSN 0889-275X

The Carl Beck Papers

Editors: William Chase, Bob Donnorummo, Ronald H. Linden

Managing Editor: Eileen O'Malley

Cover Design: Mark Weixel

Submissions to *The Carl Beck Papers* are welcome. Manuscripts must be in English, double-spaced throughout, and less than 100 pages in length. Acceptance is based on anonymous review. Mail submissions to: Editor, *The Carl Beck Papers*, Center for Russian and East European Studies, 46-17 Forbes Quadrangle, University of Pittsburgh, Pittsburgh, PA 15260.

On September 25, 1930, Vasilii Fedorovich Grachev was relieved of his post as director of Leningrad's famous "Red Putilov" factory. He had assumed control of the plant in early 1926, when his predecessor was removed for participating in the Leningrad Opposition movement. Four and a half years later he, too, faced ignominy, in his case for falling short in his efforts to meet the challenge of producing 12,000 tractors in a single year. Things could have been worse for Grachev. In June his technical director, V. L. Sablin, in whose hands the day-to-day operation of the factory had been entrusted since 1923, was arrested along with the director of Putilov's tractor department and several engineers on charges of "wrecking" and sent, rumor had it, to the Solovki penal colony in the north. Grachev undoubtedly suspected that his tenure at Putilov was nearing its end by the time OGPU agents seized Sablin. The tractor program had failed to reach its quota for the past seven months straight, and the quality of the tractors that rolled off the line was notoriously bad. Collective farms awaited the arrival of mechanized agriculture, only to find that Putilov's tractors frequently broke down on their maiden voyages.¹

Grachev knew perfectly well that Sablin and the others were not to blame for the failures of the tractor program—the pace of production was pushing machinery far beyond its reasonable capacity, worker absenteeism was high in spite of strict labor laws, and factories that supplied parts for Putilov tractors themselves fell behind on their orders. But Sablin was an easy target. Despite his years of excellent service to the factory, he had come from a noble family, and the times were not good for members of the former elites.² Ever since the trial of engineers and foreign specialists at the Shakhty mines in the Donbass in mid-1928, technical specialists everywhere, especially the majority who had received their training before 1917, had been on edge.³ Not only did teams of "inspectors" constantly monitor their performance but shop-level organizations of Communist party and Communist youth (komsomol) members harassed managerial staff and brought even minor shortcomings to the attention of higher party authorities.

Unlike Sablin, Grachev's political credentials were impeccable, as was to be expected of the "red director" of a factory with the revolutionary pedigree of Putilov. Only thirty-seven years old at the time of his promotion to director, Grachev had come from a working-class family in Tula, where he had worked as a child in a bakery. At fifteen he found employment at a machine-construction plant in Moscow but was later fired for participating in a strike. By the time World War I broke out, Vasilii Fedorovich had moved to Petrograd, already a Bolshevik. His loyalty paid off in 1917, when the new government named him chairman of the soviet of the Petrograd district, and finally, in 1926, as Putilov factory director.⁴

In the eyes of the OGPU, Grachev was not guilty of wrecking the tractor program. But three months after Sablin's arrest, Grachev and the new director of the

tractor department, Plekhanov, were still unable to sort out the factory's problems. According to official explanations, the downfall of the Putilov administration was not deliberate sabotage but the director's failure to implement one-man management (edinonachalie), the policy that concentrated power in the hands of individual managers at the same time that it made them individually responsible for the success of the plan. This is the story of why Grachev failed to implement that policy as well as a story of why he could not have succeeded.

Few topics in Russian history have undergone more thorough scrutiny in the last two decades than the First Five-Year Plan and the creation of the Stalinist state. To past generations of analysts, the First Five-Year Plan turned the Soviet Union into an economic giant at the same time that it created a submissive population through terror and indoctrination. In recent years, a dramatic increase in available source materials has allowed historians to question the success of the plan, the orderliness of its implementation, and the extent to which control of the population was achieved. Since Naum Jasny coined the phrase "bacchanalian planning" in 1961, studies of Soviet industrialization have devoted considerable attention to the chaos that the excesssive zeal of party leaders created for the Soviet economy.⁵ Studies of workers in industrialization have emphasized the impact of class warfare and economic upheaval on worker identities, social mobility, and labor migration. 6 E. A. Rees and David Shearer have called into question the unity of the Soviet state in its preparations for the First Five-Year Plan, pointing out that the years 1928 to 1930 witnessed intense institutional rivalry, especially among local economic agencies, the Supreme Economic Council (VSNKh), and the Workers' and Peasants' Inspectorate (Rabkrin). This article offers an examination of the connection between the conflicts at the top of the state hierarchy and the tumult on the factory shop floor. It uses as a case study the attempt to introduce one-man management during the Putilov factory's effort to push tractor output to extraordinary new levels.

For some historians of Soviet industrialization, the decree on one-man management of September 1929 was a clear indication of the move to authoritarianism and increased exploitation and control of labor. Passed by the Central Committee at the outset of the production year, the decree in its language suggested an intensification of control and hierarchical authority. It spoke of "strict order and sound discipline in production." It announced that "all of [the director's] operative-managerial decisions are unconditionally obligatory, both for subordinate administrators and for workers, whatever positions they may hold in party, union, or other organizations." And it intended "to establish an order in the direction of production that will guarantee the subordination and responsibility of every person engaged in production—from the director to the rank-and-file worker." Neither party members nor unions, whose

main task was to inculcate productivist values in workers, were to interfere in the decision-making processes of administrators. In return, factory managers were obliged to pay attention to worker initiatives, especially as concerned machine modifications or rationalization measures, but the decree seemed to weigh the balance of intrafactory relations heavily in favor of management.¹⁰

A close examination of the implementation of the decree on *edinonachalie*, however, suggests that employees of industry, managers as well as workers, interpreted it differently. Hiroaki Kuromiya has pointed out that the decree foresaw as much managerial responsibility to initiatives from below as it did enhancement of authority from above. Turning our attention from the language of the decree to the motives for its introduction, Kuromiya argues that one-man management was a response to years of chaotic administration of the shop floor, in which party and trade union leaders interfered with managerial authority and, in response, managers shrugged off responsibility for production failures to them. The decree's authors did not see a conflict between *edinonachalie* and workers' control; indeed, the decree was meant to enhance worker control by making managers responsive to worker criticisms.¹¹

Kuromiya's interpretation has provided a much needed corrective to earlier views of one-man management. But even though control from below might not have contradicted the enhancement of managerial authority, successful implementation of such a policy required a careful balance between the two, and Kuromiya downplays the extent to which the Soviet government itself upset this balance during the First Five-Year Plan. I argue that the varying ways of viewing the decree on one-man management reflect the inconsistencies in the Soviet government's own approach to the plan. On the one hand, since the so-called regime of economy in 1926, the state's policy aimed at improving the efficiency of operation in industrial enterprises. With the start of the Five-Year Plan and the projection of ambitious production targets, the need to improve efficiency acquired even greater urgency. On the other hand, Soviet leaders wanted to prove that traditional approaches to production were inadequate for the challenges of socialist construction. With the proper zeal and discipline, they believed, the working class was capable of achieving unheard of improvements in productive output. It was therefore in the government's interest to prove specialists wrong in their estimates of what was possible for Soviet industry. This fundamental contradiction—between the desire to improve efficiency by enhancing managerial authority and the need to prove that political motivation was sufficient to overcome perceived limits to productive capacity—was only enhanced when the conflicting parties of factory politics got hold of the decree on edinonachalie.

Economic Administrators and Institutional Context

The authority of expertise coexisted uncomfortably with ideological zeal from the earliest days of the Soviet regime. On the one hand, Bolshevik rhetoric called for the broadest participation of the working masses in affairs of state and economy, and a considerable part of the party's appeal in late 1917 was its call for all power to the popular soviets and workers' control in the factories. On the other hand, Lenin repeatedly justified strict subordination to hierarchy over democracy in the name of expediency, concentrating real power in the hands of political commissars and putting a halt to the workers' control movement in industry through the restoration of one-man management during the civil war.¹²

Between 1921 and 1927, technical specialists, engineers, and managers were beneficiaries of Lenin's pragmatism. Though few were Marxists and even fewer were Bolsheviks, many found shelter in the new regime because the Soviet government desperately needed their skills to restore the shattered economy. Like the tsarist officers who had helped the Red Army defeat the Whites in the civil war, "bourgeois specialists" who had directed the economy of the old regime proved essential for the economy of the new order. Factories were placed under the nominal control of politically reliable "red directors," but "technical directors," many of whom had run the factories before the revolution, were responsible for the day-to-day operations, often with considerable autonomy. At the higher levels of economic administration, such as the Supreme Economic Council (VSNKh) and the State Planning Commission (Gosplan), members of the former elites (*byvshie liudi*) with expertise, including some Mensheviks and liberals, found stable employment, even under as unlikely a patron as Feliks Dzerzhinskii, the head Chekist who took charge of VSNKh in 1923.¹³

Despite the apparent stability that technical experts enjoyed, however, Bolshevik leaders had difficulty reconciling the authority of individuals with the rhetoric that their movement championed the will of the masses. Many of the individuals in charge of the economy, after all, had been trained in a system that ignored the input of the masses entirely, and quite a few belonged to the Bolsheviks' political opponents. The antidote to a takeover of the economy by suspect elements was mass "control," meaning vigilant supervision by popular organizations of the work of authority figures. The Workers' and Peasants' Inspectorate (RKI, or Rabkrin) was to play the most visible role in this regard, particularly in the upper levels of the bureaucracy. But in the early 1920s other organizations appeared in factory shops whose mission was to instill the sense that the worker was the true *khozyain* (lord) of the factory. Production circles (*kruzhki*) and, later, "conferences" (*soveshchaniia*) encouraged workers to share their knowledge of the production process, improve their skills, and suggest improvements to machinery. Unions, party, and komsomol organizations also set up shop-level bureaus to make workers active agents on behalf of the state in industry.¹⁴

As long as Soviet leaders concentrated their efforts on restoration of the economy to its pre-1913 strength, managers and technical experts in factories had little cause either to fear or even pay much attention to shop-level organizations. The most important relationship for directors of state factories in the early 1920s was with the trusts, the umbrella organizations that, through trade syndicates, secured funds and orders from the state and other trusts for factories to keep shops open and workers at the bench. 15 Although party and union organizations made life difficult for managers over questions of worker safety, norm-setting, wages, and employment, they did not seriously endanger the privilege or authority of factory administrators, as long as the latter enjoyed the support of administrators at higher levels. Increasingly, union organizations found it difficult to win disputes with management, and managers often violated the terms of collective bargaining agreements with impunity. 16 The result for workers was a sharp decline in interest in shop-level organizations. Attendance at production conferences was dismal, and, by the mid-1920s, faith in the union as the defender of workers' interests declined. 17 Party membership exploded during the 1924 Lenin enrollment, but the growth in numbers was not reflected in a growth in activism, and party organizers were lucky if they could even collect membership dues. 18

The power of technical experts and managers appeared to reach its peak in early 1926. At the top of the economic hierarchy, VSNKh chairman Dzerzhinskii initiated a regime of economy to bring down the costs of production and accumulate funds for future industrial growth. The bureaucracy of VSNKh was itself to be the target of cuts, but despite Dzerzhinskii's reputation as head of the OGPU for mercilessly repressing the regime's opponents, he was protective of the "bourgeois specialists" among his staff, whose expertise he believed was essential for the transition to industrialization. At the factory level, the program's emphasis on eliminating waste, holding firm on wage increases, and driving up productivity through rationalization and strict labor discipline played into the hands of managers, who despaired of the poor work habits of new workers and the inefficiency caused by party and union interference.

