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Imperial Russia's Armed Forces at War, 1914-1917:

An Analysis of Combat Effectiveness

by

David R. Jones

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Submitted in partial fulfillment of the requirements
for the degree of Doctorate of History

at

Dalhousie University

Halifax, Nova Scotia

March, 1986

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DEDICATION

For my mother,
Mary E. Jones
and
in memory of my father,
Robert O. Jones

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ABSTRACT

This study is devoted to the performance of the Imperial Russian armed forces, and especially of the army, during the years 1914-1917. This is examined in terms of the military establishment's effectiveness, both before and during the conflict, at four levels: (1) the political, which includes a discussion of the military establishment's place in Russian society, and its ability to obtain the requisite resources; (2) the strategic, which examines its ability to plan and conduct war in accord with the national goals as defined by the empire's military-political authorities; (3) the operational, which investigates the military's ability to conduct and control war on the actual battle field; and (4) the tactical, which deals with the army's capabilities on the actual battlefield.

On the basis of this analysis, the writer concludes that Imperial Russia's soldiers made much better showing than is generally realized, and that the Revolutions of 1917 were not an immediate consequence of military defeat per se. He suggests, rather, that the Imperial regime collapsed as a result of the socio-economic strains entailed by the war effort, and the vicious political strife that divided Russia's political, and eventually its military élite from mid-1915 onwards.

PREPARE

The present study began as an essay on "combat effectiveness" for the Office of Naval Assessment of the United States Department of Defense. In its expanded version, it is conceived as a forerunner for a full-scale examination of Imperial Russia's program of military modernization after 1905, and the empire's military effort during 1914-1917. Given the number and diversity of views of recent monographs on this subject, such a reexamination seems a worthwhile task. And as the official interest of American authorities just mentioned suggests, it may be of more than purely antiquarian interest. Indeed, Russian experience in past wars may well help explain many aspects of the traditions that have been incorporated into today's Soviet Armed Forces.

The tracing of such influences, however, is not the purpose of this study. Rather, its aim is to demonstrate that the defeat and collapse of the military machine as such was not a prime cause of the subsequent revolutions of 1917. Indeed, that machine was much more effective in battle than is generally recognized. In spite of major difficulties -- difficulties which the Tsar's forces to some degree shared with every major army involved in the conflict -- they had fully recovered from the initial defeats of 1914-1915 by early 1916, and retained their combat effectiveness until the revolution. This means that

when the experience of battle had shown the military's prewar assumptions to be ill-founded, some of Russia's generals had the flexibility of mind and strength of will to pull their forces together and devise new methods to meet the unexpected challenges of modern war. In this manner, I attempt to demonstrate that at least one major element of Imperial society retained significant vitality until the end, and hope to suggest that other aspects might deserve similar reexamination. But at the very least, I trust that what follows will illustrate that many long-held views on the Imperial Army's performance have been misconceptions at best, and utter legends at worst.

The definitions of effectiveness utilized below are borrowed from the criteria employed in the original study mentioned above. These were developed by professional scholars and military men in an attempt to analyze the effectiveness of military establishments per se, both within the latters' own societies and on the battlefield. In general, these specialists define military effectiveness as "the index of how well organizations convert available resources into fighting power." To achieve this index, they devised guidelines that sought to examine military organizations both "vertically" (that is, at the political, strategic, operational, and tactical levels), and "horizontally" within each level. This latter involved a spectrum of varying

subjects, ranging from the military's ability to obtain funding at the political to the dynamics of "unit cohesion" and effectiveness of training at the tactical. And while it is true that these categories may at times appear somewhat arbitrary, they have proven useful in defining areas in which to examine the professional competence of Imperial Russia's soldiers and sailors. Nonetheless, given the more general socio-political crisis that overwhelmed that empire in early 1917, considerations of a more general, and not purely military nature, have had to be included in the present analysis.

In this I have attempted to avoid the temptation of viewing Russia's performance in World War I through the prism of 1917. It seems to me that hindsight can often distort an historian's perspective, and so warp his judgment of men and events. Given the strong ideological motivations and later attempts at self-explanation of many participants, this seems to have been particularly true of the history of Russia during the period in question. For this reason, I have sought to examine the story through the eyes of contemporaries and in part, to judge the military's competence by the standards of their own times.

It is always difficult to walk through the past beside one's subjects, and especially so in the case of the Russia

* K.H. Watman, W. Murray, and A.R. Millett, "On the Effectiveness of Military Organizations," (Unpublished essay, 1984), pp. 6-7.

of World War I. Apart from having to deal with the continuing echoes of the wartime political battles, the Canadian historian of this period is hampered by a lack of access to the archives in the Soviet Union. This is a result both of restrictions imposed by the Soviet authorities themselves, and of the lack of academic exchanges between the U.S.S.R. and Canada. Even so, the present writer has used a number of primary documents, some of which are cited in the appended bibliography, found in American, British, French, and Canadian collections. Otherwise, I have based my work on a wide range of published documents, articles in the contemporary press, contemporary manuals and works on the military "art," and a rich memoir literature. In addition, there are a large number of secondary works on the events under consideration, many of which are cited in both the endnotes and bibliography. Of these last, those published by professional Soviet soldiers in the 1920s and early 1930s are usually the most valuable.

In presenting my arguments, I have sought to avoid overburdening the text with the details of military developments. For this reason, much of my supporting analysis has been consigned to extensive endnotes. I have used these as well to indicate historiographical trends and references that would only complicate the main text. So while I apologize to my readers for the bulk of supporting

material, I would point out that it represents only a fraction of a massive literature, and that I hope its exclusion from the text makes the latter more readable.

Two other points deserve mention. As students of Russian history know, up to March 1918 the Russians used the Julian (old style) calendar, which after 1900 was thirteen days behind the Gregorian (new style) one used in Western Europe. To avoid confusion, I have given all relevant dates in both old and new styles. And secondly, in the transliteration of Russian names and words, I have followed the modified style of the Library of Congress. Otherwise, it only remains for me to thank all those -- and especially my supervisor, Norman G.O. Pereira, and colleagues Bruce Menning and Jacob Kipp -- who have helped with their advice and support in this enterprise.

INTRODUCTION

For the professionals of any nation's armed forces, the challenge of battle traditionally has been the only true test of their troops' effectiveness. Yet some crude equation of military effectiveness with victory tells us very little. An army may wage war skillfully and even successfully, but victory may elude its grasp thanks to any number of diplomatic, political, social, or other factors. The true "combat effectiveness" of any military establishment thus must be judged in a broad political-diplomatic-strategic context. Only then can one examine how soldiers deal with concrete situations, often unforeseen, within a network of constraints over which they often have little or no control. Of course, one may argue that the professionals should have foreseen both the situations and the constraints. Even so, experience suggests that wars have a nasty habit of taking unexpected turns that few would have predicted beforehand.

For the political leaders, on the other hand, the real test of their forces' effectiveness may be the extent to which they deter wars. Therefore the peacetime relations between the military and their political masters may be fraught with tensions about the armed forces' ultimate purpose, tensions that do much to shape the army that eventually enters a conflict. Similarly, the virtues demanded of commanders in peace may be very different than those

needed on the battlefield. It seems fair to suggest that the longer the period of prewar peace, the larger will be the number of "managers" among commanders at all levels. And while such managers may prove disappointing leaders once hostilities commence, in peacetime their fiscal, bureaucratic and political abilities will be highly prized, and not least by their civilian counterparts.

These considerations must be borne in mind when examining Imperial Russia's efforts in World War I. So, too, must the particular constraints imposed on Russia's leadership by geographical, social, political, and other factors. But while recognizing such problems, until recently many historians have persisted in regarding the story as one of almost unbroken bumbling, corruption and defeat. For even those taking a more balanced view, "Russia's failure to carry the war through to victory in 1917 is often read retroactively to mean that she achieved little, and was a negligible quantity prior to it." This judgement has seemed justified by the destruction of General A.V. Samsonov's 2nd Army at Tannenberg, the shell shortage and Great Retreat of 1915, and the regime's collapse in February 1917. German military historians, too, as Dennis Showalter recently pointed out, have portrayed the Kaiser's army as "a virtual equivalent of The Gang that Couldn't Shoot Straight." But, he notes, these views only "integrate perfectly with the images of the Russian army developed by

Norman Stone or Allan Wildman, in fiction above all by Alexander Solzhenitsyn: a force so comically - or tragically - inefficient that even the semi-modern German army ultimately had no trouble winning a decisive victory."²

Given this revision of the traditional estimates of the Germans' military efficiency, a similar reassessment of Russia's war effort seems in order. And in all fairness, one must admit that many Russian problems were not unique. Before 1914, all the Great Powers had planned for a short conflict, all had underestimated the demands that would be made for shells and other weapons, and all had wasted much effort on preparing their cumbersome (in terms of the transport needed) cavalry for mobile battles that seldom materialized. The year 1915 was one of shell shortages for all the warring nations as they scrambled to mobilize their resources. As for incompetent generals, one glance at the carnage of the Western Front should dispel the myth that Tsarist Russia had a monopoly on dunderheads. Russia may have faced particular political, social and economic difficulties in handling these problems, but they themselves were Europe-wide in scope.

Apart from all this, accounts of Russia's wartime ineffectiveness ignore or discount both the major successes won by Russian arms, and the areas of efficiency that the war economy had demonstrated by late 1916. During the autumn of

1914, for example, the August disaster in East Prussia was balanced by a string of victories over the Austro-Hungarians in Galicia. True, by June-July 1915 the Imperial army seemed on its last legs. Yet within one year it had recovered sufficiently to score a brilliant victory on the Southwest Front that surpassed any thus far won by its allies. In addition, this victory also demonstrated that some Russian generals were capable of learning the lessons of trench warfare at the operational and tactical levels. As in other armies, technology lagged behind the concepts of mobile warfare developed before 1914 by theorists like A.A. *Neznamov*. Nonetheless, some of the tsar's commanders continued to show remarkable innovative abilities right up to the eve of the February Revolution of 1917 (e.g., the Mitau Operation of December 1916 - January 1917). In the meantime, as Stone points out, Russia's industries had been mobilized and expanded their production to levels that provided sufficient arms and munitions for further offensives.

True, major difficulties remained in areas such as rail communications (and hence the distribution of foodstuffs and other supplies), inflation, and military manpower. Even so, in early 1917 the tsar's armies materially were in better shape than they had been in August 1914. But when the long-smouldering fires of political and social discontent burst into flames at the end of February, the chaos of

revolution quickly reduced the value of past successes to nought. As a result, the armed forces' capability for effective combat fell so low that Lenin's Soviet regime had no choice but to begin demobilizing the old army in December 1917, and to accept the humiliating Treaty of Brest-Litovsk in March 1918.

All this suggests a somewhat more complex story than the oft-told tale of corruption, incompetence, outright treason, and continuous failure. Indeed, in many respects this tale corresponds more closely to what Stone has called the "demonology of 1917" than it does to historical fact.⁴ The roots of this legend are to be found rather in the polemics and propaganda of Russia's wartime domestic politics, and its strength in the subsequent repetition of these charges by so many Red and emigre White authorities alike in the years that followed.⁵ Even so, during the war internal politics had a major impact on the Imperial army's capabilities and so they, too, must be a concern of this study.

One also must remember that the capabilities of the Imperial armed forces fluctuated considerably over the three and a half years under investigation. The army that mobilized in 1914 was not the one that collapsed in 1917. In terms of command, the headquarters or Stavka that Nicholas II oversaw in 1916 was considerably more effective than that presided over earlier by the Grand Duke Nikolai

Nikolaevich. Similarly, although demands for more war materiel continued unabated throughout the conflict, acute shortages existed only in mid-1915, and even then they were exaggerated by generals seeking excuses for their defeats. All in all, four distinct periods, each of which represents a separate political-strategic and operational-tactical context, must be noted. These are in brief:

I. July 1914 - April 1915, during which Russia's peacetime armies are efficiently mobilized, suffer initial disasters in East Prussia, fight the Germans to a standstill in Poland, conquer Austrian Galicia, threaten Hungary with invasion, and brilliantly repel a Turkish offensive in the Caucasus. Domestically, this is a period of political truce and industrial "business as usual."

II. April/May - August 1915, during which a successful German attempt to relieve the desperate Austro-Hungarians in Galicia, combined with the Russians' munition shortages, poor tactics and inept leadership, forces the tsar's armies from Galicia and most of Russian Poland. The Great Retreat and the mobilization of industry at home are used by the political opposition as an occasion to force major concessions from Nicholas II. He responds by establishing the Special Councils to run the war effort, personally assuming the Supreme Command, and proroguing the State Duma or parliament. These moves coincide with a stabilization of the European Front and further victories in the Caucasus.

III. August/September 1915 - February/March 1917. Under the new Stavka, progress in reordering the shattered armies is so rapid that by December 1915 the Russians can launch a limited counterattack against the Austrians on the Styra and, by the spring of 1916, can contemplate more ambitious operations. These include a major attack against the Germans at Lake Naroch in March and A.A. Brusilov's June offensive on the Southwest Front. Despite the disastrous Romanian campaign that follows, both Brusilov's victory and those on the Caucasian Front demonstrate that the army's capabilities have been restored. This judgement seems strikingly confirmed by the the Mitau Operation, the first battle of 1917. With supplies at long last reaching adequate levels, the prospects seem good for the upcoming campaign.

However, other factors negate these gains. As noted, problems continue to plague the transport, and especially the vital rail, system. These lead to temporary food and fuel shortages in industrial centers. Amplified by rumor, such shortages combine with anger over low wages and inflation to fuel growing discontent and more frequent strikes. The army's demands for men meanwhile force the call-up of older reservists, whose reliability in the face of civil unrest is less than perfect. And the political opposition, having lost its battle in 1915, concentrates on an underground propaganda campaign to discredit the

regime. Stories of the treason of the German-born empress and the court, and of Rasputin's alleged influence over thoroughly corrupt and talentless ministers, do much to destroy the government's credibility at both the front and in the rear.

IV. February/March 1917 - March 1918. All these factors combine at the end of February to provoke riots and mutinies in Petrograd that bring down the tsarist regime. Fearing civil war, the high command throws its support behind a Provisional Government. However, this lacks real authority, and the process of revolution demoralizes the armed forces, eventually destroying their effectiveness. After October, the victorious Bolsheviks face these problems by concluding an armistice, demobilizing the old army, and building their own Red Army on a volunteer basis. While some units see action against the Germans in late February 1918, their inability to halt the advancing enemy compels Lenin's government to accept the harsh terms imposed by the Central Powers at Brest-Litovsk on 3 March 1918. This ends Russia's formal participation in World War I.

This study will concentrate on the first three of the above periods, and have little to say directly about the events that followed the overthrow of the monarchy in February-March 1917. This is because, firstly, this last period has been covered exhaustively by numerous works, many of which are cited in the notes below. And second,

the focus of this study is the performance of the Imperial military establishment, in peace and war, within the context of the Imperial Russian social-political system during the last years of the reign of Nicholas II; that is, during the period 1905-1917. In evaluating that establishment's effectiveness, it will focus on the abilities of the military (1) to organize and lobby successfully within the political framework, so as to obtain the funds, materiel and manpower it deemed necessary to fulfill its responsibilities; (2) to plan and then wage war at the strategic level, in conjunction with Russia's allies, but in pursuit of the empire's own perceived war aims; (3) to develop and then modify the operational techniques needed to implement those strategic goals; and (4) to develop and modify as necessary the tactics needed to meet the changing demands of modern war.

Each of these areas of respective "effectiveness" are examined separately below in an attempt to ascertain the real capabilities of the Imperial military establishment. Since success in the first (the political) area was a prerequisite for efficiency in all the others, it will receive the greatest attention. Even so, the broader aspects of both international and internal politics will be touched upon only where they directly impinge upon the army's ability to conduct war. For while the burden of the conflict, and the effort required to support the field

armies, undoubtedly contributed much to the subsequent outbreak of revolution, and hence to the collapse of those armies' capability for combat, the political strife of 1914-1917 is another story that requires a different analysis. Suffice it to say here that the revolution did not occur because Imperial Russia lay prostrate and defenseless, on the field of battle.

CHAPTER I: POLITICAL EFFECTIVENESS

An analysis of this aspect of a military-naval establishment's effectiveness must first examine its position within a nation's political-social structure. In this regard, the Imperial Russian armed forces may be considered exceptionally fortunate. Thanks to a unique mixture of political-strategic, economic and demographic factors, the military has had an immense impact on the history and evolution of the Great Russian state, of its government, and of its society. From the days of Kievan Rus and Muscovy on, the real security problems posed by Eurasian geography meant that most Russians have accepted military leadership as one of their rulers' most vital functions, and large armies as unpleasant, expensive, but unavoidable necessities. Military service was never popular, but it was a recognized if onerous duty. In addition, it was one that long had offered an ambitious peasant or artisan a path to social advancement.

Another recurring theme is the technological backwardness of Russia. The need to match more advanced enemies -- first the Mongol-Tatars to the East and South, and then European neighbors to the West -- has forced the Russian state into a series of basic reforms. The most militarily significant were those of Ivan III in the 1470s, Ivan IV in the 1550s-1560s, Peter I in the early 1700s, and Alexander II in the 1860s-1870s. On each occasion, the process

involved not just the military establishment per se, but entailed profound social, economic and administrative changes for the state as a whole. Thus the reforms of Peter I began with the army, but quickly embraced all aspects of a civil administration whose primary task was to support and maintain his modernized armed forces.

This interrelationship has meant that military men often were cast in the roles of innovators and reformers. Equally important, many professional soldiers have been drawn into the actual work of the civil administration. In the late 1840s, for instance, ten of Nicholas I's thirteen ministers had served as officers in the army or fleet; in the early 1900s, General of Infantry P.L. Lobko filled the post of State Controller; and throughout the Imperial period (1721 - 1917) numerous officers can be found staffing lesser administrative offices at every level. This was one way in which, as William puts it, the "army as a whole gave structure and substance to the empire."

Originally this mixing of civil and military functions also reflected the fact that until the early 1800s, the officers made up the largest available reservoir of trained state servants. Yet its continuation for another century involved other factors as well. One of the most important was the faith that most tsars had in the virtues nourished by military service. They themselves usually had had extensive military training, and they frequently had greater

trust in their military than in their civil servants. In fact, the bonds between the monarchy and its military establishment were "far more than protective and physical ties -- the bond was moral and spiritual as well."¹¹ For above all others, the church included, the army was the institution that had built the Russian state, guaranteed its integrity, and preserved its social and political system. Under its sovereign and commander-in-chief, it stood on guard against the empire's "external" and "internal" enemies, and so maintained Russia among the ranks of the Great Powers.¹²

In 1906 the Fundamental Laws created a parliament or State Duma, and so turned the Russian empire into a quasi-parliamentary monarchy or, as it was known, a "limited autocracy." Yet by these same laws the emperor remained "the supreme commander of all the armies and fleets" who¹³ "personally directs all military matters." More important still, Nicholas II saw these responsibilities as being much more than the formal and ceremonial ones assumed by his English cousins. In 1902 he indicated his intention of leading his armies in any European war, in 1904 he contemplated personally commanding his Manchurian armies, in 1906 he reserved military and naval affairs from the new Duma's competence and, in 1915 he finally took charge of the war at Stavka.¹⁴ Meanwhile, the military had remained strongly represented in his immediate court.¹⁵ For all

these reasons, his administration recognized the needs of the army and fleet as having the highest priority.

Beyond the limits of "official society," during the decade before 1904 a growing gap had been evident between the military and most of "unofficial society." Although this worried thoughtful soldiers of the day, their duties in repressing a mounting strike movement and peasant disorders left them ill-equipped to combat the growing anti-military sentiments of much of Russia's intelligentsia and middle class.¹⁶

But with the establishment of the Duma, many of the latter saw themselves as sharing responsibility for the nation's welfare. This, along with an increased sense of German hostility, brought an upsurge of nationalist and Panslavist sentiments among many of the Octobrist and Cadet radicals of 1904.¹⁷ As moderate liberals, they still remained determined to wrest further political concessions from Nicholas II, but they also set themselves the task of acting as the true guardians of Russia's honor and power. In 1907 this group -- headed by men like A.I. Guchkov and M.V. Rodzianko -- took the lead in the Third Duma and immediately placed military and naval reform at the top of the agenda.¹⁸

We also should note that at every level, family and social ties connected professional military and naval men with members of both "official" and "unofficial" society, revolutionaries included. As a result of all these factors,

after 1907 the defense establishment could count on considerable support for its programs both within the cabinet and the Duma. But if "society" in general backed their efforts, the word "society" has a very limited sense when applied to the Russia of that day. In this context, "society" denotes the thin, educated and Westernized stratum of the population that had developed over the two centuries since Peter I. Beneath it remained the overwhelming mass of the peasantry and lower urban classes: Since their representation in the Third and Fourth Dumas remained small, their direct influence on the Imperial regime's defense (and other) policies was negligible. Only with the creation of soviets in the early spring of 1917 could these classes give weight to their views.¹⁹

This distinction between "society" and the masses, who provided the generals' "cannon fodder," is especially important when discussing war aims. All in all, little disagreement existed between the regime and "society" over the goals Russia sought in the conflict. Yet the defeats of 1915, and the strain placed on the empire's social fabric by the intensified war effort, made a separate peace objectively appear as an ever more sensible policy. Indeed, many educated Russians professed to believe that the German-born empress and her supposedly Germanophile supporters -- the infamous "dark forces" -- were pursuing this course as a means of avoiding political concessions. Documentary

evidence, and particularly the tsar's and tsarina's private correspondence, have since revealed that they were as committed as their critics to a "war to a victorious conclusion." But convictions aside, any unilateral move to end the war was an "untakable decision." Apart from risking the empire's position as a Great Power, an attempt to do so would have been regarded as outright treason, and so probably would have sparked a coup d'état by an outraged "society," civil and military alike. Once the regime fell and popular soviets appeared, this changed. Then "society's" efforts to pursue the old war aims led first to the "April Days," and in the end drew the masses to the program of Lenin's Bolsheviks. Perhaps better than any other, the issue of peace illustrates the gulf between the "two Russias" which went to war in 1914. In a narrower sense, it also demonstrates the constraints that even an "autocrat" faces from the differing aspirations of the various social classes on which his war effort depends. 20.

Nonetheless, before 1914 there was a general commitment to defense on the part of all those involved in the formation of state policy. We might therefore expect the military and naval planners to have pushed through their programs with relative ease. However a number of factors inhibited their effectiveness. Firstly, despite prewar conditions of economic expansion, resources remained limited. Secondly, even when levels of funding were

sufficient, the services had great difficulties in absorbing or expending those funds. Often this reflected a need to carry out preliminary work before beginning a program, or to outfit plants to produce new weapons. Yet effective defense spending was hampered as well by bureaucratic inefficiency, occasional cases of corruption, military-naval rivalries, and in the War Ministry, the conflicting demands of different branches of the army. ²¹

This last was complicated still further by the heterogeneous nature of the higher officer corps. Stone's description of a high command irreconcilably split into conservative, patrician supporters of the Grand Duke Nikolai Nikolaevich, and the reform-minded and socially humble praetorians led by War Minister V.A. Sukhomlinov, is oversimplified. So too is Solzhenitsyn's view of two officer corps. Neither explains, for example, the innovativeness of Brusilov, a noble cavalryman who never attended the Staff Academy but who showed a greater capacity for adaptation than did any of that institution's celebrated "Young Turk" professors of 1907-1909. ²² Even so, both views do serve to underline the fact that the high command was riven by divergent service and personal loyalties, and that basic differences of opinion existed about the reforms and programs being implemented with the monies available. Worse still, these inter- and intra-service rivalries quickly became enmeshed in the general political polemics that

gripped Russia after 1906.

Although Nicholas II had exempted military-naval affairs from parliament's direct influence, the Octobrists of the Third Duma resolved to use their budgetary powers to influence the course of military reform. For this purpose they established a Military Commission to review proposals of the War and Naval Ministers. But while they were sincere nationalists, Guchkov and his colleagues also sought to undercut the tsar's hold on the armed forces by making the Duma a second and equal symbol of patriotism, and hence an object of military loyalty. At first the Duma's commission worked in unison with officials of both ministries. Then in 1908 a number of contentious issues convinced Nicholas II that he must abolish Grand Duke Nikolai's Council of State Defense and reassert his own authority. His agent was Sukhomlinov. He was appointed first as Chief of the General Staff, and in 1909 as War Minister, with orders to reduce the Duma's interference to the limits foreseen by the Fundamental Laws. Being clearly the tsar's man, Sukhomlinov naturally became the target of liberal scorn. His recently discredited rival, Grand Duke Nikolai, meanwhile began acquiring an undeserved reputation as military genius and closet political reformer. Further, the army's intra-service rivalries now were of national political significance, a fact that did much to confuse and delay the cause of military reform.

As head of a recentralized War Ministry, Sukhomlinov consolidated his authority by concentrating all powers still more tightly in his own hands. This meant preventing any official within the ministry, and particularly the traditionally powerful Chief of the General Staff, from emerging as a potential rival. This is one explanation for the rapid turnover of these chiefs in the immediate prewar period. During 1909 to 1914, the General Staff had four chiefs, as many as Prussia/Germany had had in the previous fifty-three years. This weakened the authority of the minister's foremost deputy, and to some extent retarded, as N.N. Golovin argued, "the work of preparing the country for

war."²⁴ Others charge as well that the men chosen were²⁵ either too junior or were talentless nonentities, a judgement the wartime careers of Ia.G. Zhilinskii and N.N. Ianushkevich seem to justify. But here we should remember that the virtues needed in peacetime are not necessarily those of a field commander. Thus Zhilinskii, who moved on to command the vital Warsaw Military District and in 1914, the Northwest Front, had a not undistinguished record; A.Z. Myshlaevskii continued his career as a successful administrator within the War Ministry; and the relatively young²⁶ Ianushkevich -- dismissed by Stone as a mere "clerk" -- was an expert on wartime supply whose ideas were incorporated into the field regulations of 1914. All therefore fall into the category of peacetime managers who, to a

surprising degree, possessed qualities needed during their tenures as chief. Nonetheless, whatever bureaucratic strength and other advantages Sukhomlinov gained from these frequent repostings, the process itself promoted instability within the ministry that provided ammunition for his critics.²⁷

Such criticism, the basis for the bad press Sukhomlinov still receives,²⁸ was inevitable. During 1907-1908 Guchkov and the Octobrists had successfully expanded their influence within the central naval and military administrations. Armed with the tsar's brief, the new minister set out to disrupt their network of unofficial contacts. He instituted a series of promotions and reassignments that involved dispersing the French-influenced "Young Turk" reformers at the General Staff Academy.²⁹ The process culminated with the dismissal of Deputy War Minister A.A. Polivanov in 1912. Sukhomlinov himself had held aloof from the Duma and left all routine contacts to Polivanov. This move thus deprived the deputies of one of their most useful contacts.³⁰

Meanwhile other policies, such as the use of gendarmes to keep watch on officers' political loyalty, won Sukhomlinov few political friends outside of court.³¹ He himself was remarkably uncommunicative, even with his immediate colleagues and subordinates, and seemed indifferent to criticism. Frustrated, the Duma became increasingly receptive to requests from the Naval Ministry, whose

officials proved more cooperative and politically sensitive.
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The outbreak of war in July 1914 put a moratorium on domestic political strife. All educated Russians, a few Germanophiles and revolutionary extremists excluded, enthusiastically embraced the empire's war aims and accepted the righteousness of its cause. But the prewar divisions re-emerged in early 1915 over whether the emperor or Duma would provide political leadership to the war effort, and so take credit for an eventual victory. As noted above, this led to a political crisis that Nicholas II ended that August by departing for Stavka as Supreme Commander-in-Chief. In banishing Nikolai Nikolaevich, the liberals' new-found ally, to the Caucasus, the tsar sought to reduce the impact of domestic politics on the field armies.
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Whatever success he achieved, it was short-lived. Deprived of a political victory that had seemed within its grasp, the liberal opposition redoubled its efforts to win major concessions before a general Allied victory left the monarchy more entrenched than ever. In the underground
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"onslaught against the autocracy" that followed, the opposition paid special attention to the armed forces. From late 1915 to early 1917 junior officers and the rank-and-file were subjected to a barrage of critical propaganda, both in the rear and in the war zone. There it was conducted by liberal and revolutionary activists, many of whom

worked in the vast network of bath houses, delousing stations, canteens, and hospital trains established by the Duma and the so-called "Voluntary Organizations."³⁵ Meanwhile some of the Duma's leaders devoted themselves to winning over members of the high command. Here Guchkov's famous letter to Chief of Staff M.V. Alekseev is only the most glaring example.³⁶

It remains impossible to determine to what degree these efforts were coordinated by the opposition. If any leader stands out, it is Guchkov. Indeed, the letter just mentioned was only a small part of his extensive activities. By late 1916 these included trying to win influential sections of the officer corps for a court coup d'état.³⁷ A group of Moscow liberals devised a similar plan. It collapsed, however, when Grand Duke Nikolai Nikolaevich refused to lead the coup on the grounds that it would not have the army's support.³⁸ Even so, all these efforts helped to lower the army's morale, fuel popular discontent in the rear, and divide Russia's small military, political and managerial élite. By discrediting the tsar and his government, the opposition made it difficult for men of talent to serve without being tarred as appointees of Rasputin. But its real victory came during the February Revolution. Fearing civil war, most senior officers abandoned Nicholas II to support the Duma and its Provisional Government. They then were deeply embittered when it, too,

lost control of events, the revolutionary tide engulfed the armed forces, and the latter's combat effectiveness disintegrated. In its turn, this bitterness did much to damage White hopes in the Civil War that followed.³⁹

* * *

Having sketched the place of the armed forces in late Imperial Russia and its politics, we can examine the effectiveness with which they operated within this context. One major indicator is their success in competing with other interests for the resources available. Although figures on Imperial defense spending are almost as debated as those for today's Soviet Union, one fact is clear. The commitment of Russian governments to their military has ensured the latter a regular, and usually a substantial share of the nation's funds. In 1680, the earliest year for which a rudimentary budget is available, some 60 percent⁴⁰ was devoted to defense. By 1725, after Peter I's reorganization of the army and creation of a fleet, 6,541,000 (71.6%) out of an estimated 9,140,900 rubles went to maintain them.⁴¹ Again, from 1781 to 1796 they consumed an average of 40.7 percent of the state's annual expenditures.⁴²

As Table I indicates, after 1860 industrialization allowed a lowering of such averages. This reflects both the state's more diverse interests and a growth in the

Table 1
Russian Defense Budgets, 1885-1913
(000,000 of current price rubles)¹

Year	Admin- istration	Health & Educa- tion	De- fense ²	Total Budget ³	Defense as % of Total
1885	194	23	240	866	27.7
1888	207	21	249	888	28.0
1891	247	26	296	962	30.8
1894	250	30	331	1084	30.5
1896	295	31	347	1361	25.5
1900	326	46	483	1889	25.6
1903	391	52	436	2072	21.0
1907	443	57	570	2496	22.8
1910	536	101	558	2592	21.5
1913	583	154	970	3383	28.7

¹ Figures drawn from Table F.1 in Paul R. Gregory, Russian National Income, 1885-1913, (Cambridge, U.K.; 1982), p. 252.