The response from workers was predictable. The number of strikes shot upward as norms increased, overtime pay was trimmed, attention to safety declined, wages were distributed late, workers were asked to cover the costs of workplace amenities (towels for clean-up and tea for breaks, for example), and grievances were increasingly resolved in favor of management.²⁰ Loss of faith in the unions can be seen in the fact that many of the strikes occurred without union support, and the participation of party members, often as strike leaders, suggests the weak hold of official policy over rank-and-file members.²¹

Despite appearances, however, the regime of economy in fact greatly endangered the position of factory and trust administrators. Improving labor discipline was indeed one of the principal goals of the campaign, and Dzerzhinskii never seemed to tire of insisting that productivity must grow more quickly than wages. At the factory level, pressure on managers to cut costs was intense, and some cut drastically the few services or safety equipment their factories offered while others complained openly to the party leadership.²² Trust administrators, to win advantage in the battle for scarce new orders from the state, spent considerable sums to advertise their factories' products and maintain permanent representatives in Moscow as lobbyists.²³ As witnesses to trust expenditures, the economists at VSNKh were eager, according to Nikolai Valentinov-Vol'skii, to "screw" trust administrators, who, they believed, were mishandling or hoarding scarce resources.²⁴ Moreover, VSNKh's officers knew that factories and their machines were still far from operating at full capacity. So just as the demands on labor intensified, so too did Russia's industrial managers find themselves under growing scrutiny from above over their use of industry's resources.

For its part, Rabkrin undertook a zealous application of the regime of economy to industrial administration. As the agency charged with rationalization and supervision of the state bureaucracy, Rabkrin had particular interest in identifying ways to cut administrative costs. Between 1927 and 1930, its commissions investigated state economic institutions from top to bottom, often subjecting local officials and factory managers to a humiliating barrage of surveys and inspections. And because Rabkrin was not the only agency with inspectorates, the amount of time factories, trusts, and other institutions spent undergoing external review grew quickly. By the end of the decade factory personnel complained of having to spend sometimes six hours per day filling out survey forms or cooperating with inspections, many of which duplicated the work of other inspections.²⁵ In the 1929/30 economic year alone, for example, Putilov endured twenty-two inspections, the nearby "Treugol'nik" rubber plant twenty-nine, the textile trust forty, and the Leningrad regional economic council forty-seven.²⁶

The growing pressure on industrial administrators stemmed from the conviction of Dzerzhinskii, Kuibyshev (his successor at VSNKh), and others that the trusts, rather than facilitating the work of factories, added an extra layer of bureaucracy and costs by obstructing the transfer of accounting and decision-making responsibilities to the factories. Because trusts and syndicates submitted their financial reports to higher authorities in lump figures, there was no way to know whether individual enterprises were responsible for profits or losses, and party leaders suspected trust directors of hoarding assets, which made a thorough account of the country's reserves impossible. A commission led by Rabkrin chairman, G. K. Ordzhonikidze, in mid-1927 made the case that the trusts interfered in too much of the minutiae of factory administration and recommended cutting back on trust prerogatives as a way to increase the flexibility of enterprise directors.²⁷ Not surprisingly, trusts resisted the reorganization that resulted from the Rabkrin study.

Unfortunately for factory and trust personnel, resistance to VSNKh and Rabkrin was ill-advised in the atmosphere of political conflict that surrounded the discussion of

the plan for industrialization. We need not recount here the details of the industrialization debate, but it is important to keep in mind Kuibyshev's and Ordzhonikidze's unwavering support for Stalin, first in the struggle against the United Opposition of 1926–27 and then in 1928 against Bukharin and the right wing of the party. In the first instance, the two were able to use data collected by VSNKh and Rabkrin to show that, indeed, vast untapped resources remained in industry, thus discrediting opposition claims that industry could not grow without applying pressure on the peasantry.²⁸ When Stalin then attacked the Right for being too "soft" on the need for rapid industrial growth, Kuibyshev and Ordzhonikidze again argued that industry was capable of dramatic growth and the deepest cuts in cost imagineable, which justified upward revision of the plan to incorporate the most fantastic production targets.²⁹ Stalin's political alliances switched from right to left, but his association with the heads of VSNKh and Rabkrin suggests a reasonably consistent position—that industry could do far more on its own than Stalin's opponents, whether on the left or right, gave it credit. Those in the economic elite who spoke out against the intensification of demands on industry therefore ran the risk of falling in with the political opposition to the Central Committee as "defeatists." The paranoia that emerged from the 1927 war scare, the espionage trial of the Shakhty specialists in 1928, and preparations for a confrontation between the Soviet state and the peasantry made such a risk increasingly dangerous, especially for those with past ties to the old regime or non-Bolshevik political parties.

Despite the support of Kuibyshev and Ordzhonikidze for Stalin, however, VSNKh and Rabkrin were quite different organizations, and their differences were to have a profound impact on managerial authority in industry. Whereas VSNKh was a huge bureaucracy of white-collar employees, of whom only about 15 percent belonged to the Communist party (about 5 percent of technical specialists were members). Rabkrin, with nearly 36 percent of its staff classified as workers and close to 60 percent party members at the regional level, was the most "proletarian" and "Communist" of state agencies. 30 If economic wisdom collided with party discipline. Rabkrin members were more likely than the agents of VSNKh to fall quickly in line with party discipline. And although Kuibyshev was much less accommodating to the "bourgeois specialists" in VSNKh than Dzerzhinskii, he did not purge the agency of their presence until autumn, 1928, and its numerous offices continued to operate according to a more-or-less traditional standard of bureaucratic procedures. Ordzhonikidze, by contrast, preferred a military-campaign style of management and announced his intention to "declare war" on the country's economic administration.³¹ In this he was helped by the campaign of "self-criticism" begun in mid-1928, to which komsomol groups responded with particular vigor, subjecting factory administrators across the country to waves of incrimination.

By 1928, Rabkrin's influence over economic policy was stronger than ever, and not even VSNKh was immune to its attacks. Kuibyshev had repeatedly pushed for

more optimistic control figures than those of Gosplan, but soon VSNKh economists found themselves attempting to restrain Rabkrin claims that their estimates for cost cuts in the 1928/29 economic year were too modest.³² According to Shearer, Rabkrin essentially dictated plan targets to VSNKh over the course of 1929, forcing factory managers to undergo constant revision of their production schedules.³³

The climate of institutional conflict and political suspicion that had emerged since 1926 provided the context for passage of the decree on one-man management. As VSNKh, Gosplan, and Rabkrin fought over estimates of the "hidden wealth" of resources and creative initiative in industry, their attention increasingly focused on factory directors, who were most familiar with the particular conditions of their enterprises and were in the best position, together with shop-floor workers, to identify ways to organize production to a state of ideal efficiency. To ensure that managers lived up to their obligations to the plan, they needed to be held individually responsible for their factories' performance. One-man management had officially been in place since 1918, but, as the country's economic leaders saw it, union, party, and trust interference had diluted managerial authority over the course of the 1920s and allowed managers to evade responsibility for production by hiding behind the backs of others.³⁴ Given the enormity of expectations for the five-year plan, Russia's factories could no longer afford a diffusion of authority. But because the transfer of responsibility to directors took place as the political stakes of responsibility and economic decision-making were rising, factory authorities found that their margin for maneuverability and genuine exercise of power was diminishing rapidly.

Krasnyi Putilovets and Tractors

The transition from the mixed economy of the mid-1920s to central planning pushed the Putilov factory into a position of prominence as the Soviet Union's only major supplier of tractors—the steel horses that would pull Russian agriculture out of the dark ages and into a mechanized socialist future. Putilov began to produce its version of the "Fordson" tractor in 1923, after engineers disassembled an American model and, piece by piece, copied its design. In its first year of tractor production Putilov turned out five "Fordson-Putilovtsy" (FPs). Witnesses to one of the first models at a May Day parade in 1924 reported that the FP belched out suffocating black smoke and, after chugging its way for several blocks, broke down and had to be towed by a rope along Prospekt Stachek. As production increased, Putilov's technicians were able to eliminate many of the original defects, yet the first generations of Putilov tractors were of notoriously low quality. Newspapers reported frequent breakdowns, faulty valves, polluted cylinders, poor assembly, and other problems. As a production increased.

Foreign observers even questioned the wisdom of producing a Fordson-type tractor, arguing that the design was no longer in use in America and that it was better suited to small farms than to the giant kolkhozy envisioned by the Soviet state.³⁸ Nevertheless, production continued, and Putilov turned out 73 tractors in 1924/25; 422 in 1925/26; and surpassed 1000 in 1927/28.³⁹

From its inception, the plan to mass produce tractors mixed practical measures for the allocation of resources with a utopian belief that mechanization of agriculture was the key to increasing output and, hence, essential for the creation of communism. In a country where roughly 80 percent of the population worked the land, few things better symbolized the Bolsheviks' relationship to the "backwardness" of Russia than the priority Soviet leaders placed on sending as many tractors as possible to the countryside. In the context of the New Economic Policy, the tractor embodied the smychka (alliance) of urban workers with the Russian peasantry. During the First Five-Year Plan, tractors represented the expansion of land under plow and an ideal form of communal property in the new kolkhoz system. As the VSNKh chairman, Valerian Kuibyshey, told a general meeting of Putilov employees, "There is no more important task in industry than the restructuring of our backward agriculture on new, technical foundations. . . . [I]f agricultural machine construction is such a revolutionary means, then the tractor is literally the bearer of new socialist beginnings in the village."40 Although Putilov had never been designed to mass produce any such complex machinery, particularly in the numbers the government was planning for tractor production, faith in the transformative power of the tractor prompted leaders such as Kuibvshev to push targets ever higher.

The attention on Putilov brought some significant benefits to the factory: sizeable investments in new, modern machinery from abroad; projects for construction of a modern tractor plant; and a steady supply of orders that promised to keep all the factory's fifty shops in operation for years. Furthermore, the importance of tractor production gave factory administrators hope that they would receive priority in the hiring of increasingly scarce skilled technicians and personnel. But with the attention, Putilov also found itself drawn into the web of conflicting sentiments among planning agencies over how much the country could expect from its factories.

In 1926, VSNKh committed Putilov to raising production in coming years to 5000 tractors annually, along with 20 million rubles in spare parts. ⁴¹ Its planning department for metal-working factories, Gipromez, dispatched V. A. Lebedev the following year to explain plans for reequipping Putilov and to present a projection for future growth. Lebedev pointed out that Putilov's layout was not conducive to contemporary mass production methods and noted that the machinery and intrafactory supply lines were "decrepit." As he put it, "[P]erhaps they were satisfactory in past times, but now they do not even satisfy the traffic we have in the present production

program."⁴² The Gipromez plan called for Putilov to phase out locomotive production on all but experimental designs and discontinue railroad car production. Other shops were to be reconverted to make way for new metallurgical facilities. According to the new program, tractor production was to reach 5000 per year by the end of 1931/32.⁴³ Lebedev then reassured his listeners, who were apparently alarmed by rumors of higher targets, "We have figured that with 5000 tractors and 40,000 spare parts the cost of the tractor will be under 1800 rubles. With an output of 10,000 tractors per year we would have to leave the existing plan [zadanie] altogether. . . . A goal of 10,000 was not adopted because we do not find a demand for such a quantity of tractors."⁴⁴

The conservative estimates of the Gipromez economists, however, did not anticipate the impact that the turn to the collectivization of agriculture would have on demand for tractors. Whereas Gipromez, in 1927, reportedly had found no demand to produce 10,000 tractors over the course of the entire plan, by the next party conference in April 1929, Kuibyshev was asserting that Putilov's plan would include eventual expansion to 10,000 tractors *per year* by 1931/32.⁴⁵

In mid-June 1928, Rabkrin sent a commission to Putilov to assess the Gipromez plan for reequipping the tractor shop and determine the possibilities for the expansion of output. The commission discovered that state planners had been remarkably careless in preparing for mass assembly of tractors. By rearranging the tractor shop and forming a continuous production line, workers and engineers were able to increase output, 46 but new machinery and the growing number of assembled tractors so crowded the work floor that they blocked passage through the shop. Plans for the department appeared to have been completed in only two weeks, and no representatives of the factory or even the trust had taken part in ordering new machinery. When the machines arrived, engineers found that they had no instructions for assembly. Some had been ordered without the necessary cutting instruments and could not be used. And reequipment had not been coordinated with shops that supplied the tractor department, so although the tractor shop now had equipment designed eventually to meet an output of 5000 tractors annually, auxiliary shops such as the foundry and forge were only prepared for an output of 1200.47 To make matters worse, the tractor department did not have room for all the new equipment, and many new machines stood in the yard and rusted.48

Drawing the conclusion that Putilov's problems were simple human errors rather than "objective" obstacles to expansion, Rabkrin continued to press for the quickest possible transition to an annual output of 10,000 tractors and convinced the Council of Labor and Defense (STO) to issue an order that elevated Putilov's target, in light of its output of roughly 100 tractors per month in 1927/28, to 3000 for 1928/29—a jump to 250 tractors per month. Shocked by the increase, the factory director

made it clear that such a leap would not be possible without time and a major investment of funds. Grachev pointed out that mechanical shops would also need to be reequipped and that a new foundry and forge would have to be built to meet the demand. Warehouses would have to be revamped and supply lines rerouted. Thus, he argued, an output of 5000 tractors per year would only be possible by 1931, and he categorically rejected a new Rabkrin suggestion that Putilov could turn out 15,000 per year by 1930.⁴⁹

Seeing that Grachev needed to be convinced, STO sent a Rabkrin commission in late June 1928, headed by M. M. Kaganovich, to ensure that the director's objections did not stand in the way of the expanded program. Kaganovich emphasized that the collectivization campaign would make expansion an absolute necessity and suggested the possibility that other factories could produce parts that Putilov would assemble into a final product. Grachev was not averse to the idea of assistance from elsewhere, but he insisted that such "farming out" should not interfere with investments slated for Putilov. He argued that, in any event, Putilov could only surpass 2000 tractors per year with a new foundry and greater financial support from the trust and the VSNKh administration for the metals industry, Glavmetall. Kaganovich snapped back at the director, accusing him of paying too much attention to past production and not enough to overcoming the obstacles to further growth. Putilov's personnel had the technical expertise and experience, he reasoned, that won it the right to produce tractors, and that being the case, its administrators and specialists were responsible for expanding production as far as possible, not for approaching the task "perfunctorily" (formal 'no).50

When Kaganovich later met with city leaders and VSNKh representatives, he assessed Putilov's production capabilities at 3000 for 1928/29, 4200 for 1929/30, 7,200 for 1930/31, and 10,000 for 1931/32. Grachev confided to his managerial staff that such figures were "horrible" and stressed that "even under favorable conditions, if we were able to build two shops and equip them by the end of 1930.... it would hardly be likely that we could turn out 10,000 tractors." ⁵¹

Shortly after Grachev's confrontation with Rabkrin, STO announced its plan for Putilov to turn out 250 tractors per month by September, meaning that it expected 2000 by the end of the year, and it appeared that a compromise had been reached. Doing for a sympathetic hearing, Grachev had appealed directly to VSNKh after Kaganovich's visit, saying that even 2500 was an impossible figure. The VSNKh presidium rejected his plan, but the newer STO target gave hope that the leaders in Moscow had somewhat relented. Three days later, however, STO again bowed to pressure from Rabkrin and moved the plan back up to 3000 (420 per month), although it added that Leningrad's "Znamia Truda" and "Bol'shevik" factories agreed to supply parts, as did factories in Briansk and Nizhnii Novgorod.

Grachev's objections were practical rather than political. No oppositionist, he was nevertheless well aware of both the limits of the state's funds and the importance

it placed on tractors. The new quota was set against his best judgements, but if the state intended Putilov to be the site of mass production, it was certainly in his interest to push for as much support as possible. As long as STO insisted on 420 per month, Grachev needed to ensure that his factory had the material resources to make that target achievable. In that sense, then, Grachev was successful. His appeal to VSNKh won Putilov over a million rubles to complete construction already underway and an extra million to expand the "Znamia Truda" plant for supplies to Putilov. And despite the "horrible" targets set in Moscow, Grachev was also aware of what the program would mean for his factory. He told his managers, "here we have the possibility of raising the prestige of our factory and, in particular, that of the tractor specialists, technical personnel, and workers." 55

To the surprise of everyone, Putilov was able to overfulfill its plan for 1928/29 by producing 3050 tractors. ⁵⁶ How much assistance the factory received from its partners or what the quality of the tractors was is uncertain, but the achievement served a purpose far greater than its narrow meaning for the development of agriculture. The overfulfillment of the plan, particularly in light of Grachev's objections, supported Bolshevik convictions that there were "no fortresses the party could not overtake" and suggested that the "objective circumstances," to which managers and specialists pointed to say the state's plans were impossible, reflected a lack of faith in the untapped initiative of the working class. During a celebration to honor the completion of the plan, Kuibyshev told his audience that 3000 tractors had seemed like an unattainable goal, even to the VSNKh leadership, but, he said, "we still have not learned to take into account the reserve forces that are hidden in the energy of the working class, that are hidden in the capital we have inherited. Life has confirmed that the government was right when it gave the Putilov factory this difficult assignment."⁵⁷

If the plan for 3000 tractors seemed all but impossible at the outset of the 1928/29 year, by mid-1929 the government was ready to impose on Putilov an even more ambitious production target. In July the Central Committee issued a report on the work of the Leningrad Machine-Construction Trust (Lenmashtrest) for the first year of the Five-Year Plan with recommendations for the coming year. The report concluded that Putilov now had the means to turn out 10,000 tractors in 1929/30, and should reach 20,000 assembled units and parts for another 60,000, by 1932/33.58 Such a leap was startling, particularly considering that the original plan only called for 10,000 assembled tractors and parts for 40,000 for the entire five-year period.59 But industry in general had exceeded the control figures for the 1928/29 year, and Ordzhonikidze convinced the Politburo to approve targets that were even higher than the optimal variant of the plan had forecast.60

The upward revision of Putilov's plan, despite its remarkable contrast with the earlier version, was not an entirely arbitrary decision. In spring 1929, Grachev traveled

with a delegation of specialists to America to examine the production techniques of the Ford factory. In consultation with Ford's engineers, the Putilov group developed a program whereby, with 317 new machines from America, Putilov could begin to produce 10,000 tractors annually with a two-shift work day. But it required a newly equipped foundry, a new forge, and new mechanical shops, and the foundry could only begin operation in the second half of 1930. Shortly after the delegation's return, Gipromez announced plans to invest nearly 14 million rubles in equipment and more than 60 million rubles for construction of a new rolling mill, iron foundry, compressor, water piping, sewer system, and rail network. In effect, Putilov was to undergo construction of an entirely new set of shops and supply lines at the same time that it produced record numbers of tractors. According to a new, more optimistic version of the project, the new foundry and forge could be under roof by December 1929 and begin operation the following spring. ⁶¹

Perhaps the plan was reasonable assuming a steady supply of raw materials and parts and a well-trained work force. But as machine-construction factories became increasingly interdependent and the economy as a whole more integrated, frequent bottlenecks and work stoppages became a fact of life in Soviet industry. Although the state took great pains to promote schools for technical education, youngsters were often rushed through training or apprenticeship, and construction workers were generally peasant recruits who had limited skills and often showed little interest in the quality of their work.⁶²

Putilov's ranks swelled by over 44 percent from January 1927 to January 1930, and peasants constituted a vast majority of that number. 63 Most of the new workers concentrated in the labor-intensive metallurgical shops, where at times they made up 60 percent of all employees. 64 Because the quality of steel was a matter of great importance for the output of nearly every shop in Putilov, managers were deeply concerned about the notorious lack of discipline in the "hot shops" and the waste that resulted from shoddy workmanship. 65 A February 1929 letter from the party's Central Committee complained of a noticeable decline in labor discipline throughout the country and singled out "new layers of workers" for special attention from party and union organizations.66 New workers were, of course, an easy target, but by no means was the problem of poor discipline restricted to the unskilled. Absenteeism at Putilov reached epidemic proportions in early 1929, when 3241 workers in the tractor shop alone (where the concentration of skilled workers was higher) accumulated 5666 lost work days in a three-month period. The factory newspaper complained that administrators and trade union organizers displayed a dangerous lack of concern for absenteeism and poor work.67

Such problems were not confined to Putilov. Factories around the country grappled with the difficulties of high labor turnover, absenteeism, and the influx of new workers. Putilov had been fortunate to fulfill its plan for the first year, but information

from the nation's factories told Central Committee members that serious changes had to be made if the ambitious goals for 1929/30 were to be met.