² Does not include expenditures on state railways, or subsidies to private ones.

³ Other categories include expenditures on final goods and services, interest on the state debt, and expenditures on, or subsidies to, state and private concerns. Although other sources use slightly varied figures, the differences are insignificant (i.e., a total of 2597, not 2592, for 1910).

overall revenues available to the state from an expanding national income. During the years 1900 to 1913, this last

rose by over 80 percent. Along with foreign loans, this permitted a 93 percent increase in the size of state budgets.⁴³ In normal conditions this meant an annual defense expenditure of 25 to 31 percent. Interestingly enough, these figures correspond closely to the Central Intelligence Agency's estimate that 28 to 32 percent of Soviet budgets went to defense during the early 1970s.⁴⁴

Such figures demonstrate the consistency with which the Russian state has supported its armed forces. Yet as Tables II and III indicate, they do not tell the whole story. Apart from the regular budgetary estimates, the tsarist government used loans to raise substantial funds for "exceptional" expenditures. Over 1904-1906, some 3,260,000 rubles of income fell into this category. Of these, 2,260,000 were quickly spent, largely on suppressing disorders and for railroad construction.⁴⁵ Later, as Table III illustrates, railway building retained its place as the top priority with military and naval expansion replacing maintenance of order as the second. Table I therefore actually understates the real sums allotted to defense. If regular and exceptional expenditures are totalled, then during the five years 1909-1913 roughly one-third of the state's funding was absorbed by the army and fleet. In fact, according to Finance Minister V.N. Kokovtsov these outlays really amounted to 43 percent of total governmental expenditure during the years 1909-1910.⁴⁶

Table II.

Analysis of Russian Defense Expenditures, 1909-1913
(000,000 of rubles)¹

	1909	1910	1911	1912	1913	Total 1909-1913
Direct Defense Expendi- ture ²	565.59	597.64	618.73	703.95	825.95	3311.86
of which War Min- istry	473.37	484.91	497.77	527.87	581.10	2562.02
of which Naval Ministry	92.22	112.73	120.96	176.08	244.85	746.84
Total Regular Budget	2451.42	2473.16	2536.00	2721.76	3094.25	13276.59
Total Excep- tional Budget	156.13	123.50	309.69	449.30	288.67	1327.29
Total Expendi- ture	2607.55	2596.66	2845.69	3171.06	3382.92	14603.88

1. A.A. Sidorov, Finansovoe polozhenie Rossii v gody pervoi mirovoi voiny (1914-1917), (Moscow: "Nauka", 1966), p. 47.

2. Exceptional funds excluded from military and naval figures.

Such exceptional funding went mainly to the services as capital grants for particular programs: the "small" naval program of 1908-1909; the army reorganization of 1910; and

the "Great Program" of 1914. For the first two, defense had received some 700,000,000 rubles by 1914, and the third foresaw spending 140,000,000 yearly on the ground forces -- quite apart from an extra capital investment of 432,000,000 rubles over a three-year period ending in 1917. Meanwhile the navy had received 800,000,000 rubles in 1913 for fleet expansion, largely in the Black Sea.⁴⁷ According to estimates of the German official historians, this meant that by 1913-1914 the Russian army received more money than their own -- which understandably worried German planners when they considered their prospects in any conflict after the Grand Program had borne fruit.⁴⁸

These developments meant that by 1913 the average Russian saw 50 percent more of his income appropriated for current defense spending than did the average Englishman, and this even though the Russian's income was only 27 percent that of the latter.⁴⁹ Further, as Table 1 indicates, this concentration on defense occurred at the expense of public health and educational programs which, in the long run, could have had a major impact on Russia's military potential. Within the government, Kokovtsov as early as 1908 had noted the dangers inherent in the state's growing debt, even though he insisted that it would be a mistake "to propose that we seek in our regular budget sufficient funds to cover both the progressive growth of spending in all our civil departments and a further

increase in expenditures on state defense." ⁵⁰ Outside of the Council of Ministers, others were still more concerned. Thus in 1909 an influential publicist, Prince G.N. Trubetskoi, openly warned that Russia's resources were insufficient for her to meet her military commitments,

Table III

Analysis of Government Expenditures in 1913 ¹

	000,000 rubles	%
Regular Budget Expenditures		
War and Naval Ministries	825.9	26.7
Railways	586.9	19.0
Payments on Loans	424.4	13.7
Alcohol Monopoly	235.0	7.6
Remaining Expenditures	1022.0	33.0
Total	3094.2	100.0
Total Exceptional Expenditures	288.67	--
On Army and Fleet	127.3	--
On Railway Construction	133.8	--

¹ Sidorov, p.43.

especially as conceived by her pessimistic generals and ambitious admirals. In the view of this and other commentators, an attempt to do so risked undermining the economy and bankrupting the treasury. ⁵¹ But as Kokovtsov's

statement indicates, the government was determined to make precisely this effort. So too was the Octobrist-controlled Third Duma. At times, particularly after Russia's humiliation during the Bosnian crisis of 1908-1909, it even offered the service chiefs larger credits than requested.
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ted.

This last was not always a blessing. Even if the Duma appropriated large sums for the War and Naval Ministries, these might remain unused by the time of the next year's budget estimates. Good reasons, such as the lead times required for perfecting designs or equipping plants, often existed to explain this situation. Nonetheless, it usually brought charges of mismanagement, if not of outright corruption. Questions of military-naval funding and procurement thus became issues of domestic politics, and the debates involved at times seriously impaired the relevant minister's credibility.
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Still worse were the impressions created by competition between the ground forces and fleet for the resources available. Until 1908, the navy's bad performance in the Russo-Japanese War of 1904-1905, as well as the army's domination of Grand Duke Nikolai's Council of State Defense, ensured that the fleet stayed starved of funding for its ambitious rebuilding programs. After that matters improved thanks to the emperor's personal interventions, Sukhomlinov's growing unpopularity, and Naval Minister I.F. Grigorovich's own successful courtship of the

Duma. As Table II indicates, after 1909 the navy's credits increased proportionally at a faster rate than did the army's. But if indecision over whether to strengthen the Baltic or the Black Sea Fleet hampered the effective use of these funds by naval men, there is little reason to argue that the ground forces lacked needed funding, or that any such starvation explains the problems of materiel they faced in 1915.⁵⁴

Charges of mismanagement and corruption grew in volume during the war. However, the general commitment of Russian "society" to the struggle ensured that every sinew was strained to support the armed forces. This massive effort involved state plants, foreign suppliers, prominent domestic industrialists, and the small enterprises organized under the "Voluntary Organizations" and Guchkov's "War Industries Committees." Yet competition between these varied agencies, both for funding and for the associated credit of having overcome the shortages of 1915, lowered the effectiveness with which money was spent and further split the nation's educated elite.⁵⁵ Even so, during 1915 the state spent 25,700,000 rubles on the war, a figure that had risen to 58,400,000 by 1917.⁵⁶

The government financed these vast outlays by raising direct and indirect taxes, by internal and foreign loans, by prohibiting exchanges in gold, and by a massive growth in the circulation of paper currency (from 1,530,000 rubles

on 1 July 1914 to 17,175,000 rubles on 1 October 1917).⁵⁷

The immediate results were rapid inflation and a massive increase in the government's debt, as well as considerable bickering with the Allies -- especially with Britain, "Russia's banker," -- over how loans would be secured and credits spent. Nonetheless, monies were raised. As a result, Russia's prewar debt doubled over the years 1914-1917, increasing by a total of 8,000,000,000 gold rubles. Neither consequence had a direct impact on the combat effectiveness of the armed forces as such. Yet in the long run, the inflation and associated economic difficulties contributed to the internal unrest that sparked the February Revolution, and Russian indebtedness abroad -- largely to Britain -- created resentments that hardly helped interallied relations.⁵⁸

* * *

Even if the armed forces did receive sufficient funding, one must still consider the judgement, as I. Maevskii puts it, that Imperial Russia proved "incapable at the existing stage of industrial development of meeting the demands of modern war."⁵⁹ The above-mentioned problems of the home front -- inflation, low wages, fuel and food shortages, and a deteriorating railway network -- seemed sufficient proof of this fact to contemporaries. At the front, this opinion appeared equally confirmed by stories of criminal shortages of rifles and shells that Stavka

blamed for the Great Retreat and near collapse of the field armies in mid-1915.⁶⁰ Since this latter allegation is a benchmark by which Imperial Russia's military effectiveness often is judged, the production and supply of shells will receive particular attention below.

Many writers blame these and other shortages on Sukhomlinov's mismanaging of the funds allotted to his ministry, and on its artillery department for stubbornly refusing to recognize the unexpectedly large number of shells consumed by modern battle.⁶¹ But Stone has argued convincingly that before 1914 his "administration fell victim to development-economics rather than corruption, or mismanagement."⁶² The real problems were whether or not Russia should develop specialized and expensive domestic war industries that would remain largely inactive in peacetime, and whether or not the War Ministry could find private domestic producers to provide war materiel at prices competitive with those of the state plants or foreign suppliers.

Here aviation is a case in point. Given the empire's reputation for technological backwardness and military conservatism, it is surprising to find that in 1914, the Russian air services -- with some 244 combat aircraft -- were the world's second largest.⁶³ Even so, critics charged that Sukhomlinov's ministry should have built up a still stronger force by following the Naval Ministry's

example. The latter had concentrated on importing aircraft (largely from France), rather than on promoting and investing in domestic firms. However, the War Ministry's foresight was strikingly vindicated when the four Russian companies of Shetinin, Lebedev, Dux, and Anatra⁶⁴ proved capable of supplying 80 percent of the 222 machines a month the air services estimated they needed in 1915-1916. By 1917 the production of airframes had risen still further, from a monthly average of 37 in mid-1914 to 352 from 12 different firms.⁶⁵ By then transport difficulties and their own needs had limited her allies' willingness to provide Russia with combat-capable aircraft. This domestic supply thus was vital, even if its utility was impaired by a much lower output of motors. Unfortunately the War Ministry had had smaller success in this area. By the end of 1916 Russian plants could produce monthly only 110 to 150 aero engines, which considerably raised their importance in discussions of interallied aid.⁶⁶

With regard to guns, shells, and most other types of materiel, the War Ministry had adopted a different course than that for aviation. In fact, the ministry's support of the small, newly established private air industry was exceptional. The opinion of Russia's industrialists held by most officials in the War Ministry's technical-supply agencies was expressed best by General A. A. Manikovskii of the Artillery Department. In his field, he later wrote,

"all the negative qualities of Russia's industry emerged in spades -- bureaucratic red tape, intellectual sluggishness on the part of management, and an ignorance that verged on illiteracy on the part of the labor force."⁶⁷ Apart from this, private suppliers usually expected large advances, frequently failed to produce on time, and were also much more expensive. Once they became involved in war production, their price for a 3-inch shell rose to 14.25 rubles, as compared to 6.40 rubles for one from a state plant. Again, while the latter charged from 3,000 to 6,000 rubles for a field gun, private industry demanded 7,000 to 12,000⁶⁸ rubles. The War Ministry thus understandably sought to avoid relying on Russia's private capitalists.

An obvious alternative was to expand the state's own system of defense production. Under pressure of war, steps were taken to do just that. By 1916, for example, the Artillery Department planned to build 37 more state⁶⁹ plants. But before prolonged fighting had made such expansion an obvious necessity, this same department had preferred to prepare for the expected short conflict by stockpiling guns and shells. These it obtained from existing Russian state factories or from abroad. As Stone points out, this was far from being an uniquely Russian practice and, at the time, it made good economic sense. A factory to produce 20,000 fuses daily would cost the War Ministry 41,000,000 rubles, but in peacetime it would lie

largely idle. For the same price, on the other hand, the Artillery Department could add 2,000,000 shells to its existing reserves.⁷⁰ And since, in the words of the introduction to the "Grand Program" of 1914, "the present political and economic circumstances of Russia's main neighbors rule out the possibility of a long war," this seemed the only responsible course.⁷¹

On the basis of experience in the Russo-Japanese War, the ministry's artillery experts believed that 1,000 rounds per gun would suffice for any European conflict. (France, however, had reserves of 1,400 to 2,000 shells, and Germany of 3,000 per gun.) The Russians therefore maintained peacetime reserves of just under 7,000,000 shells of various types (see Table IV). As matters turned out, this meant that in 1914 the Russians had for each gun an amount of shells equivalent to the expenditure in just ten days during an offensive in 1916. Further, in 1914 these reserves were to be mobilized in artillery parks over a period of 480 days, and supplemented by the production of three state plants at a rate of only 500,000 per month after war broke out.⁷² The Artillery Department had considered following France and raising its reserves to 2,000 shells per gun. But as Manikovskii noted, this would have required an additional 130,000,000 rubles, while a level of 3,000 per gun would have cost twice that much. "No Minister of War," he insisted, "even one having the full

support of the Duma, could expect such appropriations to be granted at that time." He also pointed out that there were technical limitations on the size of the reserves that could be maintained: the larger the reserve, the longer it took to renew it, and so the greater was its deterioration in storage.⁷³

Such problems aside, the estimates of the Russians, French and Germans were all woefully inadequate. But in the Russian case, the munitions shortage that developed in 1915 was compounded by another factor. For this the artilleryists' prewar policies did bear partial responsibility. In 1910 they had joined the Grand Duke Nikolai's clique and other groups of the high command in opposing Iu.N. Danilov's and Sukhomlinov's proposed abandonment of the outdated Polish fortresses. This opposition's victory resulted in the expenditure of vast sums from prewar appropriations on rebuilding and rearming these positions. This diverted funds from reorganizing the field artillery (from 8-gun to 6-gun batteries); and from developing the light, high-trajectory field howitzers that proved so useful in trench warfare. Worse still, it affected the shell reserves as well. During the great crisis of 1915, a time when the field armies clamoured for shells and heavy guns, the two captured fortresses of Kovno and Novogeorgievsk alone netted the Germans 3,000 artillery pieces and close to 2,000,000 shells. So, while the shortages of 1915 were real

enough, their effects were magnified by the legacy of the prewar opposition to reform, as well as inadequate tactical preparations on the battlefield and Stavka's mishandling of the stocks available.⁷⁴

Table IV

Artillery Shell Reserves, July/August 1914¹

Type of Munitions	No. by Regulations	No. Actually Available	Shortage(-) or Surplus(+)
Shells for 76mm Guns	6,216,300	6,422,605	+ 206,305
Shells for 107mm Heavy Guns, 122mm & 152 mm Howitzers	767,200	571,731	- 185,469
Total	6,983,500	7,004,336	+ 20,836

¹ I.I. Rostunov, Russkii front pervoi mirovoi voyny, (Moscow, 1976), p. 98.

The story of the rifle shortage is similar. Before the war, the War Ministry estimated it needed on hand 4,210,582 7.2mm Mosin M-1891s and 348,421 10.67mm Berdanikas. This gave a total of 4,559,003 rifles for the men to be mobilized, and for maintaining a reserve. In addition, 700,000 then were to be added annually by the increased production of state rifle works. With stocks at the required levels, orders came to sell off 450,000 older models to officers as hunting guns. Nonetheless, as of 20 July (2 August) 1914

4,290,350 Mosins and 362,019 Berdankas, for a total of 4,652,369, were available.⁷⁵ But according to Manikovskii, the armies' real needs during three years of war reached 5,000,000 on completion of the mobilization, 5,500,000 for the men called up later,⁷⁶ and 7,200,000 over three years to cover losses and wastage.

As for machine-guns, the mobilization plan envisaged a company (8 weapons) being attached to each infantry regiment and each cavalry division. Allowing for a 10 percent wartime reserve, this meant a total of 4,990 guns that would be further supplemented during hostilities by the production of some 500 annually. The number (4,157) available when war broke out was insufficient, although the authorities had expected to acquire the remaining 833 over the next four to five months (at a rate of 200 monthly). They also anticipated a very low (c.40/month) wartime rate of loss.⁷⁷ The first battles demonstrated clearly that these numbers were inadequate, even for a short conflict. Realizing this, the Artillery Department acted on its own initiative as early as September 1914 to increase sharply the production of new machine-guns. Due to timely action, in 1915 its works provided 350 weapons a month and were preparing to supply 1,000 in 1916.⁷⁸

The story was much the same with regard to artillery. As Table V indicates, by 20 July (2 August) 1914 the number of guns in service still fell slightly short of those

called for by the mobilization plan: 7,650 light guns instead of 7,821, and 7,903 heavy pieces rather than 8,085.⁷⁹ On the basis of slightly different figures, Stone points out that in 1914 Germany 'actually' had fewer guns than the Russians. He argues that the former was "incontestably superior to its enemies only in one area -- high-trajectory artillery -- and even here their superiority was greatly over-rated."⁸⁰ The real problem for Russia, of course, was that many of her weapons, and especially the heavy guns, remained cooped up in the overaged Polish fortresses. Wildman therefore quite correctly follows Manikovskii and Golovin in insisting that the real comparison should be made between Russian and German field units. Seen from this viewpoint, a Russian infantry division opposed six eight-gun batteries of 76mm field guns, and two six-gun batteries of 122mm light howitzers (60 guns in all), against a German division's nine batteries (72 guns) of light field guns, three batteries of light howitzers, and two of 152mm guns. This gave a German division over a twofold advantage, and left only 164 heavy weapons available to the Russian field forces. These were the 152mm weapons, organized into two detached formations as a strategic reserve for the whole field army.⁸¹

Space does not permit the examination of all aspects of military equipment (pontoon and engineering equipment, telephone and telegraph apparatuses, uniforms, boots,

rations, forage, and so on). The point is that in all these areas, what deficiencies existed between the quantities on

Table V
Artillery Stocks, July/August 1914¹

	No. Required by Plan			No. on Hand		
	With Troops	In Reserve	Total	With Troops	In Reserve	Total
LIGHT WEAPONS						
76mm Field Guns	5480	781	6271	5588	677	6265
76mm Horse Guns	434	61	495	390	17	407
76mm Mountain Guns	424	57	481	408	32	440
12mm Howitzers	510	74	584	516	22	538
All Light Guns	6848	973	7821	6902	748	7650
HEAVY WEAPONS						
107mm Guns	76	8	84	76	4	80
152mm Howitzers	164	16	180	164	9	173
All Heavy Guns	240	24	264	240	13	253
TOTAL OF						
ALL GUNS	7088	997	8085	7142	761	7903

¹ Rostunov, p. 97.

hand and those stipulated as necessary in 1914 were minimal. One more example, that of small arms ammunition, highlights the situation. Estimating that in the Japanese war each rifle had used 820 bullets, in 1906 the Mobilization Committee of the Main Administration of the General Staff set the equation for peacetime reserves at 1,000 bullets per rifle and 75,000 (300 belts) per machine gun. This gave an overall total of 3,346,000,000 cartridges. As the government found the costs prohibitive, the General Staff lowered its figure to 2,829,000,000. Despite efforts of the War Ministry, by mid-1914 the existing stocks contained only 2,446,000,000 cartridges, leaving a shortfall of 383,000,000. This is perhaps the most outstanding case of "unpreparedness," and one of the few in which fiscal constraints clearly forced the ministry to reduce its original plans. Indeed, within the context of the norms as set before 1914, this case appears to be an exception on both counts.

From the vantage of 1915, the figures for pre-war stocks clearly were woefully inadequate in comparison with the demands of modern warfare. They also make Sukhomlinov's announcement that "Russia is ready," made in the spring of 1914, appear as empty bravado or a grisly joke. From that vantage Wildman's charge of the "criminal underestimation of the expenditure of bullets and shells" gains substance, as do the sneers of General N. N. Golovin about

the War Ministry's "unscientific" approach and general mismanagement of its resources. Yet such charges, as well as suggestions that Russia was too backward to build a modern army, miss the point. True, fiscal restraints did prevent ambitious admirals from building the navy of their dreams and did limit the stocks of small arms ammunition available in 1914. But most of the shortages revealed at the front resulted from planners' faulty estimates rather than a lack of funding or economic backwardness. In part these flawed estimates reflected divisions within the high command over issues like the Polish fortresses or the utility of reserve divisions, but another factor was of greater significance: the general belief that a future war could only be of brief duration.

In this context Sukhomlinov's pronouncement reflected a confidence felt by most of Russia's professional soldiers in mid-1914. Since 1906 they seemed to have rebuilt their army and either acquired, or were on the verge of acquiring, the materiel they anticipated a new war would require. If much remained to be done, they took comfort in the "Grand Program." Aimed at making Russia the predominant military power in Europe by 1917, it had been launched that June. It would fund raising the annual contingent of recruits, who would serve three rather than two years, by 585,000 men, and so provide an army of 122.5 (rather than 114.5) divisions. In terms of materiel, the number of field

guns would increase to 8,358, organized at last into the more efficient six-gun batteries. Divisions also would field twelve (not six) howitzers, and now four heavy field guns as well. Beyond this, the rail system was to be improved, stocks of munitions still further built up, and so on.⁸⁸ Small wonder indeed that Helmuth von Moltke, Chief of the German General Staff, watched the Russian army with growing gloom and insisted "that the balance of force was inevitably and irreversibly turning against the Second Reich."⁸⁹

Evidence that demands for munitions would outpace prewar expectations came quickly. As early as 10 (23) August 1914, after Rennenkampf's 1st Army had seen only four days of fighting, the Supply Chief of the Northwestern Front reported "an enormous expenditure of 3-inch ammunition." Noting that the army commander had requested 108,000 shrapnel and 17,100 ordinary shells, as well as 56,000,000 cartridges, he said he had sent his "last reserves" (2,000 ordinary and 9,000 shrapnel shells, and 7,000,000 rifle rounds). He therefore requested assistance "in expediting at earliest, supplies of ammunition to make up what has been used."⁹⁰ By that month's end, similar calls had arrived from the Southeastern Front's supply officer as well. "Heavy fighting is taking place along the whole front;" he wired on 28 August (10 September), "the expenditure of ammunition is enormous; soon the stock will be completely

exhausted. Immediate supply is necessary; the situation is critical."⁹¹ Repeated pleas from the fronts, echoed by similar appeals from both Chief of Staff Ianushkevich and the Grand Duke Nikolai, quickly alerted Petrograd to the need for action to sustain even a short conflict.⁹²

There supply questions were handled by agencies -- in particular the War and Naval Ministries -- that initially underwent little structural change. Having received a vote of confidence from the Duma, the Council of Ministers governed by means of emergency powers provided under Article 87 of the Fundamental Laws.⁹³ These should have given the government sufficient authority in state finance, censorship and other spheres to wage the expected brief war. In terms of mobilizing industry, the relevant statute -- the Law on the Period of Preparation for War of 1913 -- indicated merely that state-owned enterprises were to be given "technical guidance" to ensure that they "developed full productivity."⁹⁴ The actual supervision of army supply was left in general to the War Ministry, and in particular to its Main Administration of the General Staff (GUGSh). Headed after Ianushkevich's departure for Stavka by General M.A. Beliaev, GUGSh was charged with "unifying the activities of all the main supply administrations to achieve the complete and appropriate provision of all forms of supplies to the active army."⁹⁵ As for weapons and munitions per se, the most important of these administrations was the

Artillery Department.

Deteriorating relations between Stavka and the War Ministry quickly isolated GUGSh both from the realities of the front and from any influence on strategic or operational planning. This partly accounts for the skepticism with which GUGSh and the ministry at first greeted pleas for increased munitions and other supplies. In the Artillery Department, this skepticism was fueled by other factors, the artillerists' traditional disdain for the infantry included. They now suspected, for instance, that infantrymen wasted shells and that the artillery, thanks to Sukhomlinov's policies, had become too dominated by the infantry.⁹⁶ These officials especially resented the shells expended to support the allegedly useless second-line divisions. They also quite rightly noted that the infantry was doing little to counter German fire by tactical defensive measures. And having demonstrated that Stavka was mishandling the shells that were available, these officials not unnaturally believed that headquarters was deliberately exaggerating the shortages both to explain its own failures and as part of Nikolai Nikolaevich's vendetta against Sukhomlinov.⁹⁷ For its part, Stavka could not provide details of shell expenditure and those received from front and army staffs often contradicted each other. Further, inspections of the fronts frequently revealed unexpected stocks. And when the War Ministry found Stavka could

account for only a third of the 5,000,000 shells shipped by the end of 1914, the Artillery Department concluded that some 3,000,000 rounds must remain.⁹⁸ Yet its officials themselves were not free of blame. Aside from their prejudices, they themselves had been proponents of both the wasteful 8-gun batteries and the Polish fortresses, whose commanders now hoarded large stocks of much-needed guns and shells, some seemingly being concealed from Stavka⁹⁹ for fear of losing them.

During the initial fighting the problem was largely one of delivering the peacetime stocks on time. This was overcome, as even the critical Golovin admits, thanks to "the energetic measures of the Artillery Department."¹⁰⁰ These ensured that by early December 1914 the 112 "light parks" listed in the mobilization plan had reached the front with full stocks of munitions. But by that time he insists that experience had demonstrated that each 76mm gun needed 300 rounds a month, which entailed assigning 50 parks with some 1,500,000 rounds a month to the field army -- "a task [that] was beyond the power of the Artillery Department." Thus in December only twelve parks "could be relied upon to contain a month's supply." After this, he argues, Russia's unpreparedness for manufacturing munitions, the "catastrophic decrease" in prewar stockpiles, and bureaucratic inefficiency combined to bring disaster.¹⁰¹

But Petrograd (as St. Petersburg had been renamed) had

recognized the problem of meeting the ever-increasing demands of the front. During August and September a series of laws had established special committees to coordinate war-time transport, to stockpile materiel needed by the army and fleet, and to distribute fuel.¹⁰² And despite their suspicions and prejudices, by September officials of the Main Artillery Department or Administration had taken steps to increase the production and supply of munitions to compensate for the unexpectedly high consumption on the battlefield.

A statute of 7(20) September had reorganized this agency. Under a "special chief," it was to be responsible for "completely guaranteeing the state's needs" in armaments and munitions through the efforts of both public and private firms. For this purpose it had three basic sections¹⁰³ for administrative, economic, and technical affairs. But the artillerists still treated requests from the front with considerable skepticism. And even when they acted, their orders had to pass through the ministry's Military Council. There senior generals, conscious of civilian criticism of military accounting practices, and still expecting a short conflict, in September reduced the Artillery Department's order for 2,000,000 shells to 800,000. Indeed, they approved these only on the grounds that their noise would raise the troops' morale. The upshot was that during this period, orders were not placed for even the 5,000,000

rounds per year that Russia could produce.