Preparing for the "Great Break"

In its effort to enhance the efficiency of factory operations and, to that end, clarify lines of authority among trade unions, managerial staff, and party organizers, the Central Committee began to talk more and more of the need to revitalize one-man management. In its February 1929 letter on declining labor discipline, the committee reminded factory party organizations that the reconstruction of industry "demands the unconditional concentration of all power in the hands of the factory administration" and that "any interference by the trade unions in factory direction is, without question, dangerous and unacceptable." The role of the party and union, it argued, was to support the administration in its efforts to fulfill the plan and ensure that the managers' decisions were final in discussions of production. 68

The concentration of authority in the hands of managers, however, was another measure made in the name of improving efficiency that seemed, at first glance, to worsen the status of workers. 69 Central planners knew that they had to take caution introducing one-man management, for the regime of economy campaign of 1926–27 had already damaged relations between workers and management. 70 At Putilov. pressure to cut costs had driven directors to lay off superfluous workers and ratchet up production norms without corresponding improvements in wages. Participation in production conferences, which were supposed to be essential to increasing worker involvement in the campaign for efficiency, had been sporadic in recent years as workers complained that managers ignored their proposals.⁷¹ Relations deteriorated when managers accused workers of poor discipline and lack of attention to quality while workers accused managers of trying to cut costs exclusively at the expense of workers. ⁷² When party leaders unleashed the campaign of self-criticism in 1928. Putilov's factory newspaper was filled with attacks on managers and specialists who treated workers badly or spent little time outside their offices.⁷³ Trade unions had found it more and more difficult to win favorable terms for workers in collective bargaining agreements, and workers complained every year that management did not fulfill the contracts.74

Concerned about such relations throughout industry and how they would affect implementation of one-man management, VSNKh's deputy director, I. Kosior, circulated a secret questionnaire to factory directors in late August 1929, asking about the status of engineering and technical personnel and their relations with workers: How do workers treat them? What abnormalities exist in their relations? Do they drag

their feet on worker initiatives? What are union and party organizations doing to help the relationship and improve the authority of engineer-technicians? Grachev responded that the engineering-technical personnel were poorly apprised of their rights and responsibilities and that their relationship with workers could not yet be called "normal." He complained that workers were quick to hurl baseless accusations and said that a tradition of mutual distrust persisted. Furthermore, "other members of the triangle" often made things difficult for foremen and engineers—some were known to publicly berate members of the norm-setting bureaus; and Rabkrin commissions, as he put it, "literally terrorized" engineering-technical personnel. The union organization, for its part, did nothing to help improve worker relations with the technical staff. Finally, he noted, leadership over production could not be considered smooth because no proper system existed. ⁷⁵

The decree of September 5, 1929, on one-man management appeared to address the question of order in the factory directly. It established "distinct and sufficiently strict" lines of authority in industry and prohibited "the direct interference of party and union organs in the operational-production work of the factory administration." Managerial directives were to be "unconditionally obligatory" for all subordinates, and as the director acquired ultimate authority over the factory as a whole, so were his managers to assume the highest power in each shop. Trade unions were to stick to defending workers' cultural and economic needs and act as "energetic organizers" of worker initiatives, but defense of workers' well-being should clearly be a secondary priority. The decree's authors reasoned that assisting the administration in fulfillment of the plan and facilitating one-man management was the surest way to improve the material conditions of the working class. ⁷⁶

Party cells, although they were not to interfere in the work of the factory union committee (zavkom) or manager—especially the "operational directives of the administration"—were to provide "leadership over the political and economic life of the enterprise" and see that "fundamental party directives" were fulfilled. The decree said nothing about how such leadership could be exerted without interfering, but it was precise in prohibiting party cells from meddling in the distribution of workers in shops or involving themselves in disputes between workers and management. It also appeared to make it difficult for party organizers to bring about the dismissal of managers. One of the stated aims of the decree was to keep directors at enterprises for longer periods of time than had previously been the case, and party organs could only discuss the ouster of directors in the presence of representatives of the state agencies that appointed them and of higher trade union bodies.⁷⁷

While enhancing the authority of managers, the decree also directed them to pay attention to the voice of workers—to consider their criticisms and suggestions and draw them into the direction of production. Factories such as Putilov were to

select assistants to the director from among members of the production conferences, thereby guaranteeing that managers did not ignore conference proposals or worker innovations. And although the decree appeared to circumscribe the authority of the party and trade union, it did oblige the director to consider the opinion of those organizations in the appointment of new engineering and technical personnel.⁷⁸

Despite the appearance of a more authoritarian rule in industry, as Kuromiya and Lewis Siegelbaum both have noted, local party organizations tended to view the decree on one-man management in terms of managerial responsibility for production.⁷⁹ The case of Putilov bears this out. Putilov's party committee (partkom) members initially expressed concern that, under the new decree, the administration would do less to facilitate worker proposals, that it would ignore union and party candidates for promotion, and that "wrecker elements" would now have the opportunity to expand their activities. 80 The oblast party committee (obkom) was quick to emphasize that edinonachalie foresaw "not only a broadening of rights but also a clarification of obligations, and, consequently, the broadening of responsibilities of every enterprise, shop [and] section leader both before party and higher soviet organs as well as before all proletarian groups."81 As one Putilov partkom member put it, "the manager will answer for the entire work process. This does not, of course, eliminate the production initiative of our organizations and working masses in the future. On the contrary, it must increase and receive greater support from managers."82 And lest anyone assume that edinonachalie exempted managers from criticism from the union and party, the oblast' committee made clear that "it is necessary to continue . . . self-criticism, directing it to the uprooting of genuine shortcomings and mistakes in the management of industry."83 One member of Putilov's party committee added that "any attempt to portray the issue such that the administration will become the sole boss [nachal 'nikom] in the regulation of the production process will be incorrect."84 This view emerged as the standard interpretation of edinonachalie at Putilov, and it is hardly surprising that factory managers were reluctant to embrace such a concept of one-man management when production targets jumped from 3000 tractors per year to 10,000.

The authors of the decree on *edinonachalie* apparently believed that they had resolved the contradiction between the economic need for enhanced managerial authority and the political demand for some form of workers' control in industry (even if only via the party and unions). But in the context of the conflict-ridden shop floor, the presence of alternative emphases in the decree all but guaranteed a showdown. The harmony that the decree presupposed among unions, management, and the party might have been possible in the presence of a plan that enjoyed the confidence of managers. But when central party leaders began to violate their own desire to improve efficiency with their other priority to exceed all expectations of what was possible for production, they created an atmosphere in which managers fled from the responsibilities

edinonachalie imposed. We can not assess objectively the sincerity of factory komsomol and party organizers' enthusiasm for each new upward revision of the plan, but it is probably safe to assume that their support lay somewhere between genuine zeal and fear of running afoul of Rabkrin. Full-time party workers normally were not engaged in production—their responsibility rather was to exhort others to ever greater heights of efficiency and output. By embracing the state's fantastic production schedules, they deflected attention from themselves and gained the upper hand in factory relations, despite the intent of one-man management.

Edinonachalie and 12,000 Tractors

Kuibyshev officially announced the plan for Putilov to produce 10,000 tractors on October 12, 1929, at a meeting to commemorate completion of the first year of the Five-Year Plan. Es His announcement was no surprise, for word of the new program had been out for several months. This time Grachev had very little room to object to the new target. He had to admit his error in protesting the 3000 tractor plan, and he made no statement either in support of or opposition to the new plan. What gave Grachev and his managers cause for anxiety, however, was the VSNKh chief's statement, after projecting growth to 15,000 tractors for 1930/31 and 20,000 for 1931/32, that "it is very possible that this program will be reexamined with a view toward increasing it."

It is hard to imagine that the factory's managers greeted such talk with anything except exasperation. Only one year before, Putilov turned out slightly more than 1000 tractors, and now the head of VSNKh hinted that even a ten-fold increase might not be enough. The obkom secretary, Sergei Kirov, argued that enthusiasm would help Putilov's workers overcome the seemingly impossible task, saying "If you ask me why we need 10,000 tractors, I'll say that it's because that is a minimum. If you ask whether it can be done technically, I cannot prove that it can. But from a communist point of view—I declare before every comrade engineer that 10,000 tractors is a minimum that we need and must accomplish no matter what." 88

Regardless of how Putilov's staff may have felt about the plan for 1929/30, preparations to put it into effect were soon to be complicated further when Kuibyshev appealed to the factory's party organization to press for a higher figure. In late November the VSNKh chairman again made a trip to Putilov, this time to attend a meeting of the production conference in the tractor shop. Here Kuibyshev promised that the government would lend "all necessary assistance" to help Putilov fulfill its obligations and added: "You are discussing the issue of turning out ten thousand tractors in 1929/30. But it would be even better if you discussed how to exceed the program and produce more than ten thousand."

How much pressure was required to convince Putilov's partkom chairman, Ivan Alekseev, to propose a target still higher than 10,000 is unclear, but shortly after Kuibyshev's visit the production conference in the tractor shop voted to work for the completion of 12,000 tractors in the 1929/30 year. That this move was made on the initiative of the party organization hardly seems in doubt, for party cells routinely set the agendas for such meetings ahead of time. Alekseev had no illusions about where he should direct his allegiance. The political struggles of the last six years had shown repeatedly the folly of opposing the Central Committee. So if the Putilov managers disagreed with party leaders over what was possible for the factory's production. Alekseev would have to point out the error of their ways. It seems likely that Alekseev conveyed precisely this message to the other members of the partkom and the tractor department's production conference. In many respects, the latter was Alekseev's most important task, for the appearance of spontaneous enthusiasm served party purposes at both the factory and national levels. For the party chairman to insist to Grachev that the plan be raised would have violated the principle of edinonachalie. But managers' responsibilities required them to heed proposals from an organization of both party and nonparty workers. And how could Grachev refuse after he had been proved wrong about the previous year's plan? On a national level, the "initiative" of Putilov workers served as a paragon of behavior—this was truly how vanguard workers responded to the party program.

The reality of worker behavior at Putilov, however, was far from ideal. Discipline remained a problem, and although some workers did show enthusiasm for the plan, evidence suggests widespread dissatisfaction with the course of industrialization in general. The trade union bureaus recorded "unhealthy attitudes" surrounding discussions of the move to the three-shift workday and continuous work-week. Following the administration's explanation of the new policy, one worker from the forge complained, "no matter how well Comrade Grachev 'sang,' we know we are being mightily exploited."90 Another in the tractor shop called the continuous workweek senseless considering the constant slow-downs and stoppages that afflicted production.⁹¹ Collectivization, too, called forth its share of shop-floor protest. The Putilov newspaper reported a host of "anti-Soviet" attitudes, especially among the peasant recruits on the site of new construction at the factory and in the metallurgical shops. 92 But generalizations about the political views of "uncultured peasants" were too facile, as an open letter of resignation from the party of two skilled workers in the mechanical shop made clear. The two announced their disagreement with the "intense pressure on workers by the administration," "the forcing of peasants to create kolkhozy and sovkhozy, imposing on them unbearable taxes," and "the party line on industrialization . . . which lies like a heavy burden on the shoulders of the working masses."93 The newspaper's editors denounced the two as the worst form of cowards, but the poor response to the 1929 "industrialization loan" (an effort to convince workers to contribute a portion of their salaries to investment in industry with the promise of future return) indicates that such sentiments were not uncommon. Even party members reportedly claimed that there was "no sense" in pledging to the loan, because they knew they would never be repaid and huge sums were already being wasted. "Expel me from the party, but I will not pledge," one swore. 94

Ordinary workers may have blamed the factory administration for the hardships of their work, but Grachev and his staff were far from excited about the show of "initiative" by the tractor shop's production conference. The proposal to raise the target became official when representatives of Glavmashinstroi (the machineconstruction department of VSNKh) received a telegram from Kuibvshev on Januarv 9, 1930, that obliged Putilov to turn out 12,000 tractors instead of 10,000 and spare parts equal to an additional 2500. That day Grachev met with shop managers and engineers to discuss the logistics of the plan. He pointed out a number of areas in which the obstacles to fulfillment seemed insurmountable but did not openly call the program impossible. Ivanov, manager of the tractor shop, was less hesitant, "[Glavinashinstroi] said we do not have the right to refuse to take on this task or criticize it. We must declare whether it is possible or impossible. As concerns fulfillment of 10,000 tractors I can read you right now what is impossible for that program," and he listed a string of technical and mechanical obstacles. An engineer from the tractor department pointed out that the shop simply had no room to store so many assembled tractors, and a representative of the mechanical shop responsible for manufacturing parts complained of a number of bottlenecks that prevented his shop from fulfilling even the plan for 10,000. Moreover, he argued, skilled workers were too scarce, parts from the cooperating factories were of low quality, and overwork of imported machinery caused frequent breakdowns. The manager from the open-hearth shop echoed the last complaint, saying that his machines were close to falling apart and could not be used continuously. The rolling-mill representative pointed out that the expansion of the plan would force his shop to cancel other orders from the trust, and in any case he could not step up production of special steels necessary for tractors for another three months 95

Alekseev bristled at the defeatism of the managers and singled out Ivanov for criticism, charging that he had made no such objections when the plan for 10,000 tractors was first discussed. He admitted that the program would be a "colossal strain" on the factory, but he had no doubt that Putilov would complete it.⁹⁶

The program did not begin auspiciously. It had been pushed up to 12,000 nearly three months into the economic year, and whereas the original plan called for an output of 600 tractors for December, the tractor shop turned out barely that many in October, November, and December combined.⁹⁷ The plan for January was also 600

tractors, but by January 28 the shop had produced only 350.98 The partkom discussed breakdowns in machinery, lack of skilled labor, unpredictable supply of parts, and several purely technical complications, but they were most critical of management for failing to anticipate problems and eliminate them before they occurred.99 Indeed, nearly every problem became a cause for attacking managers and technical personnel. The factory newspaper blamed them for neglecting the quality of their shops' products, ignoring socialist competitions, and snubbing enthusiastic *vydvizhentsy* (promoted workers). 100 The party made clear that it had closed the door to explanations of production failures that referred to technical mishaps or supply interruptions. Kirov told the Leningrad Soviet, "the conditions must be created whereby not a single responsible worker [*rabotnik*] can cover himself with 'objective circumstances." 101

When the first results indicated that Putilov still had serious obstacles to overcome before the program could really begin, the Central Committee sent a commission to assess the feasibility of the 12,000 tractor plan and the possibility of lowering production costs by 18.5 percent rather than the projected 17 percent. 102 Grachev, infuriated by the newest revision of the plan, called for a mandatory conference of the factory production commission to discuss the government's proposal. At the meeting members of the government group put forward their plan, and komsomol and party secretaries of the tractor shop cells supported it as a realistic program. Grachev did not criticize the goal of 12,000 tractors, but, he countered, "we have undertaken to carry the banner of industrialization, let us carry it to the end. But we can only carry what we have strength for. We have strength to lower production costs by 17 percent."103 The chairs of both the zavkom and the production commission fell in behind the director. When the assembly put the plan to a vote, only 18 of the 400 present approved the government plan. Embarrassed by Grachev's successful appeal, the partkom met the following day and by a slim margin tabled a resolution calling for the director's dismissal. The partkom then organized a second production conference (it is not clear whether Grachev was present), at which the government's plan not only passed but those present also voted to reach 12,000 ahead of schedule and lower costs by 19 percent. 104

Grachev's resistance in 1928 to the plan for 3000 tractors had come back to haunt him when the plan was actually fulfilled, but that had been mainly a source of personal embarrassment and not a fact that threatened his position or that of his staff. His open objection to further demands on the tractor program in 1930, however, forever scarred his relationship with the factory and district party organizations. As complications mounted in production, the party leaders and factory newspaper heaped more and more blame on the administration, and specific criticisms began to flow together under the general heading of "failure to implement *edinonachalie*." Typically the accusation implied that managerial personnel had failed to provide necessary leadership, in some instances by deferring questions about production or problems of

labor discipline to party and union organizations. In other cases critics faulted managers for failing to give adequate instruction to foremen, technical specialists, or brigade leaders. ¹⁰⁵ But just as often the accusation meant little more than that the factory had not fulfilled the plan and party activists and worker correspondents needed someone to blame.

By the end of March, the half-way point of the 1929/30 year, Putilov had reached only 39.3 percent of its plan for tractors, and that figure included as yet unassembled units. Time and again, the tractor shop fell behind schedule, straining to complete one month's quota two weeks into the following month and contending with a constant flow of unusable parts from other shops. ¹⁰⁶ Investigating the factory's poor performance, the factory party committee found that the administrative and technical personnel had not taken measures to make use of the "creative energy" of the workers and the administration's planning department had done an extremely poor job of organizing production. "This approach" the partkom asserted, "attests to the unwillingness of the administrative-technical leadership of the tractor department to accept the accelerated tempo of work that the party and government have proposed.

The absolute absence of *edinonachalie* and unwillingness of the administrative-technical leadership to assume responsibility for the task the government has set... raises the question of the need to abruptly change the system of direction and, in particular, the leadership over tractor production in the factory."¹⁰⁷ The partkom attacked the factory administration for failing to keep a careful eye on shop management and for placing too much trust in it. Among the partkom's recommendations were calls to replace the leadership of the departments' auxiliary shops, reexamine the managerial staff of the entire tractor section, and place in their stead "party members and comrades able to organize work... in accordance with the tasks of the program, not hesitating to appoint persons without sufficient technical education but who possess the necessary mental outlook [krugozor] and practical experience."¹⁰⁸

As if responsibility for a plan in which they had little confidence was not by itself burdensome, factory managers also faced a new policy ostensibly designed to enhance their flexibility and initiative but that further complicated their relationship with shop-level organizations: cost accounting (*khozraschet*). Rabkrin's ascendancy over economic administration had reached new heights when, in December 1929, it convinced the Central Committee to accept a major reorganization of VSNKh, the purpose of which was to further centralize planning while decentralizing the "operational functioning" of industrial enterprises.¹⁰⁹ The key to that decentralization was to be *khozraschet*, a system by which individual factories acquired specified funds that set precise limits on spending but that otherwise were at the disposal of directors to use as they saw fit to fulfill the plan. To ensure that factories did not overspend, industrial banks were not to release funds for wages or additional expenditures without proof that the plan had been completed.¹¹⁰

Khozraschet had been an important component of industry's shift to the mixed market economy of the early 1920s and was designed to allow factories the flexibility and autonomy to pursue profits in the context of limited financial support from the state. The policy was well suited for light industry, the products of which were in high demand. But the factories of heavy industry operated at a loss for most of the NEP years, and although state banks were reluctant to issue credits to plants that were consistently in arrears (like Putilov), refusal to close such factories meant that they continued to receive funds. Khozraschet therefore became an empty phrase for much of state industry by the mid-1920s. 111 The revival of khozraschet during the First Five-Year Plan, rather than encouraging profits, emphasized accountability to the plan through strict control of factory funds. As before, khozraschet imparted a degree of autonomy to factory decision-makers. Now, however, within the confines of the plan, flexibility was restricted more to matters of daily operation, and decentralization was above all a means to augment managerial responsibility for the fulfillment of production targets.

But at what level of the economic hierarchy should decentralization stop? As soon as word of *khozraschet* reached Putilov, shop-level organizations argued that individual shops and even brigades should have separate accounts. They berated administrators for dragging their feet or, in the case of the tractor-shop director, Ivanov, refusing to share account information with them. The demand for a subdivision of the factory account to lower levels also coincided with a VSNKh order that factory production plans be broken down so that all workers, brigades, sections, and shops be apprised of their plans in five-day blocks (*piatidnevki*). Italially, every worker would begin each day with a precise understanding of his or her daily quota and where it fit into the five-day plan, while the limitations of finance would force brigade leaders

and shop directors to keep a close eye on quality control and waste.

To prepare for *khozraschet*, however, required a thorough assessment of the inventory of each shop. Grachev promised that the factory would be transferred to *khozraschet* by April 1, but by the last days of March, it was clear that most shop directors had not responded to the promise, if they understood at all what it entailed. Even by late May writers for the factory newspaper complained that *khozraschet* remained "in the director's briefcase." Five-day plans were especially difficult to determine, particularly in light of the fact that they had to be updated constantly to account for breakdowns and supply delays from other shops. If shops or brigades engaged in socialist competition, overfulfillment of quotas could disrupt future planning efforts. For the plan's enthusiasts, delays in *khozraschet* or five-day plans provided tangible evidence of the breakdown of leadership and the failure to implement *edinonachalie*. 115

By late April, Grachev was himself frustrated with Putilov's managers. In February, the OGPU had arrested the director of the artillery department for "wrecking,"

but reports suggested that, since the arrest, the planning and organization in that shop had only deteriorated. Indeed, "planlessness" seemed to have afflicted every shop in the factory, and Grachev had good reason to fear that, unless his staff could turn Putilov's production around, he would lose more of the qualifed personnel on whom he relied. A letter in late March from the regional economic council set forth guidelines for eliminating the effects of wrecking and called for a "freshening" (osvezhenie) of the plant's engineering-technical employees. Grachev held off his superiors by arguing that the factory's complement of technical specialists was already too small, but at the same time he tried to prod his shop directors into accepting the fact that they could no longer run the factory according to old standards. 116 He asked them, "Has anyone changed his method of work in the shop prior to today? Has anyone given serious thought to edinonachalie?"117 To the factory newspaper he reported that shop directors had not been serious about khozraschet and warned that the central administration of the factory would closely evaluate the work of the entire managerial staff. Moreover, he blamed the absence of edinonachalie at the shop level for the continuation of poor labor discipline and faulty workmanship. 118