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As the autumn wore on, even the most optimistic military officials came to accept that the conflict would be protracted. Yet the Artillery Department's distrust of Russian industrialists, and the latter's higher prices, caused the ministry to turn to foreign firms first. Given the French army's demands on that nation's industries, the Russians presented British and American companies with large orders for both rifles and munitions. By November 1914, the Vickers firm already had received an advance of 41,000,000 rubles.¹⁰⁵ Other efforts aimed at promoting full production at Russia's state works. As a result, the Artillery Department expressed confidence that by 1 May 1915, some 1,936,000 rounds would be available (see Table VI), and reported by early 1915 that a total of 14,000,000 had been ordered abroad.¹⁰⁶ To oversee these transactions, purchasing commissions were established abroad. In January 1915 a Russian Government Commission began work in London, and similar bodies eventually appeared in France, the United States, Italy, and Japan.¹⁰⁷ Within the War Ministry itself, on 15(28) February 1915 a decree set up a Special Administrative Commission on Artillery, chaired by Grand Duke Sergei Mikhailovich, to provide tighter central control.¹⁰⁸

Despite this, considerable confusion continued to plague Russian ordering procedures. This sprang both from

the continued rivalry between Stavka and the ministry, and from allied, especially British, interference in the ordering processes. In February 1915, Britain's Lord Kitchener offered his good services directly to Stavka,

Table VI

Shell Expected to be Available as of 1(14) September 1915¹
(000 rounds)

Type of Shell	Russian Production	Vickers	American Production
By 1(14) May			
76mm Shrapnel	820	490	275
76mm High-Explosive	146	100	75
Total	966	590	350
By 1(14) September			
76mm Shrapnel	950	400	250
76mm High-Explosive	315	225	350
Total	1265	625	600
Grand Totals	2231	1215	950

¹ N. Stone, The Eastern Front, 1914-1917, (London, 1975), p. 151.

and not the ministry, in obtaining an additional 10,000,000 rounds from America. Grand Duke Sergei opposed this order on the grounds that Kitchener would do better to expedite Russia's orders in Britain rather than place a new series at double the price in the United States.

Nonetheless, Stavka accepted this offer behind his back. The Artillery Department first got wind of the deal when the British attaché, Lt.- Colonel Alfred Knox, called to obtain the appropriate blueprints two months later. 109 Such confusion was annoying enough, but worse was to come when the foreign firms bitterly disappointed Russian expectations. In 1915 domestic production amounted to 11,200,000 shells, but imports yielded only an additional 1,300,000. More indicative still, by November 1916 only 7,100,000 of the 40,500,000 shells ordered abroad had reached Russia. 110

The story was the same with rifles. After hesitation caused by worries over mixing calibers, the War Ministry placed large orders with three American firms: 1,800,000 from Westinghouse, 1,500,000 from Remington, and 300,000 from Winchester. These were to begin arriving in batches of 100,000 a month in mid-1915, rising to 200,000 a month in mid-1916. But again, such hopes were illusory: by February/March 1917 only 216,000 Westinghouse, 180,000 Remington, and 27,000 Winchester guns had arrived. 111 Meanwhile Russian production had provided an additional 278,000 rifles by 31 December 1914, and 860,000 more throughout 1915, a year in which some 200,000 a month probably were required. 112 As a result of such shortfalls, by June 1915 the shell reserve for field guns fell to under 200 rounds each while in training units in July, five men shared two

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rifles. In the long run, Allied aid did do much to provide machinery needed to expand Russia's war industries. Even so, their short-term experiences left bitter memories among Russian military men. Further, as A.A. Sidorov notes, this reliance on foreign suppliers distracted the War Ministry's attention from the more difficult task of creating an industrial base to reduce the empire's dependence on such imports. 114

Nevertheless, given the unexpected expenditure of all types of materiel in 1914 and early 1915, it is questionable if any other course was open to the government. Initially it had hoped that the administrative reforms just noted would satisfy Stavka's demands. But as the case cited above indicates, Grand Duke Sergei's short-lived commission lacked the authority to deal with the real problems of supply, and it did little to smooth relations between front and rear. Meanwhile the government, using Article 87, continued to strengthen its controls over fuel, food and forage through various committees. Despite this, in the spring of 1915 Stavka's hysterical complaints of shortages continued to grow in volume as the armies retreated. As a result, the need for some more powerful agency became painfully evident. 115

In that May Nikolai Nikolaevich, supported by Duma President Rodzianko, urged Nicholas to create a single powerful agency to solve the supply crisis by "immediately

drawing "all the country's vital forces into the work" and supervising all orders abroad.¹¹⁶ A prototype body, with War Minister Sukhomlinov as chairman, held its first meetings on 14(27) and 18(31) May 1915. Unfortunately bureaucratic jealousies, the renewed aspirations of the Duma's liberal opposition (now organized as the Progressive Bloc), the demands of Russia's great industrialists, those of the smaller concerns represented by Guchkov's War Industries Committees, and the intrigues of Stavka all worked to delay matters. As a result, a really effective agency to mobilize the economy for a war of attrition officially appeared only on 17(30) August. Then the tsar approved a law setting up the Special Conference for the Discussion and Coordination of Measures for State Defense, usually known simply as the Special Council for Defense. Four similar but more specialized bodies followed. These dealt with fuel, transport, provisions, and refugees. But as Figure 1 demonstrates, the first was by far the most powerful and it took the lead in guiding the economic expansion that followed.¹¹⁷

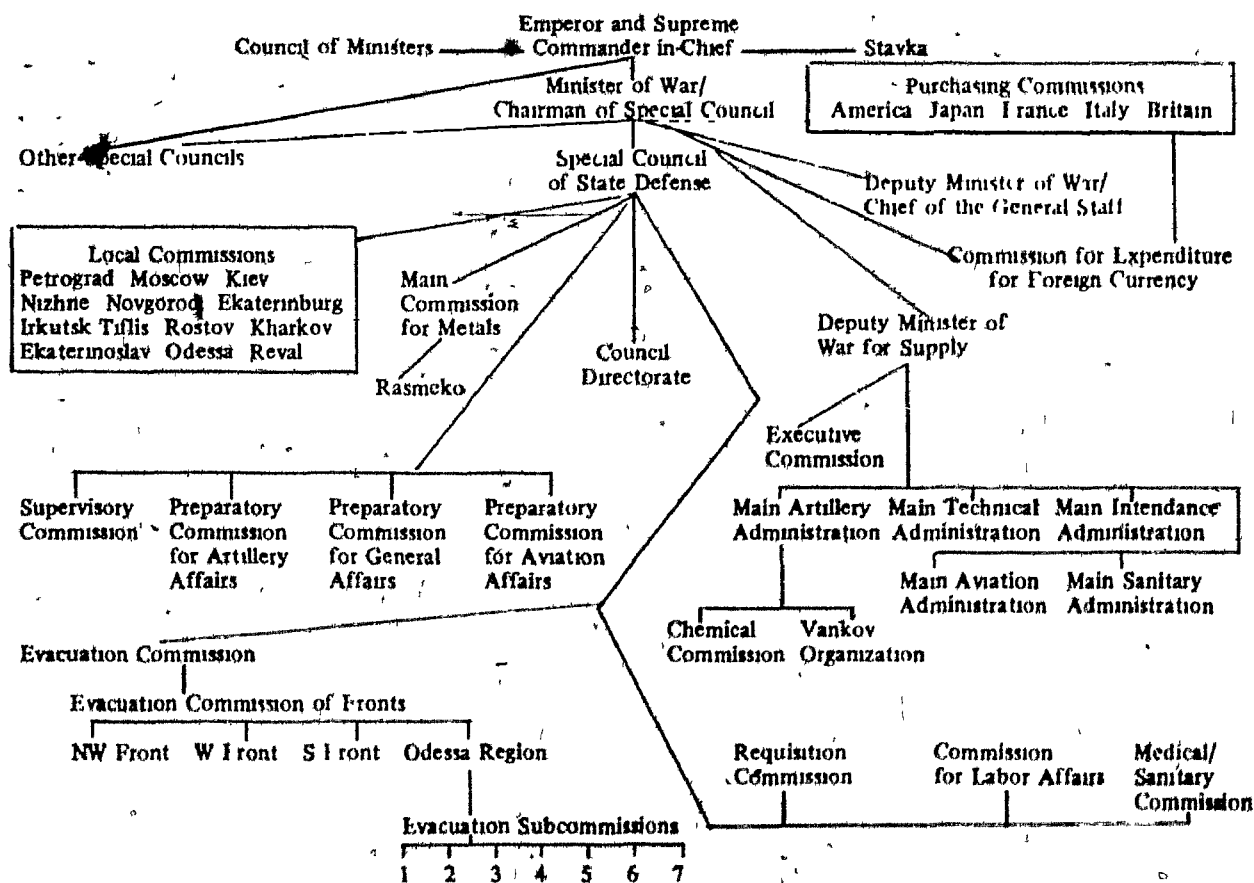
This growth was achieved mainly through a concentration of capital in the larger existing firms rather than through the efforts of the small producers of the War Industries Committees and of the municipal (Zemgor) organizations. It thus resulted in the rapid expansion of large-scale production reflected in the growth rates in Table VII, as well as in tremendous increases in the amounts of war materiel

reaching the front.

By 1917, the output of shells had increased by 2,000 percent, of artillery by 1,000 percent, and of rifles by 1,100 percent. Or to put it differently, by September, 1916 Russian plants were producing 2,900,000 shells a month, a rate which left the Bolsheviks with a shell reserve of 18,000,000 in November 1917. As for artillery, during the

Figure 1

Structure of Special Conference for State Defense,
1915-1917



Adapted from Ia.M. Bukshpan, *politika*, (Moscow, 1929), p. 320.

Voenno-khoziaistvennaia

the war Russian plants turned out 20,000 light field guns while only 5,625 were received from abroad. By 1917 domestic production rose to 900 a month. At that time Russia was providing herself with 100 percent of her howitzers and three-quarters of her heavy artillery. While she still lagged behind her enemies slightly in these last two types (see Table VIII), by the war's end Stavka could count on a considerable superiority in field artillery. The output of small arms ammunition also had grown, reaching 1,482,000,000 a year in 1916. If the total domestic production from August 1914 is added to the 2,500,000 rounds purchased and 400,000,000 captured over this same period, Golovin estimates that the army received some 9,500,000,000 cartridges. As for machine-guns, the 75,946 acquired during the conflict did not meet Stavka's optimum requirements, but the ammunition being received was fully sufficient for the weapons available.

Table VII

Estimated Growth Rate of Russian Economy, 1913-1917¹

Year	Growth Rate	Year	Growth Rate
1913	100	1915	113.7
1914	101.2	1916	121.5
		1917	77.3

¹ A.A. Siderov, Ekonomicheskoe polozhenie Rossii v gody pervoi mirovoi voyny, (Moscow, 1973), p. 350.

Similar figures exist in almost every area of essential supplies. The number of telephones, for instance, rose from 10,000 in 1914 to 50,000 in 1916. Meanwhile Russia's five major automobile works, supplemented by imports and the output of smaller shops, had equipped the armies with 5,300 cars, 1,350 motorcycles, and 3,500 bicycles by 1(14) January 1916. In that year they produced another 6,800

Table VIII

Balance of Forces on the Eastern European Front,
October 1917 (Caucasus excluded)¹

	Russia	Austro-Germans
Infantry (Bayonets)	2,116,700	1,178,600
Cavalry (Sabers)	110,600	39,000
Field, Horse & Mountain Guns	6,730	4,170
Light Howitzers	1,226	1,690
Heavy Guns	1,139	2,230

¹ E. Barsukov, "Russkaia artilleriia v mirovoi voine," Voennaiia mysl', (1939), no. 7, p. 65. By this time, of course, some German units had been transferred to the Western front.

cars, 1,700 motorcycles, and 8,800 bicycles. While even these increases did not completely meet Stavka's demands (for 19,300, 13,600 and 9,300, respectively), they are particularly indicative of the war economy's growing potential.¹²⁰ On the basis of such figures, Stone argues

that by January 1917 Russia enjoyed a "considerable superiority not only in men, but also in materiel."¹²¹ Some may consider this judgement exaggerated, but the fact it can be made seriously in itself illustrates the effectiveness of both the Special Councils and of Russian industry. However, these impressive results were achieved only at the cost of a massive effort that did much to create conditions of domestic discontent and revolt.

* * *

One paradox of Imperial Russia's war effort is that if both enemies and allies alike underrated her economic potential, they both also overrated her ability to fuel a "Russian steamroller" with almost unlimited numbers of peasant conscripts. Yet for a variety of reasons, it was precisely in the area of manpower that by late 1916 the military authorities faced their most acute problems and demonstrated their greatest "political ineffectiveness." In large part, these difficulties sprang from the problems of imposing the modified conscription law of 1874 on a vast population comprised of Slav peasants and numerous other diverse nationalities. During the war, however, the inefficiency of military officials and the incomprehension of civil bureaucrats further compounded the situation. The net result was that by 1917, Russia faced a manpower crisis that neither the military nor government seemed capable of

resolving. Further, the steps already taken to do so in the end contributed directly to the downfall of the tsarist régime.

While space does not permit a detailed investigation of all the issues involved, their general contours will suffice for our discussion. According to data of the Ministry of War, in 1853 the Imperial Army had entered the Crimean War with a strength of some 1,112,000 men.¹²² The overwhelming majority of these had been conscripted from the peasant serfs, state peasantry and other commoners, both rural and urban, who paid the hated head or poll tax. Since 1834 they had been obligated to serve 20 years, a reduction of the earlier 25-year term, but still a virtual life sentence. Along with the often brutal conditions of service life, this goes far to explain the average Russian's traditional dislike of rendering service personally. The government meanwhile had to maintain a massive professional army, a very costly proposition in terms of both the state's human and fiscal resources. Worse still, the war of 1853-1856 demonstrated that despite the heroism of Sevastopol's defenders, this force's effectiveness in combat was far from satisfactory.¹²³

Military considerations played a significant role in the reforms instituted by Alexander II after 1856.¹²⁴ The measures reorganizing the armed forces culminated in the law on military service of 1874, termed by Wildman "the

most radical social measure of the reform era" (after the emancipation of the serfs in 1861).¹²⁵ Inspired by the concept of "the nation in arms," which many believed lay behind the German-Prussian victories of 1864-1871, War Minister D.A. Miliutin and his colleagues sought to transplant this model into a modernizing Russian empire. According to Alexander II's manifesto on conscription of 1(13) January 1874,

the strength of the State does not depend exclusively on the number of its troops, but is based chiefly on the moral and intellectual qualities of the army, which can be fully developed only on condition that the defense of the country has become the common task of the people, and when all, without distinction of rank or class, unite in that sacred cause.¹²⁶

The law itself reiterated this patriotic sentiment by declaring defense ~~of~~ throne and country to be "the sacred duty of every Russian subject."¹²⁷ In this manner, the third element of the military's trinity -- "Faith, Tsar and Fatherland" -- was given more modern definition. However, the first two remained as before. As late as 1912, new Field Regulations considered the empire's polyglot troops to be "Christ-loving" defenders of the Tsar and Orthodoxy.¹²⁸

This juxtaposition illustrates the major obstacle inhibiting the creation of a true "nation in arms" within Russian reality of that day. True, after 1905 at least 20 percent of the adult males of most major social groups

(peasant householders, factory workers, artisans, small proprietors, merchants of the first two guilds, tradesmen, lower officials, and so on) had passed through military or naval service and returned to civilian life. This experience may have taught them much, but not necessarily the sense of modern nationalism that many reformers had hoped this "national university" would instill. Here Wildman is probably correct in concluding that the reform "was based on a concept that conflicted too much with the mores of society at large to create the hoped-for sense of enterprise shared by soldier and officer alike. The legacy of serfdom, driven out of the front door, filtered back through all the side doors and windows." 129 130

As Wildman points out, Miliutin had designed his legislation on the model of Prussian reformers like Gneisenau and Scharnhorst, and with the expectation that educational and other measures would create in Russia feelings of civic responsibility similar to those found in Germany. These did not appear, and even the literacy courses for peasant recruits, stipulated in the law of 1874, received a low priority at best before 1905. Older officers had little time or talent for such work while their younger colleagues frequently were overburdened by other duties and, from the 1880s on, hampered by economic restraints. During this same period, society's growing antimilitary sentiments made an officer's career less and less attractive for an educated 131

youth. Interestingly enough, the rise in nationalist spirit after 1907 saw a parallel increase in the officer's role as educator of the masses, even if the old army never achieved the goals set by Miliutin and his colleagues.¹³²

In this regard, the army's difficulties were complicated still further by the educational exemptions of the conscription statute of 1874. Whole categories of educated professionals (i.e., teachers, doctors and veterinarians) were freed completely. Further, the normal term of service was reduced to six months for those with university degrees, and to eighteen months for graduates from gymnasiums. The educated also had the option of taking officer training as a "volunteer" for one (after 1912, two) year. After this, they entered the reserves as a praporshchik or ensign. Wildman quite rightly describes them as "incorrigible civilians in uniform and an awkward presence in the military environment."¹³³ In addition, they also had little impact on the mass of worker and peasant commoners who comprised the army's rank and file.¹³⁴

The split between these "two Russias" -- that of educated "society" and that of the peasant-worker masses -- has been noted. It was especially evident in July/August 1914. All observers recall that educated Russia greeted the news of war with outbursts of patriotic fervor, and many assumed the lower orders shared this sentiment. Yet as numerous contemporary sources attest, in many places the

peasants answered the callup with riots and drinking bouts that recalled the fatalistic send-offs given recruits entering the old army of Nicholas I.¹³⁵ General Golovin nonetheless remained convinced that the formula "For Faith, Tsar and Fatherland" was "for the bulk of the common people in 1914, the voicing of a kind of national ritual." He maintains that in comparison with the West, Russian patriotism was of "a much more primitive sort."¹³⁶ The disorders he explains "by the crude simplicity of the mass of the Russian people," but he insists that among them (unlike the numerous intellectuals who sought safer work with the voluntary organizations), 96 percent of those called up reported for duty.¹³⁷

Nonetheless, other observers were less sanguine. Golovin himself quotes Colonel B.A. Engelhardt, a member of the Duma's Military Commission, to the effect that "the Russian peasant served unwillingly."¹³⁸ Again, General Yu.N. Danilov insisted that the "people proved that they were unprepared psychologically for the war. Most of the people -- the peasants -- scarcely understood why they were going to war ... [and] answered the call because they were accustomed to doing everything that the government ordered them to do. They passively bore their cross with patience until the final ordeal arrived."¹³⁹ Here Wildman's analysis probably approaches the truth. While admitting the peasant soldiers frequently felt mystical veneration for the tsar's

person, he considers the view that this equalled patriotism to be "a gross miscalculation." Pointing out that peasants in general feel little "identification with the goals of the larger society or with such abstractions as the nation, the state, or the empire," he argues that their veneration of the ruler did not carry over to the army. This institution, like the rest of the state's "hierarchy of authority, ... [was] fundamentally alien and illegitimate" to members of this class. Treating the war as fatalistically as he treated a natural catastrophe, and knowing "that to resist the military obligation could only mean his ruin," Wildman's peasant recruit submitted to the tsar's will and prayed to the Saints for their protection. ¹⁴⁰

One might argue as well that high levels of illiteracy among the rank-and-file made it difficult to imbue the army with any sense of purpose, especially during a total war such as developed after 1914. According to the census of 1897, only 20 percent of the population had a primary school education, and only 1.1 percent had attended secondary schools or universities. ¹⁴¹ These levels had risen by 1914, but even so they remained very low by British, French or German standards. Yet the rapid spread in 1917 of revolutionary ideas, in which agitational pamphlets and party newspapers played a major role, suggests that illiteracy itself is no barrier to successful propaganda. Rather it seems that the ideas of 1917 -- the promises of peace

and land struck chords within the common soldier's psyche that the Turkish Straits could not touch. ¹⁴² Here, too, the gulf between the two Russias hindered official efforts. Indeed, even such a popular orator as War Minister A.F. Kerenskiĭ often used language in ways that peasant soldiers misunderstood. When he urged troops on the Southwestern Front in 1917 to fulfill their "duty" (dolg) to the revolution, some soldiers asked their officer if this meant that they owed a greater debt (dolg) in taxes. ¹⁴³ In view of this, Nicholas II's efforts to rally the army during 1915-1916 by exploiting the mysticism attached to his person, may have displayed more political insight than ¹⁴⁴ hitherto realized.

The above discussion may suggest that the human material available to Russian generals was of dubious military quality. Yet these same peasant soldiers had fought with Peter at Poltava in 1709, won Frederick the Great's grudging respect at Zorndorf in 1758, followed Suvorov across the Alps in 1799, repulsed Napoleon in 1812, and eventually stormed Plevna in 1877. Even when the Russians left a field without victory, foreigners remained impressed with their qualities, and with the power that these placed in the hands of their superiors. Thus a British observer in Manchuria during 1904-1905 noted that while recent defeats might "make the Russian Army appear greatly inferior to what it really is; ... taken as a whole, [it] is distinctly

a good one." ¹⁴⁵ Further, the upsurge of resistance to the French invaders during the Patriotic War of 1812 suggests that some "primitive" patriotism might well exist, at least during defensive struggles. And as the battles of 1914-1916 demonstrate, even "unwilling" peasant conscripts frequently could display a prowess that the above, quasi-sociological analyses would seem to belie.

Possible reasons for this apparent contradiction will be considered later. For the moment, let us return to the conscription law itself and the quantitative aspects of the manpower issue. To begin with, despite the principle of the universality of military service, the figures cited above suggest that only about one-fifth of those eligible actually entered the ranks. Apart from educational exemptions, the statute contained a series of other articles that freed Finns, Central Asians, married men, only sons, at times Jews, and so on. ¹⁴⁶ As a consequence, the army inducted only a portion of those physically fit and otherwise suitable. In 1874 the recruit contingent therefore numbered only 150,000, a figure that rose to 235,000 in the 1880s, 320,000 by 1900, and 450,000 in 1906. It was to be raised to 585,000 by the "Grand Program" of 1914, but even this ¹⁴⁷ represented merely a third of the men available.

The reason for such deliberate shortfalls is obvious: the army simply lacked the ability to absorb and support greater numbers. There were limits to the number of

recruits it could house, equip and feed with the resources available, and train with the existing officers and NCOs. To some extent this consideration inhibited all armies. But in Russia, vast distances and other factors raised these administrative and intendantstvo (clothing, food, fodder, etc.) costs still further. As Stone points out, in the 1870s supply consumed more than 100,000,000, and administration some 19,000,000, of the army's annual budgets of some 172,000,000 rubles, and by 1913-1914 these categories absorbed 450,000,000 out of 580,000,000 rubles.¹⁴⁸ Military men thus had to reckon that the more men they trained, the fewer funds would be available for capital investment in munitions, artillery or other items. In April 1909, the War Ministry estimated that it cost 350 rubles per annum to support each enlisted man.¹⁴⁹ And since everyone foresaw a short war, neither the War Ministry's Main Staff (Glavnyi Shtab) nor the Military Districts' recruiting offices ever imagined that one day Russia would need all eligible conscripts in the various categories established in 1874.

In accord with the conscription law, the annual contingent was selected from all males who had turned twenty-one by 1 October of a given year. After exemptions had been granted, the required number of recruits were drawn by lot. During the 1870s-1880s, this meant that some 48 percent were exempted and 25 percent freed by the lottery. The

government, sought to maintain a peacetime army of some 800,000 permanent cadres and conscripts, backed by roughly 550,000 reservists. This large standing force seemed justified by Russia's vast distances and still underdeveloped transport system, factors that hampered a rapid mobilization of the reserve. Since training the often illiterate peasant soldiers allegedly required more time than did that of the better educated West Europeans, Russian conscripts served longer. The law of 1874 set the period of active service at five years (for the infantry and artillery), as compared to Prussia's three, and that of service in the active reserve (zapas) at nine. The reservist then passed into the opolchenie, often called the militia or territorial army in Western works, until the age (before 1906) of 38.¹⁵⁰

Young men who escaped direct service also were enrolled in this territorial force. The standing army and reserves proper both comprised fighting units that immediately took the field. The opolchenie, on the other hand, was to form a pool for replacements once the reserves had been exhausted, and to provide a basis for forming territorial units for rear service. These duties corresponded to two classifications of militiamen (ratniki opolcheniia), divided on the basis of family situation and of age. The first category or razriad contained ex-reservists, aged thirty-nine to forty-three, and provided the active army's first-line

replacements.

By law the reservists proper were obligated for up to two periods of annual training. These were not to last longer than six weeks. In fact, the periods usually were considerably shorter because of limited funds. Those with three full years of active service normally were recalled once a year for two weeks, and those with less active service, twice a year for three weeks. As for the territorial ratniki, they received no official training whatsoever. In addition, they were not considered attached to any particular unit. When called up in wartime, they entered a common pool in their respective military districts. There they received rudimentary training before receiving their assignments.

After 1874 changes were introduced into the periods of active and reserve service. In 1888 the War Ministry sought to cut costs and increase the wartime pool of reserves by reducing active service to four years while increasing time in the reserves to 18. Again, in 1906 it cut the active term back to three and that in the reserve to 15, but added five years to service in the opolchenie (to age 43).¹⁵² By 1(14) April 1909 the Ministry reported that the army, border guards, and Corps of Gendarmes contained 1,348,769 men. This figure represents 1.8 percent of the empire's male population, Finland included. Sukhomlinov then sought to raise his service's strength by a reorganization. By

1910 this had raised battalions in the wartime field armies from 1,110 to 1,252 by reducing the number of wartime reserve battalions to be maintained from 671 to 560. But if this measure cut expenses and improved the quality of the reserves, it did not affect the actual conscription procedures:
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A change came with the new Law on Military Service of 1912. This retained a three-year term for those inducted into the infantry and foot artillery, four years for the horse artillery and other branches, and five years for the navy. The corresponding terms of reserve service were 15, 13, and five years respectively, with 43 retained as the cutoff age for the opolchenie. The statute also removed educational distinctions that divided volunteers into two groups in terms of service. Now both categories served for two years, although this term might be reduced by four to six months if they passed an officer's qualifying exam.
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In addition, in that year a new mobilization plan, which incorporated new and seemingly sound military principles, took effect. It was worked out by Sukhomlinov's protégé and Chief of the General Staff's Mobilization Section, General A. S. Lukomskii. As a result, a large number of units, with their staffs and equipment, were redeployed deeper within the empire's interior to accord with the pattern of population densities. Until that time, they had been concentrated in frontier Military Districts and with the

outbreak of war, brought up to strength with reservists from the interior. Now units would reach full strength in their new quarters, and then move by rail to their points of concentration as combat-ready entities. Kept effective by trial mobilizations in the immediate prewar years, Lukhonskii's plan deserves much of the credit for the smooth and rapid concentration of the tsar's forces in 1914. However, the complexity of the scheme was such that during the July crisis the generals feared a partial mobilization against Austria would hopelessly confuse any later, full mobilization in response to subsequent German actions. They therefore pressed Nicholas II for a full mobilization, even though few doubted that this would make war inevitable. In this sense, then, military effectiveness in a technical regard diminished the government's ability to use its armed forces as a flexible instrument for deterrence.¹⁵⁵

In some ways this is also true of the "Grand Program" that Nicholas II approved on 24 June (7 July) 1914. Its impact on future manpower had been outlined earlier in a law of 1(14) May 1914. This ordered an increase in the army's strength of 11,592 officers and 466,178 enlisted men.¹⁵⁶

Along with the intended increases in armaments noted above, this undoubtedly alarmed German planners and played a part in their insistence on forcing a decision during the Sarajevo crisis.¹⁵⁷ Here too, one might argue, the

soldiers' very success in obtaining resources for expanding their forces helped to bring about precisely the situation that the political leadership sought to avoid.

Since the "Grand Program" never took effect, war found Russia with an army that numbered, as of 1(14) January, 158 40,238 officers and 1,145,244 men. The addition of border guards and the Corps of Gendarmes presumably explains the figure of 1,423,000 given by early Soviet statisticians, 159 as the army's strength on the eve of the mobilization. In any case, at this time Russia still trained only 25 percent of its eligible males, as compared to Germany's 52 and France's 80 percent. 160 The thought of the remaining untapped millions fuelled dreams and nightmares of "the Russian steamroller." These visions seemed confirmed by the mobilization of 3,115,000 reservists on 18(31) July, 800,000 first-class militiamen on 22 July (4 August), a further 300,000 territorials on 22 September (5 October), and the 715,000 drawn from the annual recruit contingent on 1(14) October. With the 200,000 additional first-class territorials inducted in November, Golovin estimates that 6,553,000 Russians had been enrolled by the 161 end of 1914.

There is considerable confusion about the total mobilized by October 1917, and about the casualties suffered by that date. In large part this results from the difficulties the War Ministry's Main Staff had in keeping accurate

records in both areas. Comprised of five sections, it functioned as the army's personnel and statistical office. In explaining its failure to keep abreast of events, Stone insists that it "was run, almost by definition, by incompetents, who had failed to make a career in anything other than this department, which was regarded as a waste-paper-basket." He maintains that the real problem was that its "few dozen dim-witted officers" continued routine record-keeping until the immensity of the numbers involved overwhelmed them and they "could produce nothing beyond enlightened guess-work." ¹⁶² This judgement is unduly harsh to the overworked and under-staffed officials involved. Like everyone else, they too had prepared for a short conflict. Further, throughout the war's first year Stavka's vendetta with the Ministry, along with the vastness of the front and chaos of the Great Retreat, made serious statistical work impossible. Although some of these difficulties disappeared in August 1915 with Nikolai Nikolaevich, by that time the damage was done and, as Stone puts it, the Glavnyi Shtab "succumbed." ¹⁶³

In discussing the numbers mobilized, Golovin used statistics published by Soviet experts in the 1920s. He gives a figure of 15,378,000, which he rounds to 15,500,000, recruited by 1(14) October 1917 (see Table IX). This is slightly higher than the figures of his Soviet contemporaries, who gave estimates of just over 15,000,000. ¹⁶⁴

figures match the data provided to Knox in October 1917 by the General Staff's Mobilization Section, which set the number at 15,150,000, as well as the estimate made in the autumn of 1917, by the Provisional Government's last War Minister, General A.I. Verkhovskii.¹⁶⁵ Stone, on the other hand, has reviewed more recent studies and concludes that a little over 14,000,000 were inducted out of a total population of 180,000,000.¹⁶⁶ This corresponds to the figure provided to the Council of State Defense of 14,500,000 by November 1916.¹⁶⁷ Stone also puts his figure into perspective by noting that it represents fewer men than those conscripted in Germany from a population of 65,000,000, and only slightly more than in France from its 40,000,000 inhabitants.¹⁶⁸ So clearly, the "steamroller" had failed to arrive.

Worse still, the Imperial military system lacked either the will or the means, or both, to draw on its remaining reserves. This explains the manpower crisis that emerged at the end of 1916, when the government contemplated the problem of maintaining the army's strength if hostilities continued beyond the campaign of 1917. When the conflict began, the active army contained the conscripts of the years 1911, 1912 and 1913. It was fleshed out by reservists (c.2,800,000 according to Stone) who had passed through the ranks between 1904 and 1910. They were supported by Cossacks and various territorial units, who guarded

bridges, depots, and so on in the rear. All in all, the mobilization of July 1914 affected some 4,500,000 (Stone) to 4,700,000 (Golovin) men, territorials evidently being excluded. Of that number, Golovin estimates that 3,500,000¹⁶⁹ formed the field army. However, casualties were much higher than expected, perhaps averaging 300,000 to 400,000¹⁷⁰ a month over the course of the war. In the first months,

Table IX

Estimated Numbers Called Up, 1914 - 1917¹
(in 000s)

	To 31 Dec., 1914	To 31 Dec., 1915	To 31 Dec., 1916	To 1 Oct., 1917
Unmobilized Strength, 1914	1,423	1,423	1,423	1,423
Reservists	3,115	3,115	3,115	3,115
1st Class Ter- ritorials:				
From Reserve	400	400	400	400
No Previous Re- gular Service	900	2,385	2,705	2,705
2nd Class Ter- ritorials	---	1,325	3,045	3,075
Recruits	715	2,952	3,860	4,460
Reexamined Men	---	---	100	200
Totals	6,553	11,600	14,648	15,378

¹ N.N. Golovin, Voennye usiliia Rossii v mirovoi voine, (2 vols.; Paris, 1939), v. I, pp. 95-96.

losses were even higher. Golovin maintains that the field army would have reached full strength only after 1 October, but estimates that by that time losses had reduced its numbers to 2,700,000, and to 2,000,000 by 1 December 1914.¹⁷¹

Casualty figures are even more debated than the above. The figures available range from below 4,000,000 to 11,000,000. The arguments need not be rehearsed here, but Stone probably is right in accepting the recent Soviet figures of from 7,000,000 to 7,500,000, from which he draws the monthly average given above. By 1917 this total included the 2,400,000 prisoners-of-war claimed by the Central Powers, and probably some 1,600,000 to 1,850,000 killed in action or dead of wounds. Of the total losses, the army suffered some 4,000,000 killed, missing, prisoners, and wounded between August 1914 and December 1915, and another 3,000,000 during 1916. The task facing the tsar's recruiters is clear from the replacement figures for 1915. Official reports put the field army's strength at 3,850,000 men in that January, its losses by 1 September at a minimum of 2,400,000, and the number of replacements reaching it by that date as only 2,300,000.¹⁷²

Since casualties far surpassed prewar expectations, the authorities quickly found themselves desperately searching for new sources from which to replenish the army. Although figures, again vary, the basic groups available are listed

in Table IX. The first obvious choice was the trained reserve, men who had served in the fifteen annual contingents of 1896 to 1910, inclusive. They should have yielded 5,000,000 men, but in fact it is doubtful if more than 3,115,000 actually entered the ranks, mainly as a result of the initial mobilization. The next available categories were the territorial ratniki, first class; that is, older men who had passed into the militia from the reserves, or younger men who had escaped regular service by lot. According to Golovin, 400,000 of each group were called up on 22 July (4 August), the fifth day of mobilization; another 500,000 later in 1914; 1,485,000 in 1915; and 320,000 in 1916.¹⁷³ In all, these two groups may have given the armed forces 3,000,000 men over two and a half years. Yet most of this vast reservoir "was frittered away in 1915 faster than it was being tapped" and, as the figures illustrate, by 1916 the well was running dry.¹⁷⁴

Another obvious source of replenishment was the annual recruit contingents of 20-year-olds who became liable each October. Although officially set at 550,000 men, during the war the authorities took all those available. By mid-1915 they also moved to anticipate forthcoming contingents up to 1918. By the year's end they had secured passage of a new law affecting those of 1919 as well. Another law of October 1915, meanwhile had permitted a reexamination of past exemptions, but Bureaucratic problems so hampered the

process that this measure netted only some 200,000 to 250,000 additional recruits.¹⁷⁵

This left the regime with the territorial militia, second class, as its last resource. In order to draw on it, a new law was rushed through the Duma in August 1915. This act underlines Russian "society's" commitment to the war. But the division between it and the masses became immediately clear when the first 900,000 20 to 24-year-old only breadwinners were conscripted for front-line duty in September, and two more age groups in October. When officials attempted to raise these levies, their efforts sparked riots in numerous centers throughout the empire. As Stone points out, here the real limits on Russia's attempt to create a nation-in-arms by conscription are glaringly obvious: "the government rightly feared that, if they [the recruiting-sergeants] became more [efficient], it would be swept away in a tide of popular indignation."¹⁷⁶ This fear, the lack of records in many district offices, the demands of industrialists for exemptions for their workers in towns where records existed, and numerous other bureaucratic and social obstacles, explain why this category -- which presumably included two-thirds of Russia's males -- in the end provided just over 3,000,000 men for the armed forces.¹⁷⁷

By 1916 the government faced a manpower crisis of major proportions. Its attempts to extend conscription to previously exempt non-Russians led to riots and, in Central

Asia, a native uprising of serious proportions. ¹⁷⁸ Meanwhile the call-ups of 25 March (7 April), 25 August (7 September), and 20 September (3 October) had embraced the remaining militiamen, first class, and made liable those of the second class aged 27 to 37. On 25 October (7 November), a last draft of 350,000 second-class ratniki, aged 38 to 40, joined the colors. With the 150,000 first-class, over 40-year-olds taken in October, these family men were crowded into the large, under-officered training battalions that made up Russia's rear garrisons in early 1917. As such, they played a significant role -- especially in Petrograd -- in the February Revolution. ¹⁷⁹

These overaged restless conscripts were clear evidence that "the giant Russian 'steamroller' was running out of steam." ¹⁸⁰ Recognizing the extent of this problem, the authorities, with some trepidation, prepared to attempt to dip further into the second-class opolchenie. Meanwhile Stavka sought to underplay the problem to the Allies. Indeed, on one occasion it even ordered the General Staff to draw up a false set of statistics for the British ¹⁸¹ attaché, Knox. Yet this discussion of the problem of rank-and-file combatants should not distract attention from three interrelated and equally important aspects of the manpower issue: those of technically competent personnel, non-commissioned officers, and officers proper.

The first category obviously affected the others. Given

the educational levels noted above, the pool from which to draw command personnel of all types was strictly limited. At the same time, one should not assume Russia was technologically ignorant. Although educated "society" might comprise a thin stratum at the top of the social edifice, within it many had become increasingly fascinated by technology and its applications during the prewar decade. This in some ways contrasts with the intelligentsia's oft-cited loss of interest in politics after 1907, and it found its expression in adherence to the technocratic ideas espoused by D.I. Mendeleev, V.I. Grinevetskii, and others. In a more practical form, it is evident in the enthusiasm with which many Russian youths embraced aviation after 1909-1910.¹⁸² At a lower level, continuing industrialization, also meant a growing working class with the technical skills needed for modern battle.¹⁸³

Even so, the numbers of both groups remained small by West European standards. This, along with the traditional dislike of the soldier's profession felt by many Russians of all classes, meant the armed forces faced chronic shortages of both officers and NCOs. Thus April 1914, despite recent measures to make military careers more attractive and an upsurge of nationalism since 1908, found the army 3,380 officers short. The situation with regard to NCOs was equally disturbing. In 1900, according to General A. Rediger, Germany had an average of 12 reenlisted NCOs

serving with each company in peacetime, and France had six (corporals excluded). Russia, on the other hand, had only two. This placed her below even similarly multinational or peasant-based European armies. Thus Italy (corporals excluded) and Austria-Hungary each had three such regulars¹⁸⁴ per company. Golovin suggests this was the case in 1914. If so, it is striking evidence that despite the planning of measures after 1907 for the creation of the necessary cadres of long-service regulars, very little had been achieved in practice. For in 1903 the War Ministry had reported that the army contained only 12,109, or only 46 percent, of the 23,943 re-enlisted professionals it required.¹⁸⁵

This failure to provide the basis for a real NCO class within the service was the major failure of Miliutin's reforms. Surprisingly, there has been very little scholarly investigation of this vital element of the tsarist army. A number of factors seem to explain the continuing shortage: the lack of a numerous artisan and petty bourgeois stratum, as well as of an independent self-sufficient class of peasant landowners; the low pay and lack of prestige associated with non-commissioned service; the traditions of a society that until recently had been semi-feudal; and so on. Thus unlike their counterparts in Britain or Germany, tsarist NCOs generally lacked special traditions and institutions (e.g., their own messes). For the most part, they

were appointed from literate and preferably rural conscripts as needed, although some did receive special instruction in training commands in the military districts. As noted, while the authorities had long recognized the need for change, by 1914 little had been done. The Imperial Army still relied mainly on the company sergeant-major, backed by one or two regular senior sergeants and their conscript juniors, to ensure that the ranks maintained at least the appearance of discipline and reached minimal standards of competence -- a situation that naturally increased the burden on the junior officers.¹⁸⁶

The ensuing conflict quickly exhausted the numbers of regular NCOs that did exist, especially in the infantry. Again surprisingly, the new mobilization plan introduced in 1909-1910 had made no distinction between NCO and ordinary combatant reservists. The replacement of NCOs therefore proved particularly difficult, especially since opposition from the front commanders prevented the transfer of those in cavalry regiments to the sorely pressed infantry. In an effort to replace them and provide for an expanding field army, the War Ministry established special "training companies" in reserve units for men with experience at the front. Although initially this effort gave "completely unsatisfactory results," by the end of 1916 one such company usually existed in each of the 162 "training battalions" set up to train the flood of wartime

conscripts. Nonetheless, at that time the armed forces were still woefully short of NCOs who could link the masses of mobilized conscripts to their officers. 187

Worse still, by 1917 the nature of the officer corps itself had changed drastically. According to data of the War Ministry, the 40,590 peacetime regulars of April 1914 were supplemented upon mobilization by the arrival of 20,740 reservists. According to General Yuri Danilov, Sukhomlinov's recent reform of the volunteer system had actually reduced the number of reservists by keeping volunteers longer with the ranks. In any case, the number available fell short of requirements and emergency measures -- the recall of over 1,000 retirees, the enlistment of qualified allied and Slav citizens, and reassignment of students at the Staff Academy -- gave a handful more. In addition, close to 3,000 soldiers with the appropriate education received immediate promotions, a measure that further increased the pressure on the NCO cadres. In all, this provided the wartime army of 1914 with a total of roughly 70,000 commissioned personnel. But the power of modern weapons, abetted by the desire of many regulars to win fame and promotion by feats of glory, quickly decimated their ranks. Stavka tried to reduce their vulnerability by recommending that officers cover or remove their epaulets, and that they carry rifles rather than sabers and pistols. Even so, by July 1915 officer casualties may have numbered

some 60,000, although many of these returned to their units after recovering from wounds.¹⁸⁸

Nonetheless, by that time the army's officer cadres had dropped to around 40,000 effectives.¹⁸⁹ The import of these figures is clear from General Alekseev's letter of August 1915 to Polivanov, Sukhomlinov's recent replacement as War Minister. Noting that some regiments in vital sectors of the front had lost half of their officers, he expressed fears for the army's future.¹⁹⁰ However, worse was to come. By September some sources maintain that it was rare for over a dozen officers to be found in front-line regiments, and in December of that year the War Minister reported an overall shortage of 15,777. Apart from lowering the combat effectiveness of the field armies, this situation also hindered the training of the recruits in the training battalions, from which they were expected to emerge as soldiers after a mere six weeks.¹⁹¹

As with munitions, the empire's mobilization for total war did much to solve this particular aspect of the manpower issue. Throughout the conflict's first year, the War Ministry had to satisfy itself with appealing to educated Russia for officer volunteers. Many youths satisfied their patriotism instead with service in the hospital and rear support network which the Duma and "Voluntary Organizations" of Zemgor established and operated with lavish government subsidies. In this way they remained exempt from

military service. Meanwhile the Council of Ministers, partly because its members "resented the waste of talented men on the army, partly because they feared what the educated classes would do if the State leant on them," had refused to permit the mobilization of university students until the end of 1915.¹⁹² After that matters improved, and by 1916 the army had 80,000 officers. In 1917, the War Ministry reported as of 1(14) January, that since April 1914 the number of serving officers had risen to 145,916, that 62,847 had been lost, but that command vacancies had been reduced to a mere 226.¹⁹³ Other sources give slightly higher figures. These maintain that by May 1917, the army still contained some 133,000 commissioned ranks, and that since July 1914 107,000 had been killed, wounded, captured, or reported missing.¹⁹⁴ And of course, all these figures exclude the fleet, which in 1917 had some 7,000 commissioned ranks.¹⁹⁵

While figures are as unreliable here as in other aspects of the manpower issue, it is safe to agree with Peter Kenez that (at least) 170,000 young Hungarians were commissioned during the war, of whom perhaps 130,000 entered service as ensigns.¹⁹⁶ While a number, especially from 1916 on, were soldiers promoted from the ranks, the overwhelming majority were graduates of accelerated courses in military schools, or products of the newly created military academies.

infantry officers in four months, but devoted eight to training specialists for other branches. In all, the military schools gave the army a reported 18,929 officers in 1915, a figure that grew somewhat over the next year. By the end of 1915, on the other hand, there were 34 ensign schools, with 200 to 400 students each, that by 1916 could provide annually as many as 40,000 men fit for positions as senior warrant or junior commissioned officer. The admission requirements for these schools were lower than for the accelerated officer courses, but under pressure of events, even the latter drastically lowered both their educational and social standards. 197

In these ways the War Ministry managed to meet the army's need for commanders. But it did so only at the cost of drastically changing the nature of its officer corps, especially at the lower and middle levels. By 1917, only some 10 percent of the pre-1914 regulars remained with the army, and many of these held staff positions far removed from the troops. 198 This meant that at the regimental level, the great majority of officers were either wartime graduates or men promoted from the ranks (usually from another regiment). 199 Meanwhile, as the figures cited earlier indicate, the turnover of enlisted personnel had been even more spectacular. The Life Guards Grenadiers, for instance, had entered the conflict with 4,000 men, and seen 44,000 men pass through its ranks during the conflict.

course. By early 1917, according to its official historian, it was comprised almost solely "of young officers whose graduation had been hastened, line officers transferred to the regiment, soldiers called up from the reserves, and badly trained recruits." 200

* * *

The above analysis of the "political effectiveness" of the Imperial army suggests a number of seemingly contradictory conclusions. On the one hand, official Russia remained willing and surprisingly able when it came to supplying the fiscal and material sinews of war. And while the well was just about dry, the army had continued to receive the necessary reinforcements, even if the quality often was far from satisfactory. But on the other hand, the very efforts required demonstrated the limits of the prewar military and civil bureaucracies. By 1917 this was especially evident in the looming manpower crisis. But it was apparent as well in the problems still plaguing the railway system and the associated difficulties of supplying industrial centers with fuel and coal. In the armed forces proper, Stone is probably near the truth in arguing that "the old army's structure" collapsed 201, or rather was overwhelmed, in 1915. Nonetheless, enough talent remained both to rebuild it and win a series of stunning victories in 1916, and to mobilize the empire's economy for the production of the necessary materiel.

All these successes, however, entailed substantial political costs and dangers. The fiscal effort brought inflation, the industrial mobilization brought underpaid overtime work and shortages of consumer goods, and the military effort changed the army's composition and badly weakened its old ideals of service. By December 1916 there was ample evidence of low morale on both the home and war fronts.²⁰² This was not, of course, an exclusively Russian phenomenon. But it was particularly dangerous in the tsar's empire thanks to the ongoing political struggle between ruler and Duma. Although both were steadfast behind the Allied cause, influential elements of the latter were determined to undermine the military's loyalty to the existing regime in their efforts to gain major political concessions. Indeed, some were prepared for a coup d'état if necessary. If by December 1916 these patriots had made some converts among senior regular officers, they undoubtedly had a much larger following among the wartime newcomers. And it was these who now mixed with the rapidly trained and often dispirited conscripts in the frontline trenches and rear training battalions. This did not make revolution inevitable but, as Wildman notes, the "amalgam was a deadly combination, seriously undermining the Army's combat capacity and vastly increasing the danger in the eventuality of a political crisis."²⁰³

CHAPTER II: STRATEGIC EFFECTIVENESS

Despite disagreement over how and by whom the empire should be governed, by 1914 there remained considerable unanimity among the non-revolutionaries of the educated élite about Russia's political and strategic goals. First and foremost, all agreed that whatever the financial and economic burden, their state must retain her status as a "Great Power." In turn this meant sustaining a vast military machine, despite the increasing complexity and expense of modern armaments. This explains the military's "political" success in obtaining funds. More specifically, most politically concerned Russians saw this machine as necessary for maintaining regional balances in the Far East and along their sensitive, ethnically non-Russian, Afghan-Persian-Caucasian frontier, as well as for preserving the "Great Power" balance in Europe proper.

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Some insisted the last could be guaranteed best by improving relations with the young German empire, but Berlin's growing assertiveness made this difficult. After 1894 most therefore favored instead the Franco-Russian alliance, and after 1908 a parallel entente with Great Britain. Yet in the Russian perspective, attention focused even more directly on the Balkans and Turkey. In these regions the empire's "vital" interests seemed intimately involved in resisting German/Austro-Hungarian pressures on "fellow Slavs," and in guaranteeing navigation through the

Turkish Straits, the lifeline of Russian commerce. Such a goal, they believed, could be achieved most satisfactorily by decisively neutralizing or destroying Ottoman power.

A duality of focus thus divided Russian planners' attention between the need to support their French ally and the pursuit of their own Balkan policies, and so during the war, between the German and Austrian (and later the Caucasian) Fronts. This influenced both St. Petersburg's prewar planning and Stavka's subsequent conduct of operations until the collapse of 1917. Further, any discussion of the strategic aspect of the empire's war effort falls naturally into two broad categories.

Firstly, there is the strategic-political sphere. This includes examining such questions as the degree to which planned strategic goals met Imperial Russia's political aspirations; to which they simultaneously fitted with and affected those of her allies; to which the military establishment influenced the political leadership to seek militarily logical, strategic objectives; and to which the risks involved in a possible failure were justified by expected political-strategic gains. In its widest sense, the last can of course be extended to include the central political question of war and peace. Then secondly, judgments on these issues involve analysis of more narrowly strategic-military issues. Among these are the degree to which the objectives selected were consistent with the size

and structure of the available forces, as well as with the nation's industrial base and logistical infrastructure, and the extent to which the Russians' strategic planning succeeded in opposing their strengths against their opponents' weaknesses.

* * *

Strategic-Political Effectiveness. As suggested above, in striving to maintain her "Great Power" status Imperial Russia faced two separate but interrelated problems. In the first place, the rise of the German empire as Europe's dominant land power threatened Russia from the west in a manner that was unimaginable before 1870. In 1873 D.A. Miliutin drew up the first plan for a war against an Austro-German alliance. This possibility became particularly likely after the Austro-German treaty of 1879. By 1880 General N.N. Obruchev, then Chief of the Russian General Staff, was reporting on further plans for a war with these two powers. Not only did Russia now face a double threat from the south and west, but the Hapsburg empire replaced Turkey as the main threat to St. Petersburg's interests in the Balkans, interests that were inextricably tied to Russia's position as a Great Power.

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As a counter to this threat, in 1894 conservative Russia entered an alliance with republican France. This aimed as well at placing Berlin in double jeopardy. Some continued to urge a conciliatory policy towards Germany as

late as 1914. Yet that nation's open hostility during the Bosnian crisis of 1908-1909, and the events of the Balkan Wars of 1912-1913, convinced most patriotic Russians that their best hopes lay in preserving the French alliance in peacetime, and in ensuring their ally's survival during any conflict so as to prevent an eventual German-Austrian victory. 207

This placed military planners under a peculiar burden, one which geographical and technical considerations made still more complex. Russia's immediate war aims and sentiments dictated an initial strike southwest against Austria. Yet her longer-range strategic considerations, as well as pressure from Paris, demanded a rapid offensive westwards to prevent France from being overwhelmed by superior German forces, which would leave Russia isolated. To implement either or both such actions, Russia's troops had to concentrate in tsarist Poland, a region that formed a salient between East Prussia and Austrian Galicia. This meant that any sizable force forward deployed there by Russia might well be cut off and destroyed by an Austro-German pincer. Such a threat was especially acute thanks to the tsarist empire's vast distances, lack of strategic railways, and consequent slow rates of mobilization. To prevent this eventuality, during the 1880s-1890s the Russians constructed a chain of fortresses in central Poland, behind which the generals would deploy. Yet the

French, who were providing substantial loans for railway construction, feared this meant they might be left to take the field alone.

Haunted by contrary commitments and desires, Russian planners by 1900 already had divided their armies into two commands -- a Northern Front against Germany and a South-western Front against Austro-Hungary. By 1902, in response to French pressure, they had agreed as well to simultaneous offensives against Germany and Austria. Their ally at first wanted these by the 15th day of the German mobilization, and later by the 14th. The Russians, arguing that by the fifteenth day they would have deployed only a fraction of their troops, resisted. But in 1906 St. Petersburg felt especially vulnerable because of defeats in the Far East and revolution at home. Russian planners therefore returned to the older, more defensive idea of concentrating their armies in a central position behind the dubious protection of the now outdated Polish fortresses. While these still offered some security of concentration and permitted the major blow to be struck either west or southwards, concentration there meant the tsar's armies could not take the offensive in less than six weeks, and probably not in less than two months.

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By 1909 German hostility and French pressure had made such delay impossible. Further, by that time it was clear that Berlin planned to strike first at France, not Russia.

In addition, Russia's expanding railway net, (see Table X) made a more rapid mobilization and deployment more feasible than it had been a decade earlier. For these and other reasons, Sukhomlinov and Quartermaster General Iuri Danilov produced Plan No. 19. This recognized the need of forestalling a French disaster by a rapid Russian attack in the East. Yet since a drive into Central Germany would risk the pincers from East Prussia and Galicia, the main attack was to be directed against German forces in the northwest. Since Austria-Hungary would be slower to concentrate, Danilov proposed leaving only nine (of 28) army corps to hold Germany's ally. The other 19, divided among four armies, were to drive into the tactically difficult terrain of East Prussia. There they were to destroy the Germans' concentrations, and so divert reinforcements from the French front. To speed up matters, the Russian armies would concentrate well forward. This simultaneously would permit the razing, rather than expensive reconstruction, of the aged fortress system.

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In this spirit St. Petersburg promised France in 1911 to oppose Germany with 800,000 men by the 15th day, and to begin an offensive immediately afterwards. But meanwhile the new plan had aroused a storm of protest among Sukhomlinov's enemies in the Kiev and Warsaw Military Districts, the General Staff, and so on. The debates need not concern us here, but they ended in the adoption of "Plan

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Table X

Growth of Comparative Railway Networks, 1880 - 1914
(,000 km)¹

State	Length of RRs		Increase in %
	1880	1 Jan. 1914	
France	26	51	93
Germany	23	58.4	155
European Russia	34	63.7	87

¹ I. I. Rostunov, ed., Istoriia pervoi mirovoi voyny, 1914 - 1918, (2 vols.; Moscow, 1975), v. I, p. 63.

No. 19 "Altered" in May 1912. Its main variant foresaw that in the case of a German invasion of France, Russia would launch simultaneous offensives against East Prussia and Austria. However now only two armies (29.5 infantry divisions or 33 percent of the mobilized forces) would strike the former while four armies (46.5 divisions or 52 percent) would face the Austrians. As of 1913, the remaining 15 percent were to be allocated to the 6th Army, based on St. Petersburg and guarding the Finnish Gulf, and to the 7th Army, centered on Odessa and observing the Romanians. Meanwhile the Baltic Fleet was to deploy behind the "Central Position" minefields to prevent a German sweep up the Finnish Gulf. But unfortunately for the Russian field armies, Sukhomlinov's opponents obtained the retention of

the expensive Polish fortresses, which henceforth consumed much of the available heavy artillery and relevant munitions. ²¹¹

In August 1913, St. Petersburg informed the French General Staff that if Germany invaded France, Russia's armies would be more or less ready by the 15th day to launch an immediate offensive westwards. This would be directed against either East Prussia or Berlin, depending on the German deployments. Such was the plan that went into effect in 1914. Since then, many writers have blamed the subsequent disasters in East Prussia on its provisions. They argue that in order to assist France, the tsar's armies undertook premature offensives that were beyond their strength. Such critics point out that the mobilization schedule (Table XI) meant that by the 15th day Russia would have merely one-third of its strength available for initial operations. Thus Samsonov's 2nd Army advanced hurriedly, without one-fifth of its infantry, to its destruction at Tannenberg. ²¹²

In retrospect, this argument is not convincing. True, the plan was a compromise, and so it was far from perfect. Its greatest long-term defect undoubtedly was the retention of the expensive Polish fortresses, but this only became evident in 1915. In August 1914, despite a weakening of Danilov's anticipated Prussian drive, the forces allocated to the 1st and 2nd Armies (Table XII) should have

Table XI

Anticipated Mobilization Schedule, 1914

	1st-Line Inf. Div.	2nd-Line Inf. Div.	Cavalry Div.
Total by Day 15	27	--	20
Additional by Day 23	20.5 to 23	12	6
Additional by Day 29	3 to 5	6	4
Additional by Days 30 to 60	6.5 to 11.5	6	1.5 (2nd-Line)
After Day 60	Siberian troops become available		

David R. Jones, ed., The Military-Naval Encyclopedia of Russia and the Soviet Union, (Gulf Breeze, Fl., 1978), v. 1, p. 5.

been sufficient. The same is true of the Austrian front. In fact, there the Russians did score impressive victories, even if their four armies were not at full strength until the 30th day. But even if the plan was imperfect and hurried preparations for the offensives did create some confusion, the East Prussian disasters resulted more from poor leadership and the faulty coordination of the two armies at the front level than from fatal defects in prewar planning.

In any case, this pull between two strategic directions had been implicit in Russian planning since 1870, and it had been codified in the actual war plans since 1900. By

Table XII

Forces Deployed on Eastern Front, August 1914

Fronts and Armies	Strengths		
	Inf. Div.	Cav. Div.	Guns
Northwestern Front			
Russian 1st Army	6.5	5.5	402
Russian 2nd Army	11.5 ²	3	702
Total	18	18.5	1104
German 8th Army	15	1	1044
Southwestern Front			
Russian 4th Army	6.5	3.5	426
Russian 5th Army	8	3	516
Russian 3rd Army	12	3	685
Russian 8th Army	8	3	472
Total	34.5	12.5	2099
Austrian 1st Army	9	2	480
Austrian 4th Army	9	2	474
Austrian 3rd Army	6	3	318
Woysch's Corps	2	—	72
Kummer's Corps	3	1	144
Kevis' Corps	8	3	366
Total	37	11	1854
Total Russian	52.5 ²	21	3203
Total Central Powers	52	12	2898

¹ Rostunov, Russkii front, p. 110.

² Other sources give these figures as 11, 17.5, and 52, respectively.