In response, shop directors argued that party and union organizations wanted to hold them responsible for everything but at the same time refused to cooperate with their decisions or take any responsibility themselves, saying: "We have a director, and he answers for everything, and everybody else, especially the foremen, hide behind his back." When workers needed to be fired, other shop managers claimed, union organizations refused to allow the director to take the necessary measures, and yet the central factory administration did not intervene. Finally, they complained, despite the clear explication of managers' rights and obligations in the decree on one-man management, no corresponding documents had been issued for brigade leaders or foremen. The result was that, in the event of mishaps—which were frequent—no one dared to act until the director could be found.¹¹⁹

The partkom, in its diagnosis of the problem, asserted that *edinonachalie* was failing because, among other things, managers were afraid of responsibility. Managers had good reason to be afraid. The language of political conflict and class war—talk of "rightists," "opportunists," and "alien elements"—had found ready application amid the conflicts of the shop floor and easily fed suspicion of "wrecking." And aside from party activists and worker correspondents, who were more than eager to fulfill their quota of "self-criticism," Putilov hosted a series of "temporary control commissions" (VKK) as local branches of Rabkrin. Rabkrin's presence guaranteed that agitation for the plan and criticism for shortcomings would be intense, but it could also mean an unexpected raising of plan targets—as it did when a visit by Ordzhonikidze to the Metallicheskii factory brought a nearly two-fold increase in the quota for turbines. Even worse, it could mean intervention by the OGPU in the event of plan failures. 121

The collapse of the May program marked the beginning of the end for the Putilov administration. Of a monthly target of 1150 tractors, Putilov fell short by 201. Not one month of the 12,000 plan had gone by without stoppages and backlogs. Kolkhozy across the country were complaining about the poor quality of the Fordson-Putilovets. ¹²² Like the factory newspaper, *Krasnaia gazeta* laid the blame for the failure of the program almost entirely on the tractor shop management for not keeping the assembly line supplied with parts and allowing hundreds of imported engine blocks to rust in the rain. It extended the blame also to the factories supplying Putilov, including "Znamia truda," which provided only slightly more than one quarter of the engine blocks it had promised, over 40 percent of which had some defect. ¹²³

Some time in the first three days of June 1930, OGPU agents arrived at Putilov and arrested the factory's technical director, Viktor Sablin, the tractor department head, Ivanov; and a number of other engineers and technicians on charges of wrecking. 124 Several days after the seizure of the Putilov engineers, Kirov, speaking before the Third Regional Party Conference, revealed that the arrests at Putilov had been part of a broader sweep of the Leningrad Machine-Construction Trust, the Ship-Building Trust, and the Machine-Construction Section of VSNKh. Lenmashtrest's own director Styrkovich "confessed" to deliberately slowing production at a number of the trust's factories, as did several of his subordinates. Kirov read sections from Sablin's "confession," in which the former technical director "admitted" to a secret meeting with Ivanov and Styrkovich in 1928 to resist the output of 3000 tractors. Sablin claimed that the technical staff lost respect when the factory overfulfilled the plan, so the plan for 1929/30 was drawn up without their participation, and only because worker and party groups supervised conduct of the program was wrecking not more widespread. 125

In the "triangle" of party, union, and factory administration, the party now clearly held the upper hand. Shortly after the arrests of Sablin and Ivanov, Alekseev addressed a gathering of engineering and technical personnel in which he instructed his listeners on the meaning of wrecking and warned that the problem had not been eradicated. The technical staff had been very lax, he said, and "what was recently uncovered must be a lesson to engineering-technical personnel. . . All of the best must unify around the working class and its party." He told the partkom that Grachev was now heading a commission to eliminate the remnants of wrecking, a position Alekseev must have known would compromise the director if production did not improve. Several partkom members were already prepared to accuse Grachev, noting that their shop cells had informed the director long ago about unreliable specialists, while others argued that he had simply not paid attention to the activities of his staff or asked them to take responsibility for fulfillment of the plan. As the factory newspaper reported, the error that had led most of the technical staff onto the path of the wreckers

was their attempt to maintain "neutrality," which the newspaper characterized as political illiteracy, lack of understanding of the course of Soviet industrial development, lack of faith in the collective's ability to overcome obstacles, underestimation of existing resources, and alienation from the masses.¹²⁸

The partkom stopped short of recommending Grachev's removal, but that was only a matter of time. The June tractor program quickly fell behind, and only storming efforts in the last week saved the monthly plan. But what the May program did for Sablin and Ivanov, the July program soon did for Grachev. Just as in May and June, the tractor shop was behind schedule only a few days into the schedule. But unlike June, no last-ditch efforts were able to salvage the program. By the end of the month Putilov was behind on its plan by 544 tractors, 476 chassis, and 554 motors, meaning that the factory would have to turn out 4000 tractors in the last two months of the economic year.¹²⁹ To explain the plan's failure, Grachev and Plekhanov, the new director of the tractor department, addressed a letter to Leningradskaia pravda in which they described the late arrival of imported machinery, problems installing the new equipment, the shortage of skilled labor, a lack of correspondence between factory castings and American cutting equipment, and failures of cooperating factories to supply Putilov with parts. But the newspaper's editors accused the directors of confusing the issue, which actually centered on the administration's failure to plan for contingencies or implement edinonachalie. 130

Commentary at Putilov was even less forgiving. Two writers to *Leningradskaia pravda* argued that the administration had failed in almost every respect of planning, responsibility, organization, and controlling of labor discipline. ¹³¹ Another article in the factory paper pronounced Grachev and Plekhanov's explanations "convenient excuses" for problems they should have foreseen long before. ¹³²

The criticisms only grew as the program failed again in August and September. Fortunately for Putilov, the Central Executive Committee of the Supreme Soviet (TsIK) and the Council of People's Commissars announced in late September that the new economic year would begin not in October but in January 1931, giving factories throughout the country a reprieve of three months to fulfill their plans. For Grachev and the Putilov administration, however, time had run out. On August 24 Grachev was called before the Regional Party Committee and the next day before the Central Committee in Moscow to explain the failure of Putilov's program. One month later Karl Martovich Ots replaced him as factory director. Eighteen shop managers and departmental directors fell with Grachev, and a sizeable number of secondary personnel and technicians were likewise removed. 133 Grachev left Putilov with only slightly more than 70 percent of the 12,000 tractor program completed.

Oddly enough, VSNKh transferred Grachev to Stalingrad, where he became head of that city's new tractor factory. That his failure at Putilov did not destroy his

career testifies to the dire shortage of qualified managers. Having not been charged with a crime, Grachev was simply too valuable as a politically reliable and experienced administrator to be removed from the system altogether. But the last few years at Putilov had so damaged his relationship with the party and union organizations that the authority on which one-man management depended was all but impossible to restore. Ironically, if Grachev was not to blame for the collapse of the tractor program at Putilov, he was certainly guilty of hurting it after his dismissal—as director of the Stalingrad Tractor Factory he recruited many of his new staff from among Putilov's technical specialists. ¹³⁴

Conclusion

We have long known that the Soviet government's ever-expanding production goals during the First Five-Year Plan were driven upward more by political motives than by careful consideration of economic realities. The desire to prove the superiority of the Soviet system to the capitalist world was strong, and many in the party yearned to leave behind the difficult NEP years and move quickly to a bright socialist future. But the leap to socialism would place even greater strains on industry than the preceding decade, and although party leaders like Kirov may have been convinced that political zeal could overcome "objective" economic constraints, the authors of the decree on edinonachalie recognized that the goals of industrialization would be unattainable without placing authority over production in the hands of managers and technical experts. To this extent, the decree appears as a revival and elaboration of rationalization measures begun during the regime of economy of 1926–27.

But however confident Soviet leaders felt about asserting managerial prerogatives over union and party authority, they were not prepared to abandon the principle of control from below. In the context of class warfare in the First Five-Year Plan and considering the number of "bourgeois" specialists who remained in managerial positions, party leaders did not completely trust the managers of industry to fulfill the tasks put before them. The 1928 self-criticism campaign had shown that rank-and-file workers could be powerful allies for the state, and many leaders no doubt genuinely believed that workers were an important check against class enemies and the most important source of initiative in the shops. Moreover, to ignore workers' control would have confirmed oppositionist criticism that the party and unions had become bureaucratized and that workers' power in industry had been completely overturned. ¹³⁵ Finally, abandoning the practice would also have created a tremendous problem of perception for the party among workers. Workers had reluctantly deferred during NEP the gains that the revolution had promised them, and considering the deteriorating

standards of living and the violent confrontations with peasants that accompanied the First Five-Year Plan, the party was in no position to dispense with workers' control, even if only through party and union organizations for exclusively productivist aims. 136

The decree on *edinonachalie* appeared to combine all the Soviet government's aspirations for the functioning of industry: accountability; clear definition of rights and responsibilities for unions, party organizations, and administrative personnel; strict hierarchical lines of authority; and avenues for input from below to encourage worker initiative. Ideally, managers and specialists who were both knowledgeable in their positions and sensitive to the insights of those immediately involved in production would cooperate to see that all aspects of production fit neatly together. The union's role was to clear up disagreements with management and try to encourage a disciplined work ethic. The party would rally all the factory's employees behind the government program and weed out hostile or uncooperative elements.

But how was edinonachalie to work properly if the party organization felt it was the managers themselves who were hostile and uncooperative? Who would uphold the authority of managers? Rabkrin's victory over Gosplan and VSNKh and the disregard for specialists' economic advice in those bodies was the signal that the expertise of engineers and managers no longer extended to advice on what was possible. Inevitably, that same principle extended to the factory shop floor as well. The functioning of the industrial economy under NEP had never been ideal, but Grachev had always been able to rely on cooperation from VSNKh when he encountered problems in production. Now he and his staff had no one to whom to appeal, while the party organization and worker correspondents, who were not only free but encouraged to criticize management, had a receptive audience in the party and Rabkrin hierarchies. The decree made clear distinctions between productive and political functions, but (although Soviet leaders never failed to emphasize the point) its authors seemed to forget that factory production was political in the Soviet system and, as such, political authority would ultimately reign supreme over economic authority in disagreements between party and management.

The Central Committee had every intention of improving efficiency, but the political demands of the First Five-Year Plan quickly overrode the economic rationale of the *edinonachalie* decree. Once the objections of the specialists had been discredited, the party was free to set outrageous production targets. That managers did not act to put one-man management into effect demonstrates a recognition by them that production was profoundly political and that *edinonachalie* meant primarily that they would be held accountable for failures in the plan. The outcome of the 1929/30 tractor plan at Putilov suggests they were correct.

Notes

Research for this article was supported in part by a grant from the International Research and Exchange Board (IREX), with funds provided by the National Endowment for the Humanities and the United States Information Agency. Washington College provided support through Faculty Enhancement Grants and a Christian A. Johnson Junior Faculty Leave. None of these organizations is responsible for the views expressed. Finally, I wish to thank L. Ia. Fedulina of the Central State Archives of St. Petersburg and the late I. I. Sazonova of the former Leningrad Party Archives for their gracious assistance.