1914, given the prevailing mood in Russian society (civil and military alike), the exigencies of the French alliance, the Imperial army's offensive doctrine, and the immediate causes of the war, such a division of effort was inevitable. So, too, were the risks involved, though few -- the Germans included -- anticipated the stunning outcome of the first East Prussian campaign.²¹⁴ In theory, one may agree with D.C.B. Lieven that any "[g]enuine joint Franco-Russian planning aided by a sensible grasp of the alliance's strategic position" would have convinced Paris to take a defensive stance until the Russians were prepared to commit their full forces, and that this might have occurred "had Russian generals been able to infect their French counterparts with some of their much-despised defensive-mindedness." That the Russians did not do so, he blames on a certain degree of "muddle-headedness and lack of self-confidence" on their part. But to succeed in this, the Russian military would have had to rewrite their own doctrine, and have convinced the French to abandon theirs -- and this at a time when all major armies stressed immediate offensives to win decisive victories in what was to be a brief, sharp war. This seemed the lesson of the much-studied Franco-Prussian conflict of 1870-1871. And since the Russians shared this European-wide delusion, early offensives were inevitable.²¹⁵

One must stress as well that most responsible civilian

leaders fully agreed with the generals on the need for simultaneous offensives westwards and southwards to support the French and strike at the despised Austrians. As noted, the nature of the Imperial élite made civil-military conflicts in the normal sense unlikely in prewar decision-making, and Nicholas II himself was involved in much of the planning. Further, although the data is scanty, Imperial Russia seems to have had an effective prewar intelligence system, especially in Austria. But though it scored a number of coups, the impact of its revelations on planning remains difficult to gauge.

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Once war began, the institutional military-strategic framework, and later the pressures of domestic politics, badly damaged and finally destroyed much of the existing civil-military unity. Even so, as late as 1917 few educated Russians objected to a strategy that strove to secure national goals in Galicia, the Balkans, the Turkish Straits, and the Caucasus. They also accepted that the necessities of alliance politics simultaneously demanded attacks to relieve German pressure on the French, British and after 1915, the Italians. Meanwhile, Russia's wartime strategic planning had consistently accorded with these dual political imperatives and throughout remained integrated with that of the Western Allies. Although an expedition against the Straits never eventuated, in general the Russians proved repeatedly responsive to their allies.

pleas. In March 1916, for example, they first launched the unsuccessful attack against the Germans at Lake Naroch in the north to relieve the pressure on Verdun, and then advanced the date of their June offensive on the Southwestern Front in response to a frantic Italian request in May. Again, they cooperated in Persia with the British against the Turks, supplied troops for the Allies' Salonika expedition, and even sent a brigade to France. ²¹⁷

In this planning process, the empire's political and military leaders shared responsibility for both the successes and the failures, such as Rumania's disastrous entry into the war in August 1916. ²¹⁸ Russia's military representatives -- even the ill-starred Zhilinski, who was transferred from his front command after Tannenberg to the post of military representative to Allied meetings in France -- on the whole proved competent in defending their empire's interests during allied planning sessions. Yet the Allies' desperate appeals frequently forced the high command to change its plans or divert forces from the weaker Austrians and Turks in order to launch assaults against the stronger and better entrenched Germans. While this at times may have impaired Stavka's ability to pit its strengths to enemy vulnerabilities, it more often reflected the constraints of coalition warfare than it did strategic blundering. ²¹⁹

All in all, Russia's partners had little cause for

complaint before 1917 -- a point deserving special stress given both the empire's practical reasons for seeking a separate peace after 1915, and the malicious rumors that many in court and government circles recommended just that course. In the end, the domestic costs of pursuing the conflict helped to destroy the empire, but continuation of the war was more a political than a military decision. And given the commitment found throughout both official and unofficial "society" to Russia's "national" goals, a decision to withdraw was unthinkable.

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Military-Strategic Effectiveness. Here the tsarist military's performance, at least initially, is much more open to criticism. The reforms introduced after 1908 had raised considerably the armed forces' combat potential, and those of the Great Program of 1914 would have done so still further. But as Europe lurched toward war in 1914, Russia lacked the institutional forms capable of providing effective strategic leadership and operational direction in wartime. For the armed forces still awaited new regulations for field administration which would replace those of 1890 and incorporate the lessons of 1904-1905.

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Military men had recognized the need to revamp the existing law as early as 1901. Yet it was only after a series of war games and conferences that the General Staff finally began preparing a new draft in January 1913.

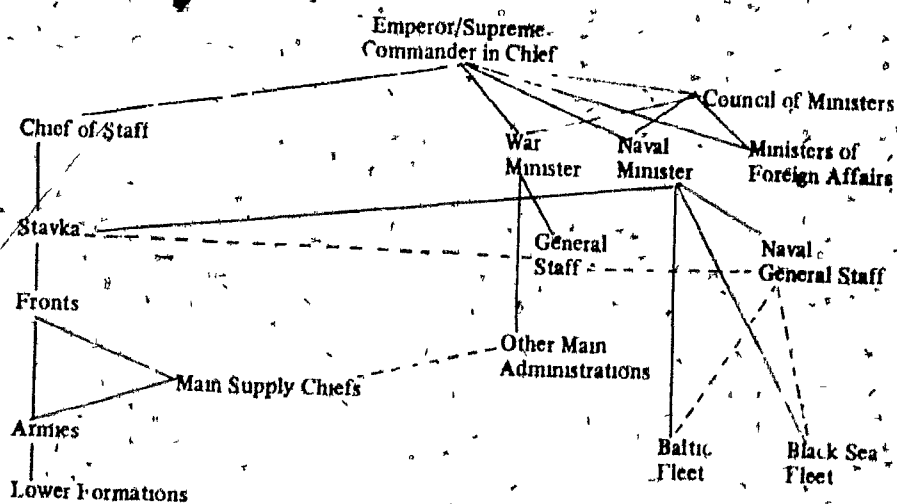
Because of debate and opposition, the draft law still awaited the emperor's approval in the summer of 1914. Under the pressure of events, Sukhomlinov finally obtained Nicholas II's confirmation of its generally unmodified provisions only on 16 (29) July 1914, the day of Russia's first and quickly aborted mobilization.²²² Since this law was intended to crown all the military reforms of the prewar years, and since it is one of the most important and criticized pieces of legislation approved by this monarch, it deserves special attention.

Nicholas II, much to the irritation of most politicians and some military men, had made clear his intention of serving personally as Supreme Commander-in-Chief since at least 1903.²²³ The new Law on the Field Administration of the Army in Wartime therefore sought to establish the smooth functioning of both front and rear through his person. As Figure 2 shows, his immediate deputies were to be the Chief of Staff at Stavka, for operational direction of the battlefields, and the War Minister in St. Petersburg, for the supervision of administrative, supply and replenishment work at home. Apart from the sovereign himself, the War Minister also would serve as a direct link with the government through the Council of Ministers. Meanwhile, part of the General Staff were to move to Stavka to form the staff of the Supreme Commander, and part would continue its duties in the War Ministry. The Naval

Ministry, with its own representative at Stavka, was to provide leadership to the fleets; the direct, operational command of which lay in the hands of their commanders.

Figure 2

Proposed Structure of the High Command, July 1914



The result should have been a relatively clear-cut system in which Nicholas' position as supreme military commander and supreme civil administrator unified the whole war effort. The law therefore granted the ruler as Supreme Commander-in-Chief, along with his Stayka and its agencies, complete civil as well as military authority in an extensive theater of operations. This last included the capital of St. Petersburg (now renamed Petrograd), and thus much of the country's industry, as well as a broad front zone stretching along Russia's western frontier. In the case of a retreat, this zone would move backwards with the front line to embrace still more of the empire. This meant that the Council of Ministers lost all effective authority in a vital region, the boundaries of which could change constantly, but which from the first included the capital. The possibilities for civil-military conflict, of course, were enormous. But acting on the assumption that the emperor would be Supreme Commander, those drafting the law did not trouble to define relations between that figure and his ministers, or give serious consideration to resolving disputes between the two.

The simplicity of this system was fatally ruptured on 19 July (1 August). Then Nicholas II bowed to ministerial arguments and appointed Grand Duke Nikolai as Supreme Commander. While the ministers had some valid political concerns, their victory had a number of unfortunate results

and created a much more complex system of command (Figure 3). Firstly, despite his presumed prestige, for the last six years the Grand Duke had been on the side-lines of planning and, in practice, during 1914-1915 he showed himself to be a mediocre generalissimo. Further, the

vendetta he and his supporters had waged against War Minister Sukhomlinov now continued and poisoned smooth relations between the field armies and their rear supply network. Most important still, under the new regulations

Nikolai Nikolaevich became in fact a viceroy, responsible only to the emperor, over vast areas in the rear of the front. By not assuming the post himself, Nicholas II

had removed the linch-pin connecting the front to the supporting military and civil administrations of the rear.

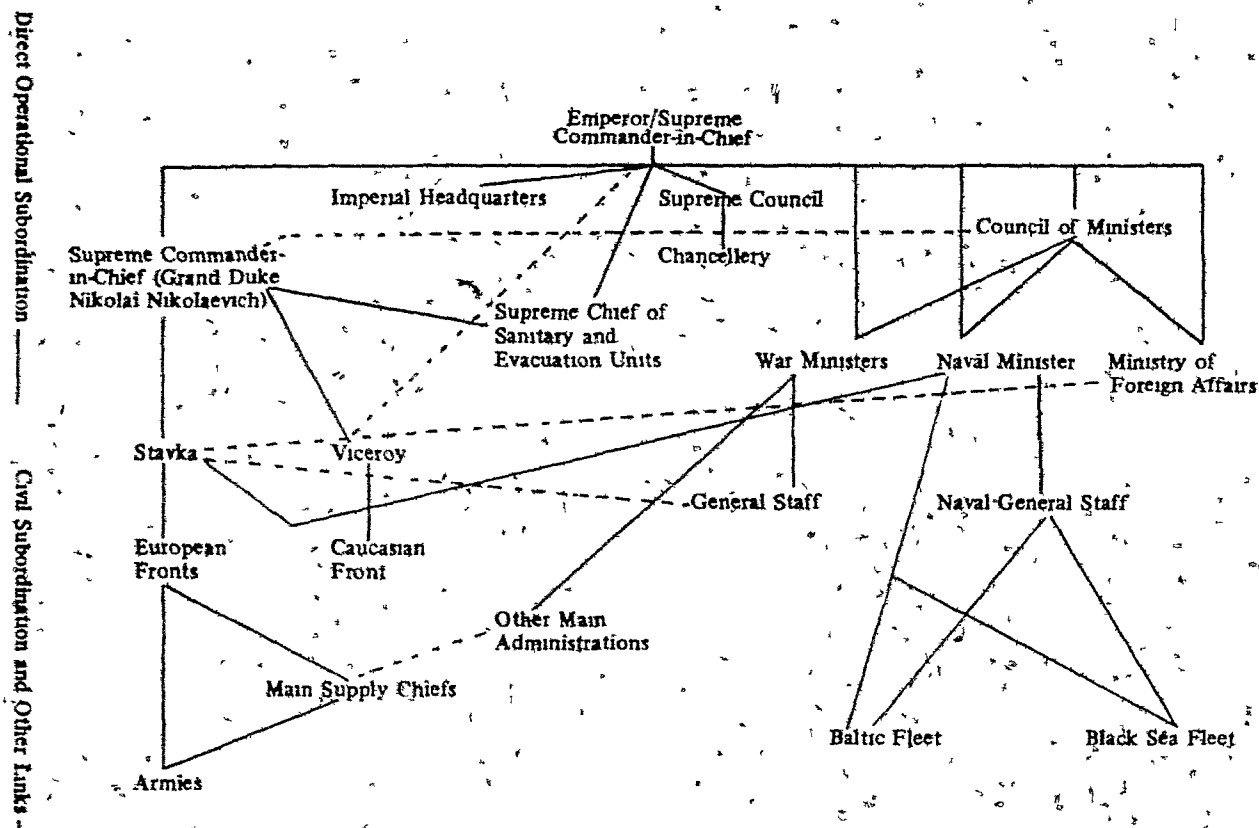
He did establish a Supreme Council, with its own chancellery, to serve this purpose under his personal headship.

However both his own reticence about interfering with Nikolai Nikolaevich, and the latter's determination to preserve every iota of the authority granted him in his new post, doomed this institution to a mere paper-existence.

The last body's impotence and Stavka's consequent autonomy in effect deprived Russia of any supreme institution capable of providing political-strategic leadership to the whole defense effort. Although the Grand Duke seems to have aspired to this responsibility, his small headquarters staff (9 generals, 36 other officers and 12 civil officials),

Actual Structure of the High Command, July 1914-August 1915

Figure 3.



even as expanded by early 1915, showed itself incapable of enforcing effective operational direction, let alone leadership in more complex spheres. In the meantime, despite his promises to work closely with the Council of Ministers, the Grand Duke's arrogance, along with Stavka's ham-fisted abuse of the civil authority granted it by the law of 16 (29) July, led to a growing atmosphere of hostility and suspicion between headquarters and the government. This was especially highlighted by Nikolai Nikolaevich's refusal even to receive War Minister Sukhomlinov, his continuing efforts to discredit the latter, and his opposition to any attempt to create an institutional means of mediating conflicts between himself and the ministers as a whole. At the same time, he gave leaders of the Duma's liberal majority a warm reception that encouraged them to see Nikolai Nikolaevich as the key to obtaining long-desired domestic political concessions.

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Matters deteriorated rapidly during the Great Retreat of 1915. Then an hysterical Stavka first lost complete control over its armies' operations and blamed their defeats on the activities of German and Jewish spies. It later complicated matters still further by instituting unnecessarily large and disorganized evacuation programs. As the retreat continued, headquarters pushed morale still lower by charging that its ineffectiveness stemmed from the treason and corruption of Sukhomlinov and his supporters.

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Even though the hated War Minister lost his position, relations between the ministers and Stavka had reached such a low point by July that even Polivanov, the Grand Duke's own man and new War Minister, was in despair. ²³³ At the same time, the Stavka-liberal alliance coincided with the recall of the Duma (for debate over the Special Councils) and military disaster to produce a major political crisis. As noted, Nicholas II resolved this in August-September by finally establishing the Special Councils to organize supply (Figure 1), restoring the linch-pin between front and rear by himself becoming Supreme Commander, and then proroguing the Duma. If the last only drove the opposition underground, the first two measures restored coordination between Stavka and its political-military rear, guaranteed the field armies adequate materiel, and rapidly restored their combat capability. ²³⁴

In sum, from the autumn of 1914 to August 1915 civil-military, or rather Stavka-government, relations had progressed to an all-time low. At the same time, confidence in Stavka's professional "military-strategic" effectiveness had collapsed. Already by November-December 1914, the Grand Duke's headquarters had shown itself incapable of adequately controlling the Southwestern Front, and so ensuring a full concentration of effort against the Germans. ²³⁵ But by June-July 1915 it had become virtually helpless in the face of the Central Powers' continued offensives, and the

Grand Duke himself seemed on the verge of mental collapse. By refusing to withdraw much of its artillery and munitions from the Polish fortresses, Stavka had helped keep its field forces starved of the sinews of war. Seeking excuses, the Grand Duke and his subordinates dabbled in domestic politics and refused to cooperate with the official rear agencies responsible for the field armies, supplies and manpower. While a worried tsar looked on, his armies -- lacking serious strategic direction -- stumbled blindly towards collapse. 236

This situation changed drastically in August-September 1915. With Nicholas II at Stavka, political-military friction again was reduced to a minimum and interallied integration was assured. Under the tsar's calm supervision, Chief of Staff M. V. Alekseev restored order at the front. With the Austro-German offensive losing steam, Stavka halted the field armies' headlong retreat, established a stable front, and in 1916 again took the offensive. While the attack at Lake Naroch hardly pitted Russian strength against German weakness, it resulted more from Allied pressures than from Russian strategic planning. Similarly, the Rumanian campaign's disastrous results owed as much to interallied diplomatic maneuvering as to faulty Russian decisions. Throughout the summer of 1916, this bickering delayed that nation's entry into the fray while Brusilov's offensive was bringing startling victories. So

by the time Rumania moved, the Central Powers had stabilized the front, the chance of decisively defeating Austria had been lost, and Russia found itself with a strategic liability rather than an asset.

Nevertheless, the Stavka of Nicholas II and Alekseev was a vast improvement over that of the Grand Duke. On the whole, it gave the Russian field armies credible military-strategic guidance within the interallied context. As just suggested, during 1916 this latter frequently disrupted Russian strategic planning. Apart from the Lake Naroch and Rumanian cases, Allied demands also limited the results Brusilov achieved on the Southwestern Front. In December 1915 an Allied conference had met at Chantilly. It had agreed that early 1916 would see offensives launched on the French, Italian and Russian Fronts, so as to prevent the Central Powers from concentrating their forces. The Russians were to take the field by early June. In accord with this, a conference of front commanders chaired by the tsar and Alekseev, agreed in early April 1916 that this would involve simultaneous attacks on all three (North, West and Southwestern) fronts. In this manner they sought to oppose Russian numerical strength against a still technically superior enemy. But apart from flaws in operational concepts and preparations, both the Allied and Russian plans were forestalled by the German assault on Verdun and the Austrian onslaught in Italy. As noted above, these events

forced both the abortive attack at Lake Naroch and Brusilov to move before the other fronts, a fact that helped prevent his operational success from achieving strategic significance. But while the Russian plan was not realized, it does illustrate Stavka's attempts to use its armies' assets as effectively as possible. 238

In this period, the force structure of these armies was consistent with the tasks envisaged. While generals like A.E. Evert continued to demand huge quantities of shells, their failures resulted more from faulty operational-tactical conceptions than materiel shortages. That this was the case reflects the improved supply situation brought about by the mobilization of Russia's industrial base. As described above, once plants evacuated from Poland during the Great Retreat, were reestablished and others had reached full capacity, production expanded rapidly. Although hindered by the enemy's blockade, this base now was relatively invulnerable, had adequate raw materials and manpower, and a surprisingly high degree of technical sophistication (as evidenced by the aviation industry's products). Thus by 1917 the troops were being fully supplied with the requisite materiel for the forthcoming campaign. 239

By the end of 1916 the army's logistical infrastructure had improved immensely. Gone were the days when artillerymen believed 420 shells per gun was a generous allocation (as in the 1st Army in 1914), or when generals, like

Samsonov's staff, prepared a mere 10,415 hospital beds for a battle's casualties.²⁴⁰ The army now was backed by a massive network of supply depots and sanitary-hospital facilities. However, their operation remained hampered by the deficiencies of Russia's railway system, which had deteriorated badly under the pressure of war. As shown above, this system had expanded considerably before 1914. Even so, the empire remained sparsely served as compared to other European nations. Whereas Germany had 10.7 and Austria-Hungary 6.7 kilometers of rail for every 100 square kilometers, European Russia had only 1.2.²⁴¹ Equally important, most Russian lines radiated out towards the frontiers from population centers. This left few north-south lateral lines that could move troops from front to front in wartime, a fact that hindered Alekseev's movement of strategic reserves during Brusilov's offensive in 1916.²⁴² Further, the creation of a front zone by the law on field administration of 1914 had badly confused the management of the system: in the rear a line remained under the civilian ministry, but on approaching the front control passed to Stavka. During the retreat of 1915 this had caused considerable chaos. But again, with the departure of Nikolai Nikolaevich for the Caucasus in that August, matters had improved. Stavka remained aware of continuing deficiencies, however, and by the end of 1916 measures were being prepared to help remedy the situation.²⁴³

The above analysis suggests that Imperial Russia's military establishment possessed a high degree of strategic competence. Unfortunately, this was not apparent during the war's first 13 months because of the split between front and rear imposed by the law on field administration of July 1914. During that period the complete ineffectiveness and arrogance of Nikolai Nikolaevich exacerbated an already difficult situation, which improved immediately once Nicholas II reunified the armies and their support structure by himself assuming the Supreme Command. After that, as in the prewar planning, the military demonstrated considerable skill in pursuing the empire's own strategic objectives while supporting her Western Allies. True, the demands of coalition warfare sometimes meant that the former were seemingly sacrificed to the latter, a fact that on occasion caused much grumbling and some bitterness among Russians at all levels. Nonetheless, "society" remained unified on the need to pursue the war, even if sharp divisions existed as to who should direct it. This made the conclusion of a separate peace an "unthinkable" decision. In the end, however, the revolutions of 1917 -- to some degree a product of the strains of the empire's successful domestic mobilization for the war effort -- robbed Russia of the benefits gained by the strategic effectiveness of her armed forces. For as 1917 progressed, the field armies lost their capability for combat in the chaos of domestic radicalism,

CHAPTER III: OPERATIONAL EFFECTIVENESS

The issues involved here are those discussed by Soviet writers when they refer to an "operational" level of command. They consider that this exists between the strategic and tactical levels, and that it involves entities such as fronts and army groups. Soviet writers argue that such higher operational groupings first appeared in a planned manner when the regulations on field administration of 1914 instituted two "fronts." These had separate headquarters that maintained sections similar to those found at the Supreme Commander's Stavka. In the Soviet view, this event marked a major step forward in the development of the military "art."²⁴⁴ Yet others disagree. Stone, for instance, believes that these fronts only reflected the fact that the army was "fatally split" between the East Prussian and Galician operations. This provision of the 1914 law, he insists, was "not an appreciation that affairs of command had become so complex that not only army commands, but also army group ones, were needed to administer land forces; it was rather a perception that the army had to be divided between irreconcilable tasks." In his view, "the construction of these separate groups was...an almost insuperable hindrance to the evolution of coherent strategy."²⁴⁵

Whatever the strategic problems raised by the creation of the new operational commands, this judgement ignores

some essential features of Russia's prewar planning. As outlined above, the "fatal" split between possible opponents was probably inevitable, given Imperial Russia's political-strategic goals and obligations. More important, the new level of command resulted just as much from developments in Russian doctrine, which in turn reflected the army's long experience in waging war over vast distances, as it did from a compromise forced on the army by faulty planning and strategic disagreements. The previous (1890) law on field administration had envisioned field armies as the largest operational groupings. These were to be logistically independent, yet operationally subordinated to a supreme headquarters. But as demonstrated in Manchuria in 1904-1905, during extended battles involving large combined formations, this arrangement could lead to confusion between the armies involved, as well as between them and Stavka. The law of 1914 therefore deprived armies of their autonomy by introducing fronts as an intermediate agency for the coordination and control of battles that often were far distant from the supreme headquarters. 246

The importance of these operational headquarters in the military's plans is evidenced by the fact that they -- not Stavka -- contained the highest officers charged solely with supply duties. These Main Supply Chiefs were subordinated directly to the front commanders and were charged with ensuring "the supply to the armies of all their needs,

and of organizing their general rear." Such an official did so by means of a series of "staging supply sections," and he handled evacuation measures as well. But given Stavka's overall powers of control, the absence of a "Supreme Supply Chief" there at first sight is surprising. This is especially the case since no figure existed at headquarters with authority to unite the rear as a whole.
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This lacuna seems explained by two considerations. Firstly, Russian planners expected a short, mobile war in which a front's responsibility for its own rear was required to provide the flexibility such a conflict demanded. And secondly, those drafting the law of 1914 had expected the War Minister and his ministry's network to organize the "deep rear" for supply of the theater forces. Since he was to be responsible to the emperor as Supreme Commander, the minister would in fact serve as Supreme Supply Chief. So here was another assumption that had to be abandoned once Nikolai Nikolaevich, not Nicholas II, took charge at Stavka.
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In August 1914, then, the Russians set up a Supreme Headquarters that was to give overall strategic direction and coordination to the operations conducted by autonomous front commands. These in turn controlled two or more armies each. The large amount of authority granted the front commanders in their sphere reflected both past

Russian experience and the widespread belief among European military men that a supreme commander could do little more than plan the overall order in which his troops would be committed. As in Leo Tolstoy's account of Borodino, events then took over while the commander-in-chief attempted to await calmly the evening action reports before drawing up his deployments for the next day. This attitude also helps to explain the latitude granted by semi-autonomous front commanders like Zhilinski to their army commanders. In part it also may lie behind the apparent passivity with which Samsonov oversaw the 2nd Army's destruction at Tannenberg.²⁴⁹ As one scholar recently noted, one of the major lessons of 1914's first battles was the extent to which modern means of reconnaissance (e.g., aircraft rather than cavalry) and communications (e.g., radios, telegraphs and telephones rather than couriers) had increased both a senior commander's control over events and the pressures upon him.²⁵⁰ That this came as a surprise is clear from the communications equipment supplied the armies that went to war. The German armed forces reportedly had a total of 40 wirelesses, and the Russians even fewer. As for Samsonov, he had a total of 25 telephones, a few morse code machines, and a primitive Hughes teleprinter that produced 1,200 words an hour. And when it broke down, the unfortunate general was reduced to travelling about by horse in an attempt to follow events.²⁵¹

Logistically, Stavka was to work through the War Minister while the front supply chiefs organized the immediate rears of their operational zones (Figure 2). To guarantee success in combined operations, the navy and (later) the Air Fleet had their own representatives at Stavka. At sea the fleets served as the operational entities for naval actions. ²⁵² When a new Caucasian Front appeared in November 1914, this was entrusted to a separate, semi-autonomous headquarters -- modelled on Stavka -- headed by the Viceroy. This left it dependent on the central headquarters only for decisions on major issues of policy, and the successes won in that theater suggest that the new structure could work effectively with a competent commander-in-chief. ²⁵³

Despite later critics, this system also suited the war envisaged by Russian planners. Although roads usually remained primitive in Eastern Europe, railroads had speeded up considerably the mobilization process. At the same time, new logistical methods had liberated armies from strict reliance on prepared magazines and supply bases. ²⁵⁴ Therefore the Russians, like other Europeans, counted on taking the offensive quickly in a war of maneuver that was to be waged by mobile, combined-arms columns. In many ways the best, if also the most extreme, expression of such expectations is found in the work of General A. A. Neznamov. By 1912 he was arguing that any serious doctrine must be based

on such factors as mass, firepower and movement, and that operationally it must stress a mobile offensive. He believed that in any future conflict, victory would be gained from a series of battles or "operations." These would be linked by "an operational line" or "basic idea" that governed goals. They thus would form an interrelated series of forward leaps that could entail multi-corps and even multi-army actions, any of which might become "today's battle of exhaustion." To avoid this and gain victory, he taught that one must first define clearly the goal of the operations, and then prepare them carefully. Above all else, one had to take care to establish, and sustain, the fire relationships between one's own units on a battlefield that had become more disorganized than ever. ²⁵⁵

The front structure obviously accommodated such operations. And theoretically at least, the Imperial Army's concept of combined-arms battle seemed equally suited to the modern battlefield. Both its tactical handbooks and the Field Regulations of 1912 recommended that armies move in mixed columns of infantry and cavalry. Supported by machine and field guns, these must be prepared at any moment to enter an "encounter" or "meeting" engagement directly from the march. But unfortunately, branch rivalries -- and especially the artillery's disdain for the infantry -- frequently hampered the realization of the necessary cooperation between arms. ²⁵⁶

There was another, still greater, problem with such concepts of mobile warfare. In 1914, an army's mobility still remained limited by the speed with which men and horses could move under their own power, once they left a rail-head. In the best conditions, on good roads and in favorable weather, rested infantrymen could travel only some 2.6 miles (4.16 km) an hour. For large operational formations, even daily moves of 10 miles (16 km) had to be considered to be "forced." Cavalry naturally seemed to offer greater opportunities for maneuver, and European military men continued to value this arm. They had been particularly impressed by Jeb Stuart's deep raids during the American Civil War (1861-1865). In 1904 the Russians had tried a similar strike against the Japanese with a mobile column under General P.I. Mishchenko. Again, before 1914 War Minister Sukhomlinov -- a student of Stuart's raids -- had contemplated a full-scale cavalry strike into Germany. Yet even such mounted columns could advance only 4.6 miles (7.6 km) per hour by alternate trotting and walking. Worse still, cavalry by itself lacked the weaponry to deal with even small infantry strong points. But if infantry and artillery were attached to form a mixed column, the cavalry's rate of movement again was reduced.

Despite such drawbacks European generals, desperate to increase the mobility of their armies, insisted on maintaining large cavalry forces. In peacetime these

consumed considerable funds that, in retrospect, might have been spent better elsewhere. Even so, cavalry retained a certain psychological effect. In the popular German mind, a Russian invasion of East Prussia entailed hordes of pillaging Cossacks. For this reason the 1st and 2nd Armies began their campaign with a total of eight and a half cavalry divisions. In the event, they proved of little use, even for reconnaissance. For the most part, during the ensuing conflict Europe's cavalry divisions spent most of the war waiting for a breakthrough that never eventuated. But the retention of this arm also meant that all European armies, Russia's included, wasted critical railway capacity on moving horses and providing them with the bulky fodder they needed to sustain them. Since the transport of a cavalry division (4000 men and 12 guns) utilized 40 trains, the same number as an infantry division (16,000 men and 54 guns), the mobilization of Russia's 20 to 21 mounted divisions undoubtedly delayed the army's full concentration in 1914. Beyond this, the cavalry's horses each ate 12 pounds of grain daily, even when not in action. The burden thus placed on Russia's already overworked rail network is obvious from Table XIII, which details the increase in horses used in the war zone, the forage they consumed, and the railway cars needed to supply them.

Taken in combination with the defensive power given infantry by machine guns, rapid-fire rifles and artillery,

the above considerations make it obvious that the mobile warfare foreseen by Neznamov and others had to await the full-scale introduction of the internal-combustion engine on the battlefield. But this did not necessarily make the operational structure of "fronts" inappropriate. Indeed, the subsequent introduction of army groups by other countries suggests the opposite. Nonetheless, the disaster suffered by Samsonov's 2nd Army in East Prussia in August/September 1914 seems to support critics like Stone.

Table XIII

Horses and Forage Requirements, 1914 - 1917

	No. of Horses	Forage (tons) Average/Month	RR Wagons Required Average/Month /Day
1914	670,775 (1 Oct.)	556,993	53,057 1,768
1915	1,035,682 (1 Jan.)	758,089	72,199 2,407
1916	1,589,909 (1 Feb.)	1,589,909	110,997 3,700
1917	2,760,000 (1 Sep.)	1,227,718	116,926 3,898

F. Shutnikov, "Prodfurazhnyi vopros v sovremennoi operatsii," Voennaya mysl, (1939), No. 10, p. 103. If those of the "voluntary public organizations" are included, by this date there were 3,164,000 horses in the theater of war.

Yet this defeat resulted from a number of factors. They include hasty preparation for the advance, poor intelligence, dismal communications, and inadequate logistical support, quite apart from Samsonov's own errors and General

Zhilinskii's lamentable failure at coordinating his two East Prussian armies at the front level. ²⁶⁰ As pointed out earlier, during the Polish/East Prussian battles of late 1914, even Stavka proved incapable of forcing its will on the Southwestern Front, and so of ensuring a concentration of effort against the Germans.

Although this helplessness in part resulted from the freedom of action granted the fronts by the July law, it reached mammoth proportions during 1915 thanks as much to the incompetence of Nikolai Nikolaevich and his subordinates as to the front structure per se. In 1916 Stavka, now under Nicholas II and Alekseev, still at times had difficulty enforcing its orders on its subordinate commanders. ²⁶¹ In spite of this, the new operational formula had been expanded by the creation of new "fronts." By 1917 they had proven their worth, both as agencies for conducting battle and for organizing the armed forces' logistical infrastructure, and since then have been an integral element in Russian doctrine. ²⁶²

* * *

In analysing the tsarist army's operational effectiveness, attention must be paid to the quality of commanders available in 1914. For if the army that marched to war was hindered by the fact that most of its regulations were new and its reequipment program had just begun, the disasters of 1914-1915 are fully explicable only in terms of faulty

leadership at the operational (front, army), as well as the tactical level. Thus D.C.B. Llieven recently scored "the relatively limited ability of most of the senior commanders" as "a key Russian failing."²⁶³ Efforts to improve the calibre at this level had been implemented. These included the creation of a Supreme Credentials Commission in 1906 to ensure the qualifications of those receiving senior promotions, an order of that same year that regimental and higher commanders undertake further training in handling troops, and another of 1909 requiring ~~the~~ staff and general officers to participate in war games. Yet when introduced, such measures frequently floundered thanks to the "protectionism" inherent in any bureaucratic organization, as well as because of the rivalries and personal jealousies that plagued the high command.²⁶⁴

As a result, critics maintain that in 1914 most senior Russian generals lacked practical experience in commanding troops. They explain this flaw in terms of both the nature of instruction received by junior officers in their regiments, and the quality of higher military education. An attempt was made to improve the first in 1908 by raising the level of the winter discussions of tactics given regimental officers. However the success of this measure differed widely from regiment to regiment: in some, critics charged, the sessions became excuses for drinking bouts, but in others they were taken seriously and involved

lectures by staff officers. Thus the quality of junior commanders undoubtedly varied greatly from arm to arm, and between different units of the same arm. ²⁶⁵ As for the lack of experience displayed by senior personnel, this usually is blamed on the early age at which candidates were selected for the staff college, the theoretical nature of many of that institution's courses, and the fact that many graduates later spent much of their time in positions of military administration, rather than in those of command. Reviewing the situation, one emigré writer sadly concluded that Russian generalship probably could have been improved only by 1920 to 1925, after the older generation had passed from the scene. ²⁶⁶

For those sharing this view, ample evidence seems available in the criticisms emerging from accounts of the prewar maneuvers and war games. Each year the training activities in each Military District officially culminated in large field exercises at that level to demonstrate both the quality of the troops and to assess the senior commanders' operational abilities. Before 1904 such maneuvers, especially those in the St. Petersburg Military District which the tsar attended, had had the reputation of being purely formal exercises that were staged for show rather than realism. ²⁶⁷ While this picture is unduly harsh, after the Manchurian campaign the War Ministry did recognize that such annual exercises were an excellent means of eradica-

ting some of the defects revealed in operational command. Since earlier efforts had been hindered by limited funding, the ministry now budgeted considerably larger funds to permit the participation of more units, which again increased the problems faced by senior commanders.²⁶⁸

As John Bushnell notes, the utility of such maneuvers obviously depended on the quality of officers involved. Maintaining that in some districts they continued to amount to "little more than picnics," he points out that senior district commanders often sought to avoid risking their reputations by participating, or that they arranged to avoid naming a winner to protect those that did. He also concludes that overall, these exercises clearly were "so carelessly conducted" as to be "worse than useless."²⁶⁹ In many respects, his judgement seems borne out by contemporary evaluations. Thus P.N. Krásnov, who took over command of the 10th Don Cossacks in late 1913 and quickly brought them up to his own high standards, complained that the comments following a divisional review praised all regiments equally and ignored the mistakes made by some of them.²⁷⁰ More telling still, the military press continued to chronicle recurring flaws in operational practice and command until the very eve of hostilities. And since these reflect on the quality of the army that entered battle in July 1914, they deserve attention here.

As described by emigré authorities like Generals A.I.

Denikin and V.M. Dragomirov, as well as contemporary critics, even after 1906 field exercises often remained set piece affairs. Each side was assigned objectives that were so specific (i.e., what to attack or defend, and even which direction in which to retreat) that the commanders were left with little or no room to display initiative. The units involved usually were pre-positioned in their bivouac areas and moved off together. Even if one did have a detached point of departure, it normally reunited quickly with the main body. The latter moved rapidly along a narrow front to fulfill its assignments and make contact with the opponent. During the march, scouts were wasted in the first stages so that later reconnaissance was insufficient, the cavalry units sent on deep reconnaissance often disappeared, and communication or coordination with flanking detachments was non-existent thanks to the commanders' dislike of the trouble involved.

On reaching the battlefield, the forces involved rushed into battle with no attempts at close reconnaissance whatsoever. As a result, little attention was paid to picking suitable fire positions for either infantry or artillery; the latter usually remained in the same position throughout; and no effort was made to mask troop movements. Field fortifications were not constructed, and the troops consequently received no practice in assaulting entrenched positions. Equally disturbing, the artillery received little

fire direction and the problems of keeping it supplied with shells were ignored. So too were the use of signals, engineers and medical services, as well as serious staff work and the advantages of night movement. As for supply, since the detachments supplied their own from caches that usually had been established in advance, commanders deviated from their preplanned march routes as little as possible. When victories were calculated, the decisions were based almost solely on the numbers of troops involved rather on their positioning, effective fire, and the efficient supply exhibited by the respective sides.

Field exercises conducted in this manner can hardly be considered serious maneuvers. Indeed, junior artillery officers sometimes were excused from attending on the grounds that they could learn nothing from the experience! As for their senior commanders, there was little here to test their capabilities. In retrospect, they have been largely judged by their performances in the series of war games or command exercises held before 1914. Almost all accounts are equally grim. One organized in 1912 by Zhilin-ski as Chief of the General Staff reportedly scandalized that institution thanks to its absurdity. In 1911, another had been scheduled for senior commanders and was to be held in the tsar's presence in the Winter Palace. But this set of games had to be cancelled due to "conflicts" between the participants, which most observers explain by the latter's

fear of risking their reputations. And most distressing of all, in April 1914 a series of games, held by Sukhomlinov in the Kiev Military District, supposedly demonstrated the complete incompetence of most of those involved (and especially of Zhilinski): the participants advanced armies too rapidly, made little attempt to coordinate their movements, paid little or no attention to problems of communications and supply, and planned attacks in grossly inappropriate conditions. And yet none of the participants was even officially criticized, let alone reprimanded or replaced.²⁷²

Such accounts, as well as the failures of many senior commanders during the first months of the war, would seem to justify the almost universally unfavorable judgements made of the Imperial Army's high command. Yet other considerations must temper this view. For example, accounts of the war games come after Tannenberg, and usually aim at finding a culprit for that disaster. Instead, prewar operational capabilities must be considered within the context of the prevailing doctrine as established by Neznamov and others, and in relation to the events of the day. For example, whatever the fears of generals for their reputations, there were real conflicts in 1912 -- the year when Danilov's new war plan was being debated and the fate of the Polish fortresses decided -- that help explain reactions to Zhilinski's games and the cancellation of those

in the palace. Again, many of the criticisms made of commanders in the Kiev exercise are of actions that the day's doctrine demanded. As pointed out above, armies were expected to advance as rapidly as possible, and to wage autonomous battles, often from the march. Further, it is not surprising that men who in peace spent much of their time as administrators or "managers," especially in an army in which even the regimental and more senior commanders had very broad "economic" responsibilities, had some difficulty in realizing such doctrinal concepts in practice. ²⁷³

More remarkable, perhaps, is the fact that with war, some commanders -- like P.K. Rennenkampf at Gumbinnen on 7(20) August 1914 -- did wage successful "meeting" or "encounter" engagements. Similarly, his colleagues on the Austrian front showed operational skills that were at least the equal of their opponents, once they had adjusted to the realities of the modern battlefield. ²⁷⁴

As for the field maneuvers, other sources suggest that the above outline is at best distorted. Even the critics mentioned admit that some exercises, such as those held in the Kiev and Vilna Military Districts, were not without value. That even this grudging praise does not reflect the true facts is clear from the informed and confidential reports of professional British observers. These frequently contradict head-on assertions that the deficiencies listed were universal. The report for 1908 on those in the

St. Petersburg District, for example, does note that General Danilov advanced his "Blue Corps" westwards "without sufficient information," and that Baron Asheberg's "Red Corps" failed in its attack because of poor communications (i.e., the use of mounted couriers rather than telephones) with his left wing. However it also congratulates Asheberg for the "neat withdrawal of his detachments from a dangerous position" by night, maintains that the "supply of blank ammunition was lavish," and remarks that overall, the "present state of training shows remarkable progress as compared with that before the war." Other criticisms include the seemingly "suicidal" deployment in the open of 14 squadrons of "red" cavalry, the lack of a use of signalling by the cavalry and of entrenchments by the infantry, and the umpires' willingness to favor the attack by permitting an advance "before superiority of fire had been obtained." On the positive side it listed the fact "that a free hand was given to commanders and there was less restriction on the movements of the troops." With regard to artillery the British observed an improvement in the close support of infantry with a few batteries being "boldly advanced" for the final assault.

One other aspect of this report deserves mention. This is the list of "general principles" that "Russian officers consider the experience of war demands ... all training should ... inculcate." Briefly, these were:

"(1) -- Concealment of troops from view and extension under fire; (2) Upkeep of communications between all parts of the force. (3) Development of independent action and initiative of the smallest units. (4) Insistence on the practice of offensive tactics." And if these objectives were not always realized in the exercise, the British had no doubt that they were taken seriously.

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Although the reports for 1909 to 1912 are generally less favorable and more supportive of the view of the critics, they nonetheless remain mixed in tone. In 1912, for instance, great attention was paid to the new, very detailed and stringent rules by which umpires were to judge the participants.

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And in 1913 British officers -- who attended the maneuvers of the St. Petersburg, Kiev and Moscow Military Districts, as well as those of the 1st Turkestan Corps -- all mention the umpiring as being well

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carried out," except in Turkestan. Both because of their timing and the criticism that appeared in the military press, the report for that year is especially interesting. None of the usual well-chronicled deficiencies are noted. Instead, both the regular infantry and cavalry receive high marks, as do the large number of reservists who participated in those of the Kiev District. The report again approvingly notes that "the opposing commanders were said to have been given complete liberty of action." It also comments favorably on Russian staff work, and in

particular on the attention paid to communications, especially in Kiev. In general, the report also concludes that "(t)elephones have been developed to an extraordinary extent in the Russian Army."

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All this suggests that "the old routine" was not as fully acceptable at the command level as Bushnell and others maintain. True, in any organization as large and complex as the tsarist army, change took time. And little enough had passed since the defeats in Manchuria. Even so, if the war soon demonstrated that some commanders lacked the operational talents needed for war, it proved that others (i.e., Brusilov, A.M. Kaledin, and so on) did not. Thus in July 1914, both commanders in East Prussia (Samsonov and Rennenkampf) seemed commendable choices. Both had had considerable experience in handling troops, were younger than their German counterparts (Max von Prittwitz and Paul von Hindenburg), had had recent combat experience in the Japanese War, and both enjoyed the confidence of their subordinates. Nonetheless, a noted British student of the 1914 campaign could only conclude sadly that both appeared "to have deteriorated much" since 1905.

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While this judgement, informed by hindsight as it is, may be applicable to Samsonov, Rennenkampf arguably remained at least as effective a commander as the British Field Marshals French and Harg.

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Unfortunately, the same

is not true of the Northwest Front's commander Zhilinskii, or worse still, of the Supreme Commander Nikolai Nikolaevich. In spite of his continuing reputation as a commander of brilliance, the evidence suggests that the Grand Duke was a complete incompetent who "never bothered about war plans, which had to be prepared on the spot by the general staff and served fresh, like an omelet by his cook." ²⁸³

Even worse, during the Great Retreat of 1915 he panicked so badly that his wife worried openly that "her husband would have a complete nervous breakdown." ²⁸⁴ It is small wonder that the ministers complained that Stavka "has apparently lost its head, and its directives are acquiring an hysterical character." ²⁸⁵

Russia's military leadership, apart from some of the generals on the Southwestern Front, must generally be given low marks for operational as well as strategic effectiveness during the war's first year. Further, commanders of this calibre were hardly capable of accommodating themselves to the new realities of a conflict in which improved communications made central control vital, defensive firepower made most assaults costly failures, and real mobility remained a mirage. In this regard, of course, they were not alone among Europe's generals. Yet after Tannenberg the Russians, for the most part, had held their own in the north, and won major victories in the south. This situation continued as long as the period of "maneuver warfare," as

it is somewhat erroneously known, lasted on the Eastern Front. By April of 1916 the tsar's armies seemed poised in the Carpathians for a drive that threatened to force the Hapsburg empire from the conflict, and in the Caucasus they had brilliantly turned back a Turkish offensive. But on the Western Front, the Germans meanwhile were absorbing the lessons of the trench warfare brought by the increased power of defensive firepower. When they then resolved to send eight divisions eastwards to aid the desperate Austrians, they also sent these lessons. The result was Gorlitz-Tarnov of 19 April (2 May) 1915, an operation that opened a new phase on the Eastern Front.

The initial German success resulted largely from local factors. Their assault was launched on a relatively narrow front against two corps of the Russian 3rd Army. Thanks to incessant quarrels between Stavka and the two front commands, this army had been left undermanned, strategically isolated, and without reserves to defend a long front running from Cracow to the Carpathians. Further, the two Russian corps involved were comprised largely of second-line troops, who were also badly entrenched. These factors, along with poor tactical leadership and a mishandling of what reserves there were available at the operational and strategic levels, do more to explain both the Gorlitz-Tarnov breakthrough and the subsequent Russian defeats over the next four months. Here Russia's poor railway net with

its lack of lateral lines played a role. But as Stone points out, the problem was also the poor quality of Russian railway troops. For in July 1916, the Germans made much more effective use of these same lines to move 494 troop trains, with 10 divisions, as well as 98 artillery trains, to stem the Russian breakthrough on the Styr. And in any case, once the front had caved in, Stavka lost complete control over events. This left the semi-autonomous fronts to manage without the coordination required by the Russian command structure, thus magnifying the impact of local disasters and furthering the spread of hysteria. For while the Central Powers did enjoy a superiority in guns and shells, it was far from a sufficient cause for the Russian collapse. However once Russian generals had convinced themselves that it was, their operational and tactical methods changed accordingly.

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When the front stabilized in a state of trench, or "position" warfare during the fall of 1915, Russian military men turned to the study of their own recent experiences and those on the Western Front. While many of their conclusions are discussed in the following section on tactics, some are properly operational in scope. Many of the tsar's generals ended by agreeing with Haig's view that only an offensive on a narrow front had any chance of breaking the stalemate. There a massive infantry assault, preceded by a tremendous artillery bombardment,

theoretically, would pierce the enemy's lines of trenches and allow the cavalry through to exploit the breakthrough.

However, the effort required to concentrate sufficient artillery and infantry for the initial assault, and to bring up the cavalry, meant abandoning the element of surprise.

This permitted the enemy to bring up his own reserves to stem any troops that managed to pass through his heavily fortified entrenchments. The end result usually was a new and costly stalemate. The Russians learned this lesson from

the 11th Corps' attack on the Strypa in December 1915, and

in the assaults undertaken during the Lake Naroch operation of March 1916. The latter, when some 240,000 to

350,000 Russians launched themselves against 62,000 Ger-

mans, cost the Russian North and Western Fronts some

100,000 men, and yet failed miserably. Although artillery

support had been generous (c. 1,000 guns with 200 rounds per

day each), the enemy lines remained virtually intact. None-

theless, the generals once again blamed an insufficiency of

munitions for their problems, a position that seemed bound

to doom the tsar's army to passivity. Obviously, this

method of conducting operations meant opposing one's own

strengths to the enemy's, who on the Russian front usually

could amass a local superiority in materiel. On the South-

western Front, however, matters were somewhat different.

There A.A. Brusilov and some his colleagues also had

studied recent experience, and particularly the 7th Army's

failure of December, 1915. As a result, he developed a new operational technique of striking with little artillery preparation (to achieve surprise) at several points along a broad front. When he became front commander in early 1916, the general at last received a chance to implement these ideas. At Stavka, Alekseev and other generals fully appreciated the strategic utility of coordinating the Allies' offensives in general, and those on their own fronts in particular. This would prevent the Central Powers from using their internal lines to defeat attacks individually, and so allow the Russians to take advantage of their superiority in men (see Table XIV). The originality of Brusilov's conception lay in utilizing a number of tactical innovations to stage simultaneous assaults at several points along the same front.

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Table XIV

Force Levels on Eastern Front, February - March 1916

Front	Russian	Austro-German	Russian Superiority
Northern	466,000	200,000	266,000
Western	754,000	420,000	334,000
Southwestern	512,000	441,000	71,000
Total	1,732,000	1,061,000	671,000

L. Vetoshnikov, "Brusilovskii proryv (Kratkii operativno-strategicheskii ocherk)," Voennaia Mysl (1939), No. 7, p. 71.

Stavka had understood from Brusilov's predecessor that his armies were incapable of offensive action. The plan presented by Alekseev therefore called for Evert's Western Front to launch the main attack towards Vilna, and for A. N. Kuropatkin's Northern Front to launch a secondary assault in the same direction. When Brusilov insisted his troops could join in and so pin down the enemy on the Southwestern Front as well, he received permission to proceed, but only on the understanding that Stavka's artillery and troop reserves had been promised already to the other fronts. Nonetheless, he remained as optimistic about his chances as his two colleagues were pessimistic about theirs, despite their greater numerical superiorities and stockpiles of materiel.

With the general attack scheduled for the end of May, Brusilov issued his directives for the forthcoming assault. In accord with these, General Kaledin's 8th Army was to deliver the major blow with three corps at Lutsk, along a front 22 km. in length; the 11th and 7th Armies were to make secondary attacks on smaller fronts (6 km or less) at Tarnopol and Yazlovetsa; the 11th Army was to make a demonstration in the direction of Lvov; and the front's reserves were to be concentrated in the Rovno region. Great precautions were taken to ensure secrecy and hence surprise: leaves continued as usual; all engineering work took place at night, and then the results were carefully camouflaged;

large underground bunkers were built to conceal the assault parties; and despite the dangers that a breakthrough might remain unexploited, there was no massing of large forces of cavalry. In addition, the date of the proposed attacks was known to a very small number of senior officers until the last moment. As a result, when Brusilov opened his offensive on 22 May (4 June), he achieved complete surprise and quickly ruptured the enemy lines. ²⁹¹

In this manner, the Russians found the key to breaking the deadlock of trench warfare at the operational-tactical level. Brusilov's success is all the more striking when compared to the defeat of the subsequent narrow-front assaults of Kuropatkin and Evert. As usual, these generals explained their failures by the lack of adequate artillery support and munitions. Yet Brusilov's guns had fired only some 250 rounds a day over two days of fighting. This was considerably fewer shells than those supplied to his colleagues, and a mere pittance compared to the 600 rounds ²⁹² being fired daily along the Somme. Yet it was Brusilov who achieved the long-sought breakthrough thanks to his rejection of the new orthodoxy. Indeed, it is quite possible that his operational and tactical innovations might have remained untested if Russian generals had had the unlimited stocks of shells of which they dreamed. ²⁹³

In the end, though, Brusilov's victory failed to win any operational-strategic advantages and ground to a halt

in the bloody mud along the Stokhod. In part this resulted from Alekseev's hesitation to withdraw for his support the reserves of troops, guns and munitions already assigned to the other fronts, and in part it reflected the Germans' efficient use of railways to rush reinforcements to the aid of the defeated Austrians. Further, in the later stages of the summer campaign the Russians tended to return to the familiar but useless "grand phalanx," narrow-front battles favored by other commanders. Yet the main reason probably was that Brusilov still lacked the mobility with which to sustain and exploit his breakthrough. Concentrations of cavalry might have provided this, but their presence would have meant forfeiting the vital element of surprise. And even if the squadrons had galloped forward, the army would still be tied to its horse-drawn supply trains. Herein lay the paradox of trench warfare: for surprise one surrendered mobility, and vice versa. For in the long run, the internal combustion engine was to prove as important for logistical mobility as it was for combat. Until armies became motorized, operations would only rarely rise above the level of grand tactics.

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Nevertheless, if in late 1916 many generals still seemed wedded to phalanx-style battles like those on the Stokhod, the stunningly successful Mitau Operation of December 1916/January 1917 demonstrated that the techniques of Brusilov were slowly gaining ground. Then units of

General R.D. Radko-Dmitriev's 12th Army achieved a complete surprise before Riga by using no artillery preparation at all. ²⁹⁵

Equally indicative, by April 1917 Lt.-Colonel A. Syromiatnikov had incorporated the lessons of this campaign into his lectures at the Staff Academy. ²⁹⁶ Meanwhile, 1916 had witnessed other proofs of Russian operational competence, the most notable being the storming of Erzurum on the Caucasian Front in that February. Less significant but just as interesting were the actions waged along the Black Sea Coast of Lazistan. These had led to the capture of Trebizond in that April. In them the Russians had demonstrated fully their capability in land-sea combined operations and amphibious techniques. ²⁹⁷

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By the spring of 1917 Brusilov, now Supreme Commander-in-Chief, was preparing to test his methods in a general summer offensive. But while they again scored initial successes, by this time the army was too demoralized by revolution to sustain the tempo. ²⁹⁸ Despite this, on the basis of his earlier victory and the other successes won by Russian arms in 1916, one must conclude that the Imperial Army had within it commanders of sufficient intellectual flexibility to adapt themselves to the reality of modern war. When they were given their heads, they in turn provided excellent examples of operational effectiveness. That they were given such opportunities reflects the

suitability of the front structure, which in the end, also proved relatively efficient as a means of organizing the infrastructure of the immediate rear. To blame this structure or other more incidental factors for the earlier failures is to obscure the main point: unfortunately many Russian generals, whatever their managerial prowess in peacetime, proved to be either incompetent in war, or as obstinately conservative as their fellows elsewhere when faced by a long war of a type they had not anticipated.

CHAPTER IV: TACTICAL EFFECTIVENESS

Much of what was said about the operational skills of Russian commanders is equally applicable to considerations of the tsarist army's tactical effectiveness in World War I. During that conflict, the line between the operational and tactical "arts" was frequently blurred to the point of being indistinguishable. By 1914 the army was preparing tactically for a mobile war in which advancing combined-arms (infantry, cavalry, and artillery) columns would employ formations suitable for entering battle directly from the march. In practice, however, the implementation of such tactics was hindered by a number of factors. Among these was the artillery's arrogance, the diverse training methods employed, and the uneven quality of junior officers who remained overburdened by the demands of their "economic" or supply responsibilities. As the British observers of the 1912 maneuvers noted, the "Russian officer has many good qualities, but his lack of education and the poorness of his prospects are fatal at present to any great improvement." For while many young officers were described as "interested in their profession and keen," there seemed few outlets for such ambitions. Their keenness therefore was dulled "by the routine of a conscript army." Meanwhile, the army still lacked a "unified military doctrine" as hot debates continued among its theoreticians over the nature of "encounter" and other types of

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conflicts.