- 1. Krasnyi putilovets, June 2, 1930, p. 1. On Putilov and the Leningrad Opposition, see T. Clayton Black, "Party Crisis and the Factory Shop Floor: Krasnyi Putilovets and the Leningrad Opposition, 1925–1926," Europe-Asia Studies 46, no. 1 (1994): 107–26. For mention of Sablin at Solovki, see the comments on Shekalov at the First Oblast Congress of the Metal Workers' Union, Tsentral'nyi Gosudarstvennyi Arkhiv Sankt Peterburga (Hereafter TsGA SPb), fond 2345, opis'1, delo 4, list 10.
- 2. TsGA SPb, f. 1788, op. 29, d. 114 b, l. 250-57; for a Red Director's assessment, see l. 137.
- 3. See Kendall E. Bailes, Technology and Society under Lenin and Stalin: Origins of the Soviet Technical Intelligentsia, 1917–1941 (Princeton, 1978), esp. 69–94.
- 4. This description of Grachev comes from the data presented to the factory party committee (partkom) during the 1929 purge. See *Krasnyi putilovets*, June 1, 1929, p. 3.
- 5. Naum Jasny, Soviet Industrialization, 1928–1952 (Chicago, 1961), 73–79. R. W. Davies's The Soviet Economy in Turmoil, 1929–1930 (Cambridge, Mass., 1989), as its title implies, underscores this point.
- 6. Hiroaki Kuromiya, Stalin's Industrial Revolution: Politics and Workers, 1928–1932 (Cambridge, 1988); David L. Hoffmann, Peasant Metropolis: Social Identities in Moscow, 1929–1941 (Ithaca, 1994).
- 7. E. A. Rees, State Control in Soviet Russia: The Rise and Fall of the Workers' and Peasants' Inspectorate, 1920–34 (New York, 1987); David R. Shearer, Industry, State, and Society in Stalin's Russia 1926–1934 (Ithaca, 1996).
- 8. Moshe Lewin has written of edinonachalie that "the aim was to create a real autocrat [in industry]"; see his The Making of the Soviet System: Essays in the Social History of Interwar Russia (New York, 1985), 252. When L. D. Trotsky wrote, in The Revolution Betrayed: What is the Soviet Union and Where Is It Going? (5th ed. [New York, 1972], 241), "the new state resorted to the old methods of pressure upon the muscles and nerves of the worker. There grew up a corps of slave drivers. The management of industry became superbureaucratic. The workers lost all influence whatever on the management of the factory," we can assume that he viewed the decree on one-man management as a part of this process. Donald Filtzer adopts a similar interpretation, viewing the decree as a part of the process by which workers were "atomized" from the Soviet state (Soviet Workers and Stalinist Industrialization: The Formation of Modern Soviet Production Relations, 1928–1940 [Armonk, N.Y., 1986], 69, 78). Hiroaki Kuromiya reviews other

relevant literature in his article "Edinonachalie and the Soviet Industrial Manager, 1928–1937," Soviet Studies 36, no. 2 (April, 1984): 185–204.

9. "Postanovlenie TsK VKP(b) o merakh po uporiadocheniiu upravleniia proizvodstvom i ustanovleniiu edinonachaliia." I have relied on the copy printed in *Torgovo-promyshlennaia gazeta*, September 7, 1929, p. 1.

10. Ibid.

- 11. Kuromiya, "Edinonachalie," 186.
- 12. S. A. Smith, Red Petrograd: Revolution in the Factories, 1917–1918 (Cambridge, 1983), 228, 241–42; and Mary McAuley, Bread and Justice: State and Society in Petrograd, 1917–1922 (Oxford, 1991), 216–27.
- 13. Bailes, Technology and Society, 44–66; N. Valentinov (Vol'skii), Novaia ekonomicheskaia politika i krizis partii posle smerti Lenina: Gody raboty v VSNKh vo vremia NEP; Vospominaniia (Stanford, 1971), 101–10.
- 14. On production conferences and shop-level organizations, see I. P. Ostapenko, *Uchastie rabochego klassa SSSR v upravlenii proizvodstvom: Proizvodstvennye soveshchaniia v promyshlennosti v 1921–1932 gg.* (Moscow, 1964), and V. Z. Drobizhev et al., *Rabochii klass v upravlenii gosudarstvom, 1926–1937 gg.* (Moscow, 1968).
- 15. For a nice description of the organization of industry in the 1920s, see Shearer, *Industry, State, and Society*, chapter 1, 25–52.
- 16. For more on labor-management conflicts in the mid-1920s, see documents 38 to 52 in Iu. I. Kir'ianov et al., eds., *Trudovye konflikty v Sovetskoi Rossii 1918–1929 gg.* (Moscow, 1998), 300–23.
- 17. The growing disillusionment with the union can be seen in the stenographic account of an April 1925 meeting of the Puilov factory membership, TsGA SPb, f. 1788, op. 33, d. 456, ll. 14, 14ob, 103, 21ob, 23, and passim. See also the report in *Leningradskaia pravda*, October 3, 1926, p. 3. On poor attendance and the general level of passivity, see Tsentral'nyi Gosudarstvennyi Arkhiv Istoriko-Politicheskikh Dokumentov Peterburga (hereafter TsGAIPDP), f. 1012, op. 2, d. 55, ll. 80–83.
- 18. On the Lenin enrollment in Leningrad, see Iu. A. Lipilin and G. A. Sachkovskii, *Leninskii prizyv v leningradskoi partiinoi organizatsii* (Leningrad, 1984). On the problem with dues, see the reportage on the 1929 party purge in *Krasnyi putilovets*, May 27, 1929, p. 2. The majority of those removed from the party during the purge lost their memberships because of failure to pay dues. See TsGAIPDP, f. 1012, op. 1, d. 679, l. 18.
- 19. Witness, for example, the editorship of VSNKh newspaper *Torgovo-promyshlennaia gazeta* by former Menshevik, Nikolai Valentinov (Vol'skii). See Valentinov (Vol'skii), *Novaia ekonomicheskaia politika i krizis partii*, 130–35.

- 20. Andrea Graziosi, "Stalin's Antiworker 'Workerism', 1924–1931," *International Review of Social History* 40 (1995): 224–27; B. N. Kazantsev, "Materialy gosudarstvennykh, partiinykh i profsoiuznykh organov o vystupleniiakh rabochikh na predpriiatiiakh Sovetskoi Rossii v 1918–1928 gg.: Po fondam RTsKhIDNI i GARF," in Kir'ianov et al., eds., *Trudovye konflikty v Sovetskoi Rossii*, 64–66. On amenities, see complaints such as those at the First Oblast Congress of Metal Workers, January 1927, TsGA SPb, f. 4591, op. 49, d. 135, l. 8.
- 21. See Kazantsev, "Materialy gosudarstvennykh, partiinykh i profsoiuznykh organov," 65.
- 22. Rees, State Control in Soviet Russia, 135.
- 23. Shearer, Industry, State, and Society, 44-46.
- 24. Valentinov (Vol'skii), Novaia ekonomicheskaia politika, 125.
- 25. Shearer, Industry, State, and Society, 88.
- 26. A. P. Konstantinov et al., Leninskie traditsii partiino-gosudarstvennogo kontrolia: Iz istorii sozdaniia i deiatel'nosti Leningradskoi oblastnoi i gorodskoi KK-RKI (Leningrad, 1963), 85.
- 27. Drobizhev, Glavnyi shtab sotsialisticheskoi promyshlennosti: Ocherki istorii VSNKh, 1917–1932 gg. (Moscow, 1966), 156.
- 28. Rees, State Control in Soviet Russia, 139-40, 144-48.
- 29. *Ibid.*, 173–175; also E. H. Carr and R. W. Davies, *Foundations of a Planned Economy 1926–1929*, vol. 1 (Harmondsworth, 1969), 925–49.
- 30. Rees, *State Control in Soviet Russia*, 82; the percentage of Communists in the Leningrad Rabkrin organization was roughly the same. See Konstantinov, *Leninskie traditsii*, 30.
- 31. Shearer, Industry, State, and Society, 85.
- 32. Ibid., 90; also Davies, Soviet Economy in Turmoil, 69.
- 33. Shearer, Industry, State, and Society, 94-95; Rees, State Control in Soviet Russia, 174-75.
- 34. See Kuromiya, "Edinonachalie," 186.
- 35. Vosstanovlenie promyshlennosti Leningrada, 1921–1924 gg.: Dokumenty i materialy (Leningrad, 1963), 138, fn. 16.
- 36. V. I. Karasev, Takovy my—rabochie: Zapiski rabochego Kirovskogo (byvshego putilovskogo) zavoda (Moscow, 1962), 85–94; Valerii Vinogradov, Liniia naibol'shego soprotivleniia (Moscow-Leningrad, 1931), 25.
- 37. TsGA SPb, f. 1788, op. 33, d. 348, 11, 1-6; see also op. 23, d. 54, l. 155.

- 38. TsGA SPb, f. 1788, op. 23, d. 95, l. 44.
- 39. Vosstanovlenie promyshlennosti Leningrada, 138; S. Kostiuchenko et al., Istoriia Kirovskogo zavoda (Moscow, 1966), 287.
- 40. TsGA SPb, f. 1788, op. 33, d. 1077, 1. 47.
- 41. Leningradskaia pravda, May 19, 1926, 1.
- 42. TsGA SPb, f. 1788, op. 23, d. 54, l. 116ob.
- 43. Ibid., 1. 122.
- 44. Ibid., 1. 122 ob.
- 45. Shestnadtsataia konferentsiia VKP(b), aprel' 1929 goda: Stenograficheskii otchet (Moscow 1962), 66.
- 46. Industrializatsiia severo-zapadnogo raiona v gody pervoi piatiletki (1929–1932 gg.): Sbornik dokumentov i materialov (Leningrad, 1967), 129.
- 47. Krasnyi putilovets, June 16, 1928, p. 1.
- 48. Torgovo-promyshlennaia gazeta, February 12, 1927, p. 3; Krasnyi putilovets, September 15, 1928, p. 5.
- 49. TsGA SPb, f. 1788, op. 23, d. 95, l. 8.
- 50. Ibid., 11. 26ob-27, 30-31, 330G.
- 51. Ibid., 1.62.
- 52. Ibid., Il. 144-44ob.
- 53. Ibid., 1. 62.
- 54. *Ibid*.
- 55. Ibid., 1.61.
- 56. Ibid., op. 33, d. 1077, 1. 46.
- 57. Ibid., 1. 45 ob.
- 58. Industrializatsiia severo-zapadnogo raiona, 103.