Despite these continuing problems, clear signs existed of a growing sense of professionalism among Russian officers before 1904, and of a real "military renaissance" between 1906 and 1914. 302 The year 1896, for instance, had seen the formation of the Obshchestvo revnitelei voennykh znanii (Society of Zealots of Military Knowledge) from a private study group of Staff and Guards officers in St. Petersburg, and in 1899 publication of the journal Razvedchik (Scout) had begun. Both sought to promote the professional expertise of the army's command cadres, and by 1905 the Society of Zealots had some 3,000 members. 303 In the provinces other publications, such as L.V. Evdokimov's almanach Dosugi Marsa (Leisure of Mars), which appeared in Kazan and Saratov between 1887 and 1890, had had the same goal. 304 And while none of these attempts ever resulted in the formation of a fully professional officer corps, they did do much to improve the situation before 1904. 305

After the Japanese War the Society continued its activities and Razvedchik continued its publication until the outbreak of the European conflict in 1914. However, during the period after 1906 their efforts were seconded by those of the officers involved in the publication of Voennyi golos (The Military Voice), 195 issues of which appeared in 1906; by the debates roused by the theories of the Young Turks; and by the growth of the Neo-Panslavist move-

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ment. Other officers meanwhile involved themselves in the studies organized between 1907 and 1914 by the Russian Military-Historical Society, devoted themselves to emerging technologies like those involved in automobiles and aviation, or sought to create a nationalist youth movement after 1909 by founding branches of the Boy Scouts. 307

In his bibliography of the military periodical press, the Soviet military historian L.G. Beskrovnyi has presented other evidence of the intellectual ferment that seized the Russian ofitserstvo during these years. Of the total of 339 titles he lists as appearing from the early 1700s to the end of 1914, only 123 began publication before 1905. Eighty-nine titles were added during 1905-1907, inclusive, but just over half of these were issued by groups in the revolutionary underground. Even so, these three years witnessed the birth of over 40 military journals of varying professional quality, and almost all of the titles added during the years 1908-1914 fall into the same category. 308

Both within the pages of these journals, as well as in separate monographs, the elite of Russia's military men carried on a robust debate over the tactical lessons of 1904-1905, and the proper tactics for any future conflict. Foremost among them were A.A. Neznamov, A.G. Elchaninov, N.P. Mikhnevich, N.N. Golovin, and M.D. Bonch-Bruевич, all of whom were connected with the Nikolai Academy of the General Staff. In addition, in 1911 and in 1913 this insti-

tution published two jointly authored instructions on tactics.³⁰⁹ Echoes of this debate are found in numerous official and semi-official manuals of the day. For example, in 1910 the War Ministry issued its draft Instructions for Leading Infantry in Battle.³¹⁰ These were greeted with immediate and widespread criticism both for over-emphasizing the use of cover on the one hand, and for ignoring the need to direct fire and cooperate with the artillery on the other.³¹¹ As a result, the draft was withdrawn and replaced with a new, officially approved manual in 1914.³¹²

Similar debate surrounded the Infantry Drill Regulations of 1908.³¹³ As a draft, these also had drawn violent criticism, such as that levelled at them by the military correspondent of the influential conservative newspaper Novoe Vremia (New Times).³¹⁴ Indeed, even after the official adoption of these regulations, arguments continued over the proper organization and formations for the infantry. As a result, a commission of the General Staff was formed to examine the various proposals being advanced. In 1911 the eminent military scholar N.P. Mikhnevich presented that body with draft regulations for the organization of future infantry regiments. Nonetheless, by 1914 those of 1908 still remained in force.³¹⁵

Numerous other manuals and regulations appeared for other branches of the army.³¹⁶ These and the other developments just discussed suggest that the intellectual horizons

and professional interests of many Russian officers were considerably more varied than John Bushnell and others have indicated, and that their tactical skills were not necessarily of a uniformly low level.³¹⁷ Indeed, the troops who took the field in August 1914 were surprisingly ready to wage the type of tactical struggle envisaged by military planners. The latter naturally had defined this in terms of the prevailing operational concepts. As in that area, actual mobility often fell far short of the theoretical demands of tactical precepts. These had been reworked since 1905, encoded in such manuals as the Field Regulations of 1912, and were applied -- with various degrees of success -- in field exercises and maneuvers.³¹⁸ On such occasions, the infantry generally won good marks from foreign observers for both its physique and ability to carry out modern tactical drills.³¹⁹ Tactically, the cavalry won fewer plaudits and in modern war, it proved a disappointment. Unfortunately Russia's generals -- who like their confreres elsewhere often were ex-cavalrymen -- for long ignored the lessons of the conflict's first months.³²⁰

Apart from mobility, the tactical precepts and training of the tsar's forces in 1914 also emphasized the need for combining the traditional arms in battle. Much is often made of the traditionalists' professed belief in the power of the bayonet, allegedly as a replacement for firepower. But the axioms of the great A.V. Suvorov and M.I. Dragomi-

rov were used more as training aids, intended to instill a Russian martial spirit in peasant conscripts, than as serious expressions of tactical preference.³²¹ Furthermore, the retention of such aids does not mean that after 1905 Russian officers, especially those who had seen service in Manchuria, did not recognize full well the need of improving their troop training in general, and that of the infantry in particular. By 1906, the best methods of doing so had become a topic of intense and often bitter discussion in the military press.³²² That this continued throughout the period is clear from the debates over the manuals just discussed. The same is true of the cavalry as well, and this arm, too, saw the introduction of a number of reforms. These brought measures to upgrade the quality of its personnel, mounts, firepower, and training, as well as new uniforms.³²³ As a result, one writer insists that after 1906, the cavalry's summer maneuvers "became intense exercises at all levels of command, rather than the pleasant summer rides of the gay nineties."³²⁴ Even so, on the whole the condition of this branch seems to have remained much as before.³²⁵

With regard to firepower, it is true that Russian (and other) theorists still had to comprehend fully the awesome power that modern weapons gave well-entrenched defenders, and the tsar's artillerists still resented having to work in close cooperation with the infantry. Nonetheless, al-

most all understood full well that firepower was a decisive factor. As Neznamov put it in 1909: "Fire decides battle; the bayonet culminates the attack" -- a judgement that almost every manual or writer echoed to some degree.³²⁶ In a lecture delivered in that same year, he again listed the increased power of modern firearms as the first of four dominant characteristics of the contemporary military art.³²⁷ And in his later work on modern war, he decisively rejected the dream "of massive blows with the bayonet."³²⁸ He went on to charge that this dream, along with a failure to appreciate modern firepower, had dominated Russia's military thought before 1904-1905. Instead, Neznamov emphasized a recognition of the increased "role and significance of artillery in modern warfare," and the need for the infantry to master "the art of musketry."³²⁹

Many foreign observers missed this trend in Russian military thought and continued to believe that despite the increase in modern firepower, "the traditional culte of the bayonet handed down from Suvorov's time holds good. It has not yet been recognized," wrote one commentator, "that it is only by the attainment of superiority of fire that the advance of attacking infantry to close quarters is rendered possible."³³⁰ But if some members of Russia's "national" school of military thought still tended to lay greater stress on "cold steel" than did the more innovative Neznamov, a review of the tactical texts of the day makes it

clear that the Imperial Army had recognized the growing importance of firepower on the modern battlefield. Thus, for example, in 1907 General Skalon had instructed his troops that while the bayonet remained "the decisive means of breaking down a vigorous adversary," an "advance should always be accompanied with a terrific fire."³³¹ Again, the Nikolai Staff College's tactical handbook of 1911 reiterated Neznamov's claim that "battle is waged by fire and finished with the bayonet," and stressed the role of supporting fire during a bayonet assault.³³²

Otherwise, the foreign commentator just quoted noted in May 1910 that the "combination between arms has improved," and that by 1908 the artillery had begun supporting the infantry more closely than had been true earlier. However, he added that "no real progress can be hoped for in this [last] respect till units have been more scientifically grouped." In his view, "[g]uns will have to support their infantry more closely when they have been permanently placed for tactical training under infantry division commanders."³³³ In fact, Sukhomlinov took just this step in 1910. But unfortunately, before the outbreak of hostilities, continuing jealousies and distrust prevented the establishing of a fully cooperative working relationship between the two arms -- a situation that continued, to Russia's detriment, even after that event.³³⁴

John Bushnell has recognized this reformist urge, con-

nected it with units and officers who had seen service in
 the Far East, but concluded that such "junior officers"
 clearly did not have a major impact on their units.³³⁵ He
 also has criticized the diversity of the new training
 programs, and points out that in 1905 the new post of
 Inspector General of Infantry was created "to oversee and
 bring some uniformity to infantry training."³³⁶ This posi-
 tion was first filled by O.K. Grippenbergh, and from 1906 by
 N.P. Zarubaev.³³⁷ But according to Bushnell, resistance
 from commanders of the military districts brought the abo-
 lition of this office in 1909.³³⁸ Yet Zurubaev's career was
 not quite as barren as Bushnell suggests, nor actual reform
 as rare as he indicates. In 1908, for instance, a commission
 recommended a revised program for the training of infantry
 officer-candidates. This now included the study of the
 Japanese war, stressed the importance of "hasty" or field
 fortifications, and increased the attention paid to commu-
 nications and applied tactics. A similar program was imple-
 mented in the cavalry schools as well.³³⁹

Evidence of the army's new appreciation of the utility
 of field works also appears in instructions governing sum-
 mer training issued in the Kiev Military District in 1907.
 In accord with Point 8, "[w]henver possible entrenchments
 should be made during the manoeuvres. We paid dearly for
despising the spade."³⁴⁰ General Skalon of Warsaw also
 called attention to the value of such works, both in the

offense and on the defense, and instructed that trenches "should be as little visible as possible, and should blend with the surrounding terrain."³⁴¹ However, critics like Bushnell insist that this interest, too, was only a passing fashion.³⁴² And on maneuvers in the St. Petersburg Military District in 1908, the "use of entrenchments in the attack was not observed." Although officers or NCOs in each unit supposedly were to draw up plans for field fortifications on each piece of ground occupied, to make estimates of the times required for building them and if possible, dig "a few feet of trench... as an example," British observers saw no evidence of these last.³⁴³

Interest in entrenchments naturally waned somewhat as the Imperial Army increasingly became wedded to an offensive doctrine of mobile warfare. Nonetheless, it is a mistake to argue that field works were largely ignored after 1908. Since the experience of 1904-1905 had demonstrated that when the infantry had dug trenches under the direction of their own officers, the results often were so badly sited as to prove positively dangerous. To correct this situation, the ministry had published revised regulations for field fortifications in 1907. In accord with these, one officer, four reenlisted NCOs and 16 men from each infantry regiment were annually to undergo a month's training with an engineer battalion.³⁴⁴ In 1909 the ministry published a new, three-part manual on field works for

the infantry, which supplemented another three-part handbook on engineering for infantryman that had appeared in 1908. More practically, the authorities also took steps to increase the number of entrenching tools provided each company of foot soldiers. During these years these rose from 20 light axes and 80 light spades 30 light axes, 30 pick-shovels and 140 light spades³⁴⁵

Because of the increased recognition given firepower, after 1906 Russian training also emphasized marksmanship and the siting of fire-points to a degree never seen before in the Imperial Army. In the wake of the Japanese war, efforts to improve the individual soldier's rifle fire, rather than reliance on the mass volleys used in Manchuria, were a matter of top priority with War Minister A.F. Rediger and other reformers. In 1907, the minister told the British attaché Colonel Wyndham of plans for establishing a "school of musketry," in each military district, for all infantry staff captains. The result was the six-week courses that first appeared in 1908. At that time, three such courses were established in the Moscow, and two in the Vilna Military District. Seven more were organized in 1909 (four in the Warsaw and three in the Vilna Military Districts), and by 1910 similar courses were for those of St. Petersburg and the Priamur as well.³⁴⁶

Other examples of this increased interest in marksmanship abound. In 1907, for example, instructions for the

summer maneuvers in the Kazan Military District ordered that the troops receive individual instruction and practice in "firing lying down and on the knee . . . as they are the most resorted to in war." ³⁴⁷ Nevertheless, progress was

slow and in November 1908, Wyndham reported that "[t]he bad firing of the men in the last war has been fully realized, but it is difficult to judge what improvement has been made since." ³⁴⁸ Again, as late as May 1910, another

observer noted that the "use of volleys is still retained, and there is much firing by word of command, probably to facilitate economy in ammunition." Even so, this writer did consider the new musketry regulations of 1909 to be a great advance on those of 1899. This was because they laid greater stress upon individual fire exercises in the field, with firing at known ranges being 1 ft for the preliminary practices in what had become a progressive course of training. He also called attention to the increase from 120 to 170 rounds of ammunition being allocated annually to such practice. ³⁴⁹

And in 1911, Army Order No. 198 further amended the regulations of 1909 so as to add another 50 rounds to be used during field exercises with small units. ³⁵⁰

These measures also attest to the work of Zarubaev, even though by that last date his office had been abolished. Nonetheless, many of his duties had been absorbed into those assigned the new Inspector of Musketry (or Riflemen).

He was to supervise musketry throughout the army. For this purpose, he had a staff of three major-general/inspectors as assistants, and the new official himself reported directly to the Minister of War. Furthermore, at this time the infantry's machine-gun detachments were reorganized, and special machine-gun practice camps were set up to train their personnel.³⁵¹

One area in which the demands of a doctrine for an offensive, mobile style of war had a major impact was that of logistics. Operationally, as noted above, this was the responsibility of the Front Supply Chiefs. But as Snyder and others have noted, this aspect was generally ignored in war games and at maneuvers.³⁵² True, by 1914 measures were

being considered to relieve junior officers of their "economic" or supply responsibilities, the supply services themselves were receiving increased attention, and they had even begun publishing their own specialist journal.³⁵³ As

yet, however, no infrastructure existed to tie the tactical units to their respective Front commands even if, as Snyder admits, Russia's soldiers "had as good an understanding of the shortcomings" of their supply services as did their critics. In this regard, he cites a memorandum by Generals F.F. Palitsyn and M.V. Alekseev as demonstrating the extent to which concern for mobility forced them to envisage a logistics system that could become feasible only with the large-scale exploitation of the automobile, some-

thing that in 1914 remained "unobtainable" because of "Russia's financial and technical limitations."³⁵⁴ But if here again, Imperial Russia was no exception, the problem of tactical supply in the field still remained largely unresolved.

Nonetheless, by 1914 all arms were becoming accustomed to new tactical formations that stressed the need for the troops to deploy rapidly from the march, often directly into battle. These were described in a series of new manuals that also recommended the troops drill in skirmish lines, make full use of cover, and develop initiative.³⁵⁵

In this last regard, British officers were especially impressed by the training given scouts in the 1st Turkestan Corps.³⁵⁶ By 1914 Russia's artillerymen, despite their frequent choices of exposed positions, had an excellent reputation for their accuracy.³⁵⁷ Others maintained the infantrymen had become the best shots in Europe as well.³⁵⁸

This claim was probably exaggerated, but the army as a whole was not badly prepared for a war of maneuver. This is evident from the victories of the Galician armies, and from the successes scored by the infantry of Rennenkampf's First Army in its first actions in East Prussia. Indeed, Soviet writers still cite the actions fought at Gumbinnen as models of encounter battles in this period.³⁵⁹ More impressive still, the march formations of today's Soviet army are basically those practised by the Imperial Army in 1914,

with tanks and personnel carriers replacing cavalry and infantry respectively. ³⁶⁰

Wedded to their belief in mobile war, most Russian commanders by the early spring of 1915 still had not recognized the need for acquiring new tactical skills. In this regard, the situation matched that described in the operational section above, and is especially clear from their continuing belief in the possibilities of cavalry. The performance of this arm had been very disappointing during the East Prussian campaign of 1914, and only marginally more rewarding in Galicia, despite some significant mounted actions. ³⁶¹

Interestingly enough, during the great retreat of 1915 the Southwestern Front's command seriously attempted to form a mounted partisan detachment within each cavalry division, but had no success in waging this type of war. ³⁶²

But in general, from 1915 onwards -- apart from some small actions, mainly in the Baltic region -- cavalrymen found themselves preserved as units "in being" by assignments to guard duties in the rear, or to the reserve held behind the lines to exploit an anticipated breakthrough. On occasion, they were even forced to man the trenches. But for the most part, they proved to be an expensive luxury that badly complicated the army's logistics problems. ³⁶³

Despite this, large numbers of mounted formations were retained throughout the conflict, and a British general who

canvassed the Southwest's command in late 1916 found most of its senior commanders still held high hopes for the role of horse on the battlefield. At that time Brusilov, despite the facts that he himself was an old cavalryman and had been unable to exploit his breakthroughs fully thanks to a lack of that arm -- concluded that there was "too much cavalry in the Russian army." In his view, its supply had become too costly and complicated given the returns it brought on the battlefield. However A.M. Kaledin, one of his subordinate commanders, disagreed while another, A.M. Dragimirov, insisted that "a great day for cavalry is coming." ³⁶⁴ This last opinion seems to have remained the prevailing view among most generals on the Russian and Western Fronts throughout the war.

But when the German divisions moved eastwards to relieve the hard-pressed Austrians in 1915, they had brought with them the costly tactical lessons of the more compact Western Front. These included the careful use of artillery, the need for close cooperation of that arm with the infantry, and the utility of well prepared field fortifications. As pointed out, Russian artillerists had continued to consider themselves an elite and to disdain working closely with the infantry, which in turn had yet to learn the need for proper trenches. Although there had been a flurry of interest in these latter after the Manchurian campaign, this had waned with a reassertion of the doctrine

of offensive mobility. While manuals continued to note their utility and officers were supposed to prepare the appropriate plans on maneuvers, in practice little was done to train the troops in their use.³⁶⁵ In addition, the vast

extent of the eastern front and the poorer railway communications already noted made the use of sufficient reserves, tactically as well as operationally, much more difficult. All sides in the east therefore tended to rely on thick front lines which had little reserve backing, which left commanders with little to throw into the gaps torn by enemy breakthroughs. Thus the Germans demonstrated with their carefully organized assault at Gorlitz in May, and in the subsequent battles of the spring and summer of 1915.³⁶⁶

At first Russian commanders at all levels proved slow in abandoning their preconceptions. But by autumn, with the enemy finally stalled, they had begun to reassess their methods in the light of recent experiences. By July 1916 French and German handbooks had been translated for Russian use, and Stavka had issued new manuals on infantry combat and on attacking fortified zones. Now, as one emigré expert has noted, each soldier was trained in a particular skill rather than as a jack-of-all-trades, and their commanders' initiative was severely limited. This was to ensure that they adhered closely to their roles in meticulously timed assaults made by waves of infantry, whose advance had been coordinated closely with the artillery's supporting bomb-

ardment. After a devastating barrage had supposedly smothered the defenses, these waves were to strike the enemy's entrenchments in a narrow sector of the line, drive through to the rear, and so open the way for the cavalry to pierce the front. ³⁶⁷

In general, the course of tactical change mirrored the operational developments outlined above. The majority of Russian commanders -- men like N. P. Ivanov, A. E. Evert and N. V. Russkii -- had concluded that they must adopt this version of the German tactics, and that overwhelming artillery fire was an absolute requirement. For this they estimated that it was hopeless to attempt to move until up to 100 light and heavy guns, each with 1,000 rounds for a 10-day battle, could be concentrated on each kilometer of the sector of the assault. ³⁶⁸ Only then could it be struck successfully by the massed infantry. In this manner, of course, they also reiterated their belief that a shell shortage -- not military incompetence at every level -- lay behind recent disasters. ³⁶⁹

Such tactics were tested in the series of bloody yet unsuccessful attacks that opened on the River Strypa in December 1915 and terminated on the Stokhod ten months later. These clearly demonstrated that such methods could not end the stalemate of trench warfare. For even if artillery-infantry cooperation could have been guaranteed, which in the earliest of these battles was never the case,

even the most massive artillery preparation seldom destroyed the second or third lines of hostile trenches. Yet it so broke up the battleground as to impede the infantry's advance and make it subsequently impossible to bring up guns to support, or cavalry to exploit, any breakthrough. In addition, the efforts required to concentrate the necessary munitions and cavalry, let alone infantry, meant that real tactical as well as operational surprise became impossible. Therefore enemy reserves usually were in place well before the attack, which thus struck the strongest, rather than weakest, section of his line. To solve this problem, the commanders mentioned could only call for still more shells and guns.

As pointed out earlier, matters came to be viewed differently on the Southwestern Front. There, Brusilov and his colleagues quickly recognized the need to regain the possibility of both operational and tactical surprise. The system they worked out, and had an opportunity to apply when Brusilov replaced the aging Ivanov as front commander, was mutually consistent at these levels of action. To begin with, careful reconnaissance and observation took place along a broad front, which left the enemy doubtful about where the blow would fall. In the event, a number of blows came simultaneously in several sectors and aimed in several directions. Equally important, the initial attack was conducted by specially selected and carefully trained

"shock" or assault units. Having been familiarized with every detail of their objectives, they were secretly assembled in underground dugouts on the eve of the offensive. Further, rigorous steps were taken to organize infantry-artillery cooperation at the tactical level. Officers were exchanged between units of the two arms, with the artillerymen in the trenches serving as spotters. During the preparatory period, they selected and carefully registered targets in the opposing line. In this process aerial reconnaissance proved to be of considerable assistance. During the actual assault, the infantry advanced after a minimal but effective artillery preparation. On reaching enemy trenches, the attackers by-passed any remaining strongpoints and so quickly overran even "thick," well-entrenched defensive lines. That they did so was thanks largely to the fact that they had achieved complete surprise. This meant that initially the stunned Austro-Germans blundered as much in using their available reserves in 1916 as the Russians had done in 1915.

At the same time, this surprise resulted largely from the skillful use of camouflage and deception techniques, and from the fact that the enemy had not been alerted by any unusual concentrations of munitions or cavalry. But if the tactical and immediate operational benefits of this system were abundantly clear -- indeed, within less than a year the Germans had adopted a similar system for use as

their own preferred style of tactics -- it failed to bring major operational-strategic results. Some blamed this on the fact that Brusilov struck with four extended fingers rather than a fist; that is, that no single assault had enough force to be decisive. Others once again blamed a lack of guns and shells.³⁷² But as already noted, it was a lack of cavalry to exploit the breakthrough, as well as the inability of the cumbersome supply and artillery columns of that day to keep pace with the advancing infantry, that eventually permitted the Germans to stem the flood and so robbed Brusilov's techniques of decisive strategic significance. As at the operational level, only the use of the internal combustion engine for aircraft, tanks and the trucks of supply columns could restore a mobility to the battlefield that was fully consistent with the warring nation's strategic objectives. Nonetheless, signs that Brusilov's system was finding wider use on other Russian fronts made the empire's prospects for 1917 seem much brighter.³⁷³

However, in that year the army collapsed dramatically under the impact of domestic revolution. The consequent disintegration of its components in turn raises the issue of unit cohesion, an area in which the tsarist army usually has earned a low score. Stone has suggested that the "old" army in fact collapsed during the disasters of 1916, and that the nucleus of a "new" army began gestation on the

Southwestern Front in 1916. In support of the first part of his thesis he cites considerable evidence concerning the low morale existing during the Great Retreat, the rising figures on desertion and illness, and the miserable conditions of service caused by chaos in the railways, supply and evacuation networks, and in the military administrative system in general. As other contributing factors, Stone includes the chronic shortages in officers and NCOs, the heavy losses suffered by both these categories in 1914 and early 1915, and the replacement of the regular conscript-regulars of 1914 by reservists and militiamen. Given the traditional distance existing between Russian officers and men, a reluctance to promote new officers from the ranks, and the general horror aroused by modern warfare, he notes that many wonder why signs of revolution did not break out among soldiers as early as December 1914. For the army's "structural" problems, he posits, were by then being reinforced by the common soldier's growing sense that his officers did not understand their business.³⁷⁴ And as Stone himself, Wildman and others demonstrate, such symptoms continued throughout 1916.³⁷⁵

Despite this catalogue of misfortunes, these writers explain the army's continued existence and combat capability almost solely in terms of the harsh disciplinary measures imposed by senior and junior commanders.³⁷⁶ Yet despite the effective use of such measures to meet similar

signs of demoralization in other armies that did survive, this explanation is hardly convincing. As mentioned earlier, one Guards' regiment began the war with 4,000 men, but by 1917 had had 44,000 men pass through its ranks. Yet until June of that year, it continued to be capable of combat. Despite the influx of under-trained recruits, many other units had scored successes in 1916 and seemed ready, if not always overly eager, to continue in action in 1917. For this reason, somewhat more sophisticated explanations seem appropriate. 377

One recent study of the prewar tsarist army suggests that its basic unit, the regiment, in many ways replicated the peasant village. In this the soldier supposedly remained the toiler, and the officer the gentleman landlord or barin, in a world in which economic concerns and labor occupied much of the time of both. 378 While there is much to support this view, it still ignores other essential aspects of the regiment's nature. On joining it, the conscript and officer alike entered a "family" with its own traditions, distinctive way of doing things, and corporate existence. Its connection with other similar units was based on particular instances of past glories, a common allegiance to the tsar and -- despite religious diversity -- the ideal of an Orthodox empire. To some extent each soldier, although to a lesser degree than an officer, was drawn into this corporate entity. 379

Given the vast turnover of personnel occasioned by the losses of 1914-1916, as well as the general disillusionment and fatalism induced by such losses, the inculcating of such military traditions became much more difficult. Opposition propaganda, official stupidity and inefficiency, and all the other problems just enumerated, undoubtedly hampered the process still further. Nonetheless, such traditional values seem to have combined with the individual soldier's sense of pride, and his search for self-respect among his peers, to a degree that sufficed to keep most regiments existing as cohesive fighting units into 1917. Here the oft-noted bonding of men who see action together, as well as the peasants' veneration for a tsar who made a point of being seen among his men, also probably played a part. But in 1916, the liberal and radical opposition's propaganda began undermining both the soldier's individual pride in himself as a combatant, and his faith in the traditional symbols of church and tsar. When this reached a crescendo after Nicholas II's abdication in early 1917, the regimental system collapsed. With it, so did the Imperial Army as a fighting organization.

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Tactically, the picture of the tsarist army's effectiveness parallels developments in the operational field. Before 1914 tactics were consistent with doctrine and the troops were receiving the appropriate training. True, the

latter's efficacy varied from officer to officer, unit to unit, and from Military District to Military District. Even so, apart from Tannenberg, during the war's initial campaigns the troops gave a good account of themselves. Indeed, even during that operation the Russians showed considerable tactical skills, and the disaster's roots were more operational in nature. Nonetheless, until May 1915 actions on the Eastern Front supported the illusion that the war was still one of limited maneuver.

This relieved Russian commanders of the need to recognize the bloody lessons being taught by defensive firepower on the Western Front. When the Germans demonstrated these at Gorlitz-Tarnov in May 1915, the result was a catastrophe. By that autumn, however, the Russian commanders were reassessing their tactical concepts. While the majority adopted those then being used in France, on the Southwestern Front Brusilov and his colleagues demonstrated that some officers of the Imperial Army were capable of original operational-tactical thinking. They developed there techniques for breaking the stalemate of trench warfare. If the means with which to fully exploit a breakthrough had to await the large-scale introduction of the internal combustion engine onto the battlefield, the result nonetheless was the stunning victory of 1916. More important still, their precepts seemed destined to see wider application during the summer of 1917. Then, however, revolution

undermined the army's capabilities, finally destroyed the regimental system, and with it the old army. Nonetheless, before 1914 it had a tactical system consistent with its perceived capabilities, and after 1915 it was developing one consistent with the new realities of modern war.

CONCLUSIONS

In summary, then, the story of the Imperial Russian Army's conduct of World War I has been badly misrepresented. While it had many failings in all the areas considered above, these often were not unique. Further, for the most part they are not the failings so repeatedly chronicled by most historians since Bernard Pares and Nikolai Golovin. For despite its problems, the Imperial Army gave a creditable account of itself during the tragic years 1914-1917.

In part this resulted from the general support Russian "society" gave its military and naval establishments. Politically and strategically, most educated Russians agreed on war aims and strategic objectives. They therefore provided their armed forces with adequate funding before the conflict and, despite administrative inefficiency, after 1914 created a war economy capable of providing the materiel for waging the struggle. Meanwhile tsarist planners had developed an appropriate strategic-operational structure for the conduct of war, and an operational-tactical system consistent with the underlying doctrine of their day. In addition, since 1906 training in many units had improved considerably, the quality of personnel was slowly being raised at every level, and modern weapons were being introduced into both the ground forces and fleet. It was unfortunate that issues of defense became a bone of

contention between the newly established Duma and the Emperor, but in the long run this did not seriously hamper the process of prewar modernization. Only after August 1915 did the problem posed by two national authorities create political tensions that, in the long run, contributed to the revolutionary crisis that eventually sapped the strength of the field armies. So if Russia was not as ready in 1914 as she might have been in 1917, after the "Grand Program" had made its effects felt, her leaders nonetheless had good reasons for confidence in their prospects.

When the conflict came in August 1914, however, these advantages initially were offset by the conflict's unexpected duration. During 1914-1915 matters were made worse by the incompetence of the command of the Northwestern Front and of Nikolai Nikolaevich's Stavka, by structural flaws within the Empire's political and military systems, and by an inefficient military bureaucracy. The situation then improved dramatically in late 1915, once Nicholas II had reunited the administration of the rear with the front by personally assuming the post of Supreme Commander-in-Chief. This is not to suggest that the Emperor himself was a warlord of significant talent. Rather, he left military planning to his chief of staff, General Alekseev, and contented himself with the tasks of generally supervising the military and civil administrations, and with efforts to raise morale. As a result of the increased administrative

efficiency achieved by this measure, and of the efforts of the new Special Councils, by 1916 the tsar's armies were again ready to take the offensive. In the end, even if he still had failed to win a political peace on the home front that might have forestalled a revolution, but unlike the German Kaiser, he did manage to avoid permitting the creation of a military dictatorship that would leave the crown powerless and the country in the hands of the generals.

Meanwhile, thanks to the conservatism and lack of imagination of many generals, the first battles of 1916 proved costly examples of the frustrations of trench warfare. Yet on the Southwestern Front, General Brusilov and his colleagues developed methods that broke the tactical and operational stalemate, even if strategic victory eluded their grasp. As a result, the next year's campaign seemed to offer greater chances for a Russian, and indeed, for an Allied victory, than had any period since August 1914. And meanwhile, shortages in materiel at last seemed to have been overcome, even if by 1917 the War Ministry's officials still faced a major crisis because of the drain on military manpower.

In the end, this problem combined with domestic political opposition and economic strains to produce a revolution. The exact contribution of each of these factors to the events of 1917 has yet to be determined with certitude. Nonetheless, the collapse of the Imperial regime in Fe-

bruary/March 1917 was not a direct result of defeat on the battlefield. It thus should not obscure the facts that during 1916, the tsar's armed forces had shown remarkable powers of recovery and doctrinal innovation, that some of Russia's generals were adapting to the demands of trench warfare, or that in early 1917, the empire's far-flung armies still remained a potent factor in the optimistic calculations of their allies.

ENDNOTES

1

Keith Neilson, Strategy and Supply. The Anglo-Russian Alliance, 1914-17, (London, 1984), p.8.

2

Dennis E. Showalter, "Even Generals Wet Their Pants: The First Three Weeks in East Prussia, August 1914," War and Society, (September 1984), No. 2, p. 63. The works to which he refers are Norman Stone, The Eastern Front, 1914-1918, (London, 1975); Allan K. Wildman, The End of the Russian Imperial Army. The Old Army and the Soldiers' Revolt (March-April 1917), (Princeton, NJ, 1980); and Alexander Solzhenitsyn, August 1914, trans. Michael Glenny, (New York, 1972). Stone makes much of the factionalism existing within the higher command, a factionalism which he believes inhibited wartime efforts at strategic and operational coordination. He emphasizes this factor, the bureaucracy's inability to handle the manpower problem, and "the bottleneck of peasant agriculture" (p. 14), as major causes of Russia's defeat.

Wildman suggests the more extensive sociological explanation that the structure of the army, like that of the whole of Imperial Russian society, had remained only half modernized, and so could not absorb the shock of total war. A similar view informs John Bushnell's "The Tsarist Officer Corps, 1881-1914: Customs, Duties, Inefficiency," The American Historical Review, (October, 1981), No. 4, pp. 753-780 (especially pp. 774ff), and his more recent Mutiny and Repression. Russian Soldiers in the Revolution of 1905-1906, (Bloomington, 1985), pp. 1-24. A somewhat different view is presented by William C. Fuller, Jr., Civil-Military Conflict in Imperial Russia, 1881-1914, (Princeton, 1985). He stresses the military's search for professionalism and the problems this created for its relations with the autocracy and bureaucracy, its supposedly traditional allies.

Solzhenitsyn generally follows the more traditional view that was best developed by General Nicholas (Nikolai) N. Golovin in his The Russian Army in the World War, (New Haven, 1931), and his expanded Voennyya usiliya Rossii v mirovoi voine, (2 vols.; Paris, 1939). Although Golovin insists the tsarist army of 1914 was well trained, he believes its defeats arose from the fact that the high command was incompetent, its manpower more limited than most realized, and its armaments (especially artillery and munitions) insufficient. Most of this he blames on the Minister of War, V.A. Sukhomlinov, whom he argues undid the efforts of progressive reformers like himself. His themes have been reiterated in numerous Western works, one of the most recent being Ward Rutherford's popular account, The

Russian Army in World War I, (London, 1975).