- 59. See *Leningradskaia pravda*, May 19, 1926, p. 1; and comments by Gipromez representative Lebedev in TsGA SPb f. 1788, op. 23, d. 54, l. 122.
- 60. For a more detailed description of industry as a whole, see Davies, Soviet Economy in Turmoil, 179–94; on the results of the 1928/29 year, see Carr and Davies, Foundations of a Planned Economy, 871; see also Alec Nove, An Economic History of the USSR (New York, 1969), 188–92; V. I. Kuz'min, V bor'be za sotsialisticheskuiu rekonstruktsiiu 1926–1937 (Moscow, 1976), 90–96.
- 61. Krasnyi putilovets, May 27, 1929, p. 1; June 13, 1929, p. 2.
- 62. For an excellent study of the effects of peasant migration on industrialization, see Hoffmann, *Peasant Metropolis*.
- 63. See *Krasnyi putilovets*, April 7, 1929, p. 1. The preponderance of peasants among new recruits also became apparent during the campaign for the industrialization loan in 1929. See *Krasnyi putilovets*, September 9, 1929, p. 2; September 30, 1929, p. 2; October 3, 1929, p. 1; and October 7, 1929, p. 1.
- 64, TsGAIPDP, f. 1012, op. 1, d. 683, l. 125. See also Krasnyi putilovets, November 21, 1929, p. 1.
- 65. Krasnyi putilovets, November 21, 1929, p. 1.
- 66. TsGA SPb, f. 1788, op. 29, d. 294, l. 7.
- 67. Krasnyi putilovets, April 21, 1929, p. 3.
- 68. TsGA SPb, f. 1788, op. 29, d. 294, ll. 7-8.
- 69. On worker protest against one-man management, see Davies, *Soviet Economy in Turmoil*, 272–74.
- 70. On the regime of economy campaign, see John Hatch, "The Politics of Industrial Efficiency during NEP: The 1926 Rezhim Ekonomii Campaign in Moscow," in Stephen White, ed., New Directions in Soviet History (New York, 1992), 113–24. For a study of the campaign at Putilov, see Clayton Black, "Manufacturing Communists: 'Krasnyi Putilovets' and the Politics of Soviet Industrialization, 1923-1932" (Ph.D. diss., Indiana University, 1996), 181–227.
- 71. William J. Chase and Kuromiya both argue that state pressure on managers and emphasis on criticism from below breathed new life in to the production conferences by 1928–29. See Kuromiya, Stalin's Industrial Revolution, 116–17; and William J. Chase, Workers, Society, and the Soviet State: Labor and Life in Moscow, 1918–1929 (Urbana, 1987). Chase sees the shift in popularity occurring as early as 1926. Evidence from Putilov does not support such a view. Production conferences there complained of attendance rates as low as 4 percent in late 1928. As a ditty from the Putilov factory newspaper put it, "A table, benches, and the chairman/His solitary vigil keeps./Alone he sits at the conference/And he's, no doubt, asleep," Krasnyi putilovets, February 1, 1928, p. 5; see also Krasnyi putilovets, September 15, 1928, p. 2; December 17, 1928, p. 4; and Proizvodstvennoe soveshchanie, no. 20, (October 25, 1928): 8.

- 72. See debates over *prirabotok* (overtime pay) at Putilov, for example, in TsGA SPb, f. 1788, op. 33, d. 541, ll. 78–79, and d. 481, ll. 151–52; also f. 4591, op. 49, d. 135, ll. 2, 8, 10, 15, 30.
- 73. Krasnyi putilovets, August 1, 1928, p. 4; August 15, 1928, p. 4; January 5, 1929, p. 3; March 16, 1929, p. 2; and July 24, 1929, p. 4.
- 74. Such complaints were particularly common in the early 1920s, but 1926 witnessed a sharp upturn in complaints against the union at Putilov. See *Leningradskaia pravda*, October 3, 1926, p. 3. Also *Krasnyi putilovets*, April 2, 1928, p. 4; June 16, 1928, p. 1; March 4, 1929, p. 3. On union-management conflict over wages, see Paul Ashin, "The Politics of Wages in Leningrad, 1921–1929" (Ph.D. diss., Stanford University, 1986), esp. 217–72.
- 75. TsGA SPb, f. 1788, op. 29, d. 294, ll. 85, 97, 97ob.; op. 23, d. 54, 1. 282.
- 76. Torgovo-promyshlennaia gazeta, September 7, 1929, p. 1.
- 77. Ibid.
- 78. Ibid.
- 79. Kuromiya, "Edinonachalie," 192; Lewis H. Siegelbaum, Stakhanovism and the Politics of Productivity in the USSR, 1935–1941 (Cambridge 1988), 25, 30–31.
- 80. TsGAIPDP, f. 1012, op. 1, d. 681, ll. 69ob, 70ob.
- 81. For the full text of the oblast committee decree on *edinonachalie*, see Moskovsko-Narvskii Raionnyi Komitet VKP(b) Leningradskoi Organizatsii, *O merakh po uporiadocheniiu upravleniia proizvodstvom i ustanovleniiu edinonachaliia* (Leningrad, 1929), 28. The obkom decree was also published in *Krasnyi putilovets*, October 14, 1929, p. 4.
- 82. Krasnyi putilovets, October 14, 1929, p. 4.
- 83. Moskovsko-Narvskii Raionnyi Komitet VKP(b), O merakh po uporiadocheniiu, 28-29.
- 84. TsGAIPDP, f. 1012, op. 1, d. 681, l. 62ob.
- 85. Partkom Chairman Alekseev mentioned a target of 10,000 as early as January 1929. See *Krasnyi putilovets*, January 31, 1929, p. 1; Kostiuchenko, *Istoriia Kirovskogo zavoda*, 295; and TsGASP, f. 1788, op. 33, d. 1077, l. 48.
- 86. The raising of the target to 10,000 for the 1929/30 year was announced in *Izvestiia TsK VKP(b)*, no. 25 (1929): 26.
- 87. TsGA SPb, f. 1788, op. 33, d. 1077, l. 48.
- 88. Ibid., 1.55 ob.
- 89. Torgovo-promyshlennaia gazeta, November 24, 1929, p. 1.

- 90. TsGA SPb, f. 1788, op. 33, d. 1021, l. 10; also Krasnyi putilovets, October 24, 1929, p. 2.
- 91. Krasnyi putilovets, November 18, 1929, p. 1.
- 92. Ibid., September 9, 1929, p. 2; September 16, 1929, p. 1; October 3, 1929, p. 1.
- 93. Ibid., September 30, 1929, p. 2.
- 94. Ibid., October 3, 1929, p. 1.
- 95. TsGA SPb, f. 1788, op. 23, d. 119, ll. 8ob-9ob, 11.
- 96. Ibid., Il. 120b-130b.
- 97. Krasnyi putilovets, January 6, 1930, p. 1.
- 98. Pravda, January 28, 1930, p. 1.
- 99. Ibid.
- 100. Krasnyi putilovets, January 9, 1930, p. 1.
- 101. Leningradskaia pravda, January 14, 1930, p. 4.
- 102. Krasnyi putilovets, February 13, 1930, p. 1.
- 103. Za industrializatsiiu, February 19, 1930, p. 3, emphasis in original.
- 104. Ibid.
- 105. For the most direct set of accusations, see Krasnyi putilovets, January 13, 1930, p. 1.
- 106. *Pravda*, February 10, 1930, p. 1; *Krasnyi putilovets*, January 30, 1930, p. 1; February 10, 1930, p. 2; March 30, 1930, p. 2. Also TsGAIPDP, f. 1012, op. 1, d. 799, l. 20.
- 107. TsGAIPDP, f. 1012, op. 1, d. 804, l. 39.
- 108. Ibid., 1. 62.
- 109. See Davies, Soviet Economy in Turmoil, 241.
- 110. On khozraschet, see Davies, Soviet Economy in Turmoil, 314-16; at Putilov, see P. Lysakov, Partrabota v tsekhu (Za novye formy partraboty) (Leningrad, 1931), 7-8.
- 111. N. Ia. Petrakov et al., eds., NEP i khozraschet (Moscow, 1991), pp. 5-26.
- 112. Krasnyi putilovets, March 27, 1930, p. 1.

- 113. TsGA SPb, f. 1788, op. 23, d. 98, 1, 329.
- 114. Krasnyi putilovets, May 22, 1930, p. 1; on inventories, see TsGA SPb, f. 1788, op. 23, d. 98, 1.316.
- 115. TsGA SPb, f. 1788, op. 23, d. 98, l. 329; Krasnyi putilovets, March 20, 1930, p. 2.
- 116. TsGA SPb, f. 1788, op. 29, d. 264, ll. 54-56.
- 117. Ibid., op. 23, d. 123, l. 1.
- 118. Krasnyi putilovets, May 9, 1930, p. 1.
- 119. TsGA SPb, f. 1788, op. 23, d. 123, ll. 2 ob, 3-4.
- 120. Leningradskaia pravda, May 20, 1930, p. 2.
- 121. Konstantinov, Leninskie traditsii, p. 82. On Rabkrin and OGPU, see Rees, State Control in Soviet Russia, p. 93.
- 122. Krasnyi putilovets, June 2, 1930, p. 1.
- 123. Krasnaia gazeta, June 1, 1930, p. 1.
- 124. Partkom chairman Alekseev announced the arrests at a meeting of the engineering and technical personnel on June 6, 1930. TsGAIPDP, f. 1012, op. 1, d. 858, l. 1-2.
- 125. Krasnaia gazeta, June 12, 1930, p. 3.
- 126. TsGAIPDP, f. 1012, op. 1, d. 858, ll. 1-2.
- 127. Ibid., d. 802, ll. 163-65.
- 128. Krasnyi putilovets, June 19, 1930, p. 3.
- 129. Ibid., July 28, 1930, p. 1.
- 130. Leningradskaia pravda, August 4, 1930, p. 1.
- 131. Ibid., August 9, 1930, p. 1.
- 132. Krasnyi putilovets, August 8, 1930, p. 1.
- 133. TsGA SPb, f. 1788, op. 23, d. 131, l. 33.
- 134. Ibid., Il. 33-34.

- 135. For an overview of oppositionist attacks on the party regarding labor policy in 1927-28, see Iv. Kraval', "Politika partii v rabochem voprose i oppozitsionnaia demagogiia (Diskussionnyi listok, No. 5)" in *Partiia i oppozitsiia nakanune XV s "ezda VKP(b): Sbornik diskussionnykh materialov*, vol. 2, *Diskussiia po voprosam khoziaistvennogo stroitel'stva* (Moscow-Leningrad, 1928), 281-97.
- 136. On workers during NEP, see William J. Chase, Workers, Society, and the Soviet State: Labor and Life in Moscow, 1918-1929 (Urbana, 1987). On living standards during the First Five-Year Plan, see E. A. Osokina, Ierararkhiia potrebleniia: O zhizni liudei v usloviiakh Stalinskogo snabzheniia 1928-1935 gg. (Moscow, 1993).