Soviet scholars also have stressed the importance of material shortages; see, for instance, K.F. Shatsillo, Rossia pered pervoi mirovoi voinoi (Vooruzhennye sily tsarizma v 1905 - 1914 gg.), (Moscow, 1974); D.V. Verzhkhovskii and V.F. Liakhov, Pervaya mirovaia voina, 1914 - 1918 gg. Voenno-istoricheskii ocherk, (Moscow, 1964); and V.A. Emets, "O roli russkoi armii v pervyi period mirovoi voiny 1914-1918 gg.," Istoricheskie zapiski, (Moscow, 1965), kn. 77, pp. 57-84. This last, for instance, concludes (p. 84) that after 1915 the importance of the Russian army for its allies declined thanks to "great losses of men, a severe munitions shortage, and the revolutionary crisis in the country."

3

Stone, pp. 12-14, 210-211, 231, 282.

4

Ibid., p. 25.

5

Apart from Golovin's above-mentioned study, see Sir Bernard Pares' famous The Fall of the Russian Monarchy. A Study of the Evidence, (New York, 1961); Michael T. Florinsky, The End of Imperial Russia, (New Haven, 1931); Vladimir Maevskii, Na grani dvukh epokh, (Madrid, 1963); V. Semennikov, Romanovy i germanskoe vliianie vo vremia mirovoi voiny, (Leningrad, 1929); and P. Berezhov, Sverzhenie dyuglavogo orla, (Moscow, 1967). Despite their varied times of publication, and the authors' diverse political standpoints, the stories they tell are remarkably similar.

6

Apart from Stone, most general Western-language accounts of Russian military operations are superficial at best. For a detailed, chronological military account, a student must turn to such works as A. A. Stokov, Vooruzhennye sily i voennoe iskusstvo v pervoi mirovoi voinie, (Moscow, 1974); I.I. Rostunov, et al., Istoriia pervoi mirovoi voiny, 1914-1918, (2 vols., Moscow, 1975); and I.I. Rostunov, Russkii front pervoi mirovoi voiny, (Moscow, 1976). All of these have sound bibliographical references. For a guide to the very useful, early Soviet literature see G. Khmelevskii, Mirovaia imperialisticheskai voina 1914-18 gg. Sistematischeskii ukazatel knizhnoi i statnoi voenno-istoricheskoi literatury za 1914 - 1935 gg., (Moscow, 1936). Aleksei Gering provides a similar service for the rich émigré literature with his Materialy k bibliografii russkoi voennoi pechaty za rubezhom, (Paris, 1968).

7

On the average Russian's attitude to military service, despite the chances of advancement it offered, see the perceptive comments of A.N. Drew in his Russia. A Study, (London, 1918), pp. 107-109. The best general accounts of the peasants' relationship to military service remain John S. Curtiss, "The Peasant and the Army," in Wayne S. Vucinich, ed., The Peasant in Nineteenth Century Russia, (Stanford, 1968), pp. 108-132; Wildman, pp. 25-49; John Bushnell, "Peasants in Uniform: The Tsarist Army as a Peasant Society," Journal of Social History, v. 13, (1980), pp. 565-577; and his Mutiny and Repression, pp. 5-11. For contemporary views of the life of peasant soldiers, see the comments in A. Rittikh, Russkii voennyi byt v deistvitel'nosti i mechtakh, (St. Petersburg, 1893), pp. 17ff., and M. Semin, "Byt soldat v tsarskoi kazarme," Krasnyi arkhiv, (1940), kn. 97, pp. 145-176.

On the social make-up of the officer corps, and the possibility of passing from peasant conscript to officer, see Wildman, pp. 12-13, 20-24; E. Messner, et al., Rossiiskie ofitseri, (Buenos Aires, 1959), pp. 4-15; Hans-Peter Stein, "Der Offizier des russischen Heeres im Zeitabschnitt zwischen Reform und Revolution (1861-1905)," Forschungen zur osteuropaischen Geschichte, (Berlin, 1967), v. 13, pp. 346-507 (especially 420ff.); and Peter Kenez, "A Profile of the Prerevolutionary Officer Corps," in California Slavic Studies, (Berkeley, 1973), v. 7, pp. 121-158 (especially pp. 122-123, 126-128, 131-133, 139-143); and A.I. Dentkin, Put' russkogo ofitsera, (New York, 1953), pp. 17-22.

8

George I. Yaney, The Systematization of Russian Government. Social Evolution in the Domestic Administration of Imperial Russia, 1711 - 1905, (Urbana-Chicago, 1973), pp. 51-63. A useful introduction to the military problems of pre-Petrine Russia is Richard Hellie, Enserfment and Military Change in Muscovy, (Chicago, 1971), pp. 21-74, 151ff.

This argument about the impact of military necessity on Russian historical development is outlined in greater detail in Derek Leebaert, "The Context of Soviet Military Thinking," in D. Leebaert, ed., Soviet Military Thinking, (London, 1981), pp. 20-23; David R. Jones, "Russian Military Traditions and the Soviet Military Establishment," in K.M. Currie and G. Varhall, eds., The Soviet Union: What Lies Ahead? Military-Political Affairs in the 1980s, (Washington, DC, 1985), pp. 25-28, 31; and my "Soviet Concepts of Security: Reflections on Flight KAL 007," Air University Review, (forthcoming, September/October, 1986).

9

Jones, "Russian Military Traditions," p. 31; Fuller, pp. 17-18; 39, 45-46, 109-110, 161-162; Wildman, pp. 3-11; David R. Jones, "Central Military Administrative System and Policy-Making Process (Before 1917)," in D.R. Jones, ed., The Military-Naval Encyclopedia of Russia and the Soviet Union, (Gulf Breeze, Fl., 1980), v. 2, pp. 37-38; John S. Curtiss, "The Army of Nicholas I: Its Role and Character," American Historical Review, (July, 1958), pp. 880-881; Richard G. Robbins, Jr., "Choosing the Russian Governors: The Professionalism of the Gubernatorial Corps," Slavonic and East European Review, (October, 1980), pp. 550-553; Theodore H. Von Laue, Sergei Witte and the Industrialization of Russia, (New York, 1963), pp. 200-201; and so on.

10

Wildman, p. 10. However, as Fuller points out (pp. 260-264), the growing "professionalism" of both the War Ministry and part of the officer corps was undermining this bond in the last decades of Imperial Russia. By this process the army, in its own right, increasingly became the prime concern of military men.

11

Wildman, p. 3. Also see the comments in Jones, "Russian Military Traditions," pp. 31-32.

12

For the importance of Russia's "Great Power" status in the eyes of contemporaries, see the discussion in Fuller, pp. 58, 205-207, 226-227, and especially that in D.C.B. Lieven, Russia and the Origins of the First World War, (New York, 1983), pp. 5ff. Typical expressions of the nationalism of this period are G.N. Trubetskoi, "Rossia kak velikaia derzhava," in V.P. Riabushinskii, ed., Velikaia Rossiia. Sbornik statei po voennym i obshchestvennym voprosam, (Moscow, 1910), kn. 1, pp. 21-138, and S.A. Kotliarevskii, "Russkaia vneshniaia politika: natsional'nyiia zadachi," in Ibid., (Moscow, 1911), kn. 2, pp. 43-66. The officers' view of the army's role is outlined in Messner, Ofitseri, pp. 21-22; Virmoslav, "Voiskaia povinnost," Ofiterskaia zhizn', Warsaw, (16/29 May, 1909), No. 169, pp. 1028-1030; and "Idei sluzheniia imperatorskoi russkoi armii," in V.I. Shaiditskii, ed., Na sluzhbu Otechestva, (San Francisco, 1963), pp. 516-517.

A Soviet view of the army's duties vis-à-vis "internal" enemies is presented in V.A. Petrov, "Tsarskaia armia v bor'be s massovym revoliutsionnym dvizheniem v nachale XX veka," Istoricheskie zapiski, (Moscow, 1950), kn. 35, pp. 321-332. For a detailed study of this question, and of the officers' attitudes to these "police" duties, see Fuller,

chapters 3-6, and pp. 244-258. Also see Denikin, Put', pp. 94-95; A.I. Denikin, Staraiia armia, (2 vols.; Paris, 1929-1931), v. 1, pp. 131-132; A.A. Kersnovskii, Istoriia rus-skoi armii, (4 vols.; Belgrade, 1933-1938), v. 3, pp. 586-587, 614-615; "Obshchestvo i armia," Voina i mir. Zhurnal voenno-obshchestvennyi, Moscow, (May, 1906), No. 3, pp. 451-463; (June, 1906), No. 4, pp. 106-121; M. Grulev, Zapiski generala-evreia, (Paris, 1930), pp. 235-236; and M. Korol'kov, Grimasy zhizni. Iz vospominanii voennago iurista, (Novyi Sad, 1929), passim.

13

Professor Eltchaninow (Elchaninov), La Règne de S.M. Nicolás II, (Paris, 1913), p. 71. This statement merely condenses Article 14 of the Fundamental Laws of the Russian Empire of 23 April (6 May) 1906. On these see Jones, "Central Military," pp. 35, 39-41; Paul P. Gronsky and Nicholas J. Astrov, The War and the Russian Government, (New Haven, 1929), pp. 11-12; and M. Szeftel, The Russian Constitution of April 23, 1906. Political Institutions of the Duma Monarchy, (Brussels, 1976), passim. As for Nicholas II's attitude towards his control of the armed forces, also see Fuller, pp. 30-31, 219ff., and P.A. Zaionchkovskii, Samo-derzhavie i russkaiia armia na rubezhe XIX-XX stoletii, 1881-1903, (Moscow, 1973), pp. 40-50.

14

On Nicholas II's early expressions of his intention of commanding his troops personally, see "Dnevnik A.N. Kuropatkina," Krasnyi arkhiv, (1922), kn. 2, pp. 29-30 and E. Bing, ed., The Letters of Tsar Nicolas and Empress Marie, (London, 1937), p. 177. The question of his view of his military responsibilities is treated extensively in David R. Jones, "Nicholas II and the Supreme Command: An Investigation of Motives," in Study Group on the Russian Revolution, Sbornik 11 (1985), pp. 47-83.

15

The military presence in the Imperial Court is clear from the official Pridvornyi kalendar', published annually in St. Petersburg, and from numerous memoirs; see, e.g., General A.A. Mosolov, At the Court of the Last Tsar, (London, 1935), and V.N. Voelkov, S tsarem i bez tsaria, Vospominaniia posledniago dvortsovago komendanta Gosudariia Imperatorii Nikolaiia II, (Helsingfors, 1936). On Nicholas, the court, and the army, also see Fuller, pp. 16-19; Zaionchkovskii, pp. 31ff.; Jones, "Central Military," pp. 37-39; V.V. Svechin, Svetloe pamiati Imperatora Velikomuchenika Nikolaiia II, (Paris, 1933), pp. 11-20; and V.P. Nikol'skii, "Otnoshenie Gosudaria k svoei Armii," in Pamiati tsarstvennykh muchenikov, (Sofia, 1930), pp. 15-28. According to

Finance Minister V.N. Kokovtsov, Nicholas II felt it was impossible to refuse to meet most of the military's requests for appropriations; see H.H. Fisher, ed., Out of My Past. The Memoirs of Count Kokovtsov, trans. L. Matveev, (Stanford, 1965), p. 340.

16

Apart from the sources cited in note 12 above, see "Dnevnik Kuropatkina," pp. 13, 40; A.N. Kuropatkin, The Russian Army and the Japanese War, (2 vols.; London, 1909), pp. 102-103; E.I. Martynov, Iz pechal'nogo opyta russko-iaponskoi voiny, (St. Petersburg, 1906), p. 9, and the discussion in "Mirosozertsanie naroda i dukh armii," in Velikaia Rossiia, kn. 1, pp. 1-20.

The attitude of many intellectuals to a military career is exemplified by the teacher who argued that it was a "shameful" choice; see B.N. Sergeevskii, Perezhitoe 1914, (Belgrade, 1933), p. 4. Thinking officers were particularly concerned by Leo Tolstoy's antimilitarism, which provoked a response from the well-known military theorist M.I. Dragomirov in the form of Ocherki: Razbor "Voiny i mira." Russkii soldat Napoleon I-y. Zhanna d'Ark, (Kiev, 1898). Examples of officers who had to deal with Tolstoy's message are Korol'kov, pp. 44-48, and Denikin, Put', pp. 94-96. At the same time, within the officer corps there developed a distrust and dislike for civilians, and especially of intellectuals, which Fuller (pp. 26-29, 216-217) has called "negative corporatism."

17

Kersnovskii, v. 3, p. 615; Lieven, pp. 33-37, 75-76; Ben-Cion Pinchuk, The Octobrists in the Third Duma, 1907-1912, (Seattle, 1974), p. 160, 177ff.; Geoffrey A. Hosking, The Russian Constitutional Experiment. Government and Duma, 1907-1914, (Cambridge, U.K., 1973), pp. 228-233. Also see E. Messner, "Tsar i ofitsery," in S. Zavalishin, ed., Gosudar Imperator Nikolai II Aleksandrovich, (New York, 1968), pp. 176-177, and Jones, "Russian Military Traditions," pp. 30-31.

18

On the Duma and defense see Wildman, pp. 69-79; Fuller, pp. 225-244; Lieven, pp. 51-57; Pinchuk, pp. 63-80; Hosking, pp. 74-105; J.F. Hutchinson, "The Octobrists and the Future of Russia as a Great Power," Slavonic and East European Review, (April, 1972), pp. 225-231; and J.D. Waiz, State Defense and Russian Politics Under the Last Tsar, (PhD dissertation; Syracuse University, 1967), pp. 55ff. For a contemporary expression of liberal opinion, see A.I. Zvergintsev, "The Duma and Imperial Defense," Russian

Review, London, (1912), No. 1, pp. 50-60, and the reports in British Documents on Foreign Affairs. Reports and Papers from the Foreign Office Confidential Print, Part I, Series A: Russia, 1859-1914, ed. Dominic Lieven, (6 vols.; University Publications of America, 1983), v. 5, pp. 47, 116, 143, 164-169, 240-242, 272-275, 280-286; v. 6, pp. 24-25, 63-64, 82, 143-145, 150-158, 166, 240-250, 328-329.

The military's attitude towards the Duma's efforts are recorded in Denikin, Staraya armiya, v. 1, pp. 151-153; A.S. Lukomskii, Vospominaniia generala A.S. Lukomskago, (Berlin, 1922), v. 1, pp. 26-29; and A.A. Polivanov, Iz dnevnikov i vospominanii po dolzhnosti Voennogo ministra i ego pomoshchika, 1907-1916, (Moscow, 1924), pp. 48-110. On Guchkov's role in these events see his "Iz vospominanii A.I. Guchkova," Posledniia novosti, (Paris), 19 August, 1936, No. 5626, and L. Menashe, "A Liberal With Spurs: Alexander Guchkov, A Russian Bourgeois in Politics," Russian Review, Stanford, (January, 1967), No. 1, pp. 38-53. Of special interest are the memoirs of one of the Duma's leading military experts, Colonel B.A. Engel'gardt, "Potonyvshii mir," Voенно-istoricheskii zhurnal, (January, 1964), No. 1, pp. 70-81.

19

General support, of course, does not mean an absence of debate within either the cabinet, or within "society," about the exact levels of military funding. As Fuller (Chapters 6-8) demonstrates, numerous issues, apart from the budget, existed to create "military-civil" tensions (i.e., the use of the army internally). As he points out (p. 263), this was perhaps "the inevitable result" of the facts that Imperial Russia had thus far proven incapable of finding a place for military "professionals" within its society, had been unwilling or incapable of creating institutions to mediate between the bureaucracy and military establishment, and had refused "to grant the army more autonomy, since military autonomy was in itself a contradiction of the autocratic principle." But despite these problems, which he perhaps emphasizes too strongly, most educated Russians continued to see their armed forces as a necessary and inescapable guarantee of their national existence and international position (see note 12 above).

On the nature of Imperial "society," and the interaction between its components, see Lieven, chapters 3 and 4. For more personal observations, see Denikin, Put', pp. 94-96, 240-242. One might note that the eminent Bolshevik V.D. Bonch-Bruévich's brother was General M.D. Bonch-Bruévich of the General Staff. The existence of such connections is noted in Stone, The Eastern Front, I, 22. In defining

"society" in this manner, I am following, among others, the interpretation of Wladimir Weidle, Russia: Absent and Present, trans. A. Gordon Smith, (New York, 1961). On the representation of various Russian social groups in the Duma after 1907, see Alfred Levin, The Third Duma: Election and Profile, (Hamden, Conn., 1973).

20

Apart from the traditional accounts listed in note 5, Russia's wartime politics are analysed in Raymond Pearson, The Russian Moderates and the Crisis of Tsarism, 1914-1918, (London, 1977); Robert Edelman, Gentry Politics on the Eve of the Russian Revolution. The Nationalist Party, 1907-1917, (New Brunswick, N.J., 1980), pp. 202ff.; Margarete Walters, Aussenpolitische Fragen vor der vierten Duma, (Hamburg, 1969), pp. 106ff.; B.B. Grave, K istorii klassovoi bor'by v Rossii v gody imperialisticheskoi voyny, iul' 1914 g. - fevral', 1917 g.; Proletariat i burzhazii, (Leningrad, 1926); B.B. Grave, Burzhazii nakanune fevral'skoi revoliutsii, (Moscow, 1927); V.S. Diakin, Russkaya burzhazii i tsarizm v gody pervoi mirovoi voyny, 1914-1917, (Leningrad, 1967); V. Ia. Laverychev, Po tu storony barrikad (Iz istorii bor'by moskovskoi burzhazii s revoliutsiei), (Moscow, 1967), pp. 109ff.; E.D. Chermenski, IV Gosudarstvennaya duma i sverzhenie tsarizm v Rossii, (Moscow, 1976), pp. 68ff.; V.I. Startsev, Russkaya burzhazii i samoderzhavie v 1905-1917 gg. (Bor'ba vokrug "otvetstvennogo ministerstva" i "pravitel'stva doveriia"), (Leningrad, 1977), pp. 131ff.; and G.Z. Ioffe, "Verkhii" tsarskoi Rossii v fevral'sko-martovskie dni 1917 g., Istoricheskie zapiski, (Moscow, 1983), kn. 110, pp. 67-113.

A few specific questions deserve special mention. For example, the myth of Rasputin's political power is exposed decisively by Martin Kilcoyne in his The Political Influence of Rasputin, (PhD dissertation, University of Washington, 1961). Similarly, with the publication of the the tsar and tsarina's personal correspondence, it became clear that both supported the war effort completely; see C.E. Vulliamy, ed., The Letters of the Tsar to the Tsaritsa, 1914-1917, (London, 1929), and Bernard Pares, The Letters of the Tsaritsa to the Tsar, 1914-1916, (London, 1923). This now is accepted even by scholars who still seek evidence that some circles in imperial society wished a separate peace; e.g., V.V. Lebedev, "A Contribution to the Historiography of the Problem of Russia's Leaving the War on the Eve of the February Revolution," Studies in Soviet History, (Fall, 1972), No. 2, pp. 178-192, and V.S. Vasiukov, "voprosu o separatnom mire nakanune fevral'skoi revoliutsii," Istoricheskie zapiski, (Moscow, 1982), kn. 107, pp. 226-303.

Indeed, some have criticized the government for not seeking such a peace; see, e.g., Baron R.R. Rosen, Forty Years of Diplomacy, (2 vols.; London, 1922), v. 2, p. 200. On this issue in general, see S.P. Melgunov's classic study, Legendy o separatnom mire (Kanon revoliutsii), (Paris, 1957). His views are followed by such writers as Aleksandr Tarsaidze, Chetyre mifa, (New York, 1969), pp. 355-382, and George Katkov, Russia, 1917: The February Revolution, (London, 1967), pp. 63 ff. Katkov's account of the other aspects of internal wartime politics is a useful corrective to most extremes of the traditional view as well. For the issue of war and peace after February 1917, see V.S. Vasjukov, Vneshniaia politika vremennogo pravitel'stva, (Moscow, 1966); A.V. Ignat'ev, Vneshniaia politika vremennogo pravitel'stva, (Moscow, 1974); and Rex A. Wade, The Russian Search for Peace, February - October 1917, (Stanford, 1969).

21

Stone, p. 29; Fuller, pp. 219-244; Lukomskii, 29ff.; Edward R. Goldstein, Military Aspects of Russian Industrialization: The Defense Industries, 1890 - 1917, (PhD dissertation; Case Western Reserve University, 1971), pp. 228ff.; and Polivanov, IZ Unevnikov, pp. 110-112. For an interesting contemporary assessment of the 1913 defense estimates and the monies left from previous credits, see the memorandum of Mr. O'Beirne and report of Colonel Knox in British Documents on Foreign Affairs: Russia, 1859-1914, v. 6, pp. 270-276.

On problems with rebuilding the fleet, see the reports in Ibid., v. 5, pp. 47, 116, 164-168, 272-274, 280-286; v. 6, pp. 24-25, 63-64, 82, 143-145, 150-158, 166, 243-250, 271-272, 328-329, and the articles of Brut, "Kazennoe vozsozhdanie flota," Velikaia Rossiia, kn. 1, pp. 139-176, and "Slepye," Ibid., kn. 2, pp. 283-322. Also see K.F. Shatchilo, Russkii imperiializm i razvitiie flota nakanune pervoi mirovoi voyny (1906 - 1914 gg.), (Moscow, 1968). Typical in this regard was the state of the major ports in 1906 (pp. 47-49), and the need to develop the capabilities of Russia's shipbuilding yards (pp. 235ff.). On these problems, also see "Zapiski o merakh, neobkhodimyykh dlia uskorenia i udeshevleniia korablistroeniia, predstavleniata v komissiiu inzhener-generalov Rorberga chlenami Gos. Dumy A.F. Bobianskim, N.N. Lvovym, M.V. Chelnokym i A.A. Fedorovym," Velikaia Rossiia, kn. 2, pp. 123-142. For a case study of one facility, see David R. Jones, "Admiralty Shipyard," in D.R. Jones, ed., Military-Naval Encyclopedia of Russia and the Soviet Union, (1981), v. 3, pp. 159-168.

22

Stone, pp. 19-28. Also see his comments in "The Historical Background of the Red Army," in John Erickson and E.J. Feuchtwanger, Soviet Military Power and Performance, (London, 1979), pp. 11-16; Fuller, pp. 238-243; and Kenez, "A Profile," passim. An excellent analysis of the place of the army in society, as revealed in Russian literature, is Richard Lockett, "Pre-revolutionary Army Life in Russian Literature," in Geoffrey Best and Andrew Wheatcroft, eds., War, Economy and the Military Mind, (London, 1976), pp. 19-31.

In August 1914 Solzhenitsyn's Colonel Verotyntsev embodies the alleged virtues of the "Young Turks," and the frustration they felt at the way the traditionalists were running the war. The ideas of these mladoturki, the self-proclaimed westernizing heirs of D.A. Miliutin, are discussed in Peter von Wahlde, Military Thought in Imperial Russia, (PhD dissertation; University of Indiana, 1966), pp. 199ff.; Fuller, pp. 201-204; and Kenez, "A Profile," pp. 151-152. For an outline of Brusilov's career, see I.I. Rostunov, General Brusilov, (Moscow, 1964), pp. 235-238; G. Belov, "Russkii polkovodets A.A. Brusilov," Voenno-istoricheskii zhurnal, (October, 1962), No. 10, pp. 41-55; and A. Levitskii, "General Brusilov," Voennaia byl', (January, 1968), No. 89, pp. 32-34.

23

On the Council of State Defense and the politics surrounding it, see Jones, "Central Military," pp. 128-137; Michael Perrins, "The Council for State Defense 1905-1909: A Study in Russian Bureaucratic Politics," Slavonic and East European Review, (July, 1980), No. 3, pp. 371-398; the view in military circles of the Grand Duke's appointment expressed in Captain Leiman, "General Khamin," Voennaia byl', (November, 1963), No. 64, pp. 38-42; General A.A. Polivanov's testimony in P.E. Shchegolev, ed., Padenie tsarskogo rezhima, (7 vols.; Moscow, 1924-1927), v. 7, pp. 54-57; and Walz, pp. 106ff.

This issue and Sukhomlinov's appointment also are discussed in Wildman, pp. 64-65; Fuller, pp. 151-160, 232-238; Denikin, Staraya armia, v. 1, pp. 9-10; Denikin, Put', pp. 250-252; Kersnovskii, v. 3, pp. 598-600; Stone, pp. 19-24; A.V. Zenkovskii, Pravda o Stolypine, (New York, 1956), pp. 104-107; Mary S. Conroy, Peter Arkad'evich Stolypin. Practical Politics in Late Tsarist Russia, (Boulder, 1976), p. 33; Hutchinson, p. 229; Pinchuk, pp. 79-80, 110, 189-190; V.A. Sukhomlinov, Velikii kniaz' Nikolai Nikolaevich (mladshii), (Berlin, 1925), pp. 17-26; V.A. Sukhomlinov, Erinnerungen, (Berlin, 1924), pp. 223-228; Iu.N. Danilov, Velikii kniaz' Nikolai Nikolaevich, (Paris, 1930), pp. 68-71; and

the reports in British Documents on Foreign Affairs: Russia, 1859-1914, v. 5, pp. 143, 272, 275. Also see references in note 18 above.

24

Golovin, The Russian Army, p. 13; Stone, The Eastern Front, p. 26. On the history and debates about the role of the General Staff in this period, also see Fuller, pp. 159-160, 199, 220-221, 232, 249-250; Jones, "Central Military," pp. 132-133, 137-140; John Erickson, The Russian Imperial/Soviet General Staff, (College Station [Texas] Papers, No. 3, July 1981), pp. 31-39; A. Kavtaradze, "Iz istorii russkogo General'nogo shtaba," Voenno-istoricheskii zhurnal, (July, 1972), No. 7, pp. 87-92; Ibid., (December, 1974), No. 12, pp. 80-86; Matitiahu Mayzel, "The Formation of the Russian General Staff, 1880-1917," Cahiers du Monde russe et soviétique, (July-December, 1975), No. 3-4, pp. 297-321; and V.M. Dragmircv, "Podgotovka russkoi armii k velikoi voine," Voennyyi sbornik, (Belgrade, 1923), kn. 4, pp. 98-120.

25

Stone, The Eastern Front, p. 26; Wildman, pp. 69-70. The latter is somewhat kinder to some of the occupants than is Stone, and he largely bases his assessment on Boris V. Gerua, Vospominaniia o moei zhizni, (2 vols.; Paris, 1969-1970), v. 1, pp. 244-247.

26

Stone, The Eastern Front, p. 26.

27

See N.N. Ianushkevich, Organizatsiia i rol' intendantstva v sovremennykh armiakh na voine, (St. Petersburg, 1912). Elsewhere, Stone himself points out that "circumstances in the Tsarist army were such that administration tended to dominate every other consideration;" see his "The Historical Background," p. 14. For a particularly critical assessment of the role of "chancellory men," see P.I. Zalesskii, Vozmezdie (Prichiny russkoi katastrofy), (Berlin, 1925), pp. 103-106.

For more on Gerngross, Myshlaevskii and Zhilinskii in particular, see Gerua's comments (v. 1, p. 245). Myshlaevskii later had a distinguished career working with the Special Council on State Defense after 1915, and he was the author of a number of important military historical studies; see the biographical entry in Sovetskaya Voennaya Entsiklopediia (Moscow, 1978), v. 5, p. 455. On the General Staff and its chiefs in this period also see Iu. N. Danilov, Rossia v mirovoi voine, 1914-1915, (Berlin, 1924), pp. 32-34; Lukomskii, v. 1, pp. 26, 39-40; and the other

works cited in note 24.

28

It is interesting that to informed foreign observers, Sukhomlinov's appointment was seen as a gain for the right within the government. Even so, one British representative believed that his "brilliant career, his popularity in the service, and his knowledge of the Austrian frontier are recognized as valuable assets;" British Documents on Foreign Affairs: Russia, 1859-1914, v. 5, p. 275. Again, two years later another observer remarked that while the reforms instituted in 1910-1911 had been worked out earlier, Sukhomlinov was the man who had effected them, and that he had "displayed indefatigable activity in the discharge of his heavy duties;" see "Reorganization of the Russian Army," Journal of the Royal United Services Institute, v. 55, (November, 1911), p. 1469.

For recent reassessments of Sukhomlinov see Stone, The Eastern Front, pp. 24ff.; Wildman, pp. 67-68; Fuller, pp. 237-244; C.D. Bellamy, Sukhomlinov's Army Reforms, 1909 - 1915, (MA thesis; Kings College, London University, 1978); and W.T. Wilfong, Rebuilding the Russian Army, 1905-1914, (Unpublished PhD; Indiana University, 1977). The literature of controversy opened with V. Dumbadze's Russia's War Minister, trans. A.A. Knaap, (London, 1915). Its praise was repeated in a more subdued manner by Winston Churchill, The Unknown War: The Eastern Front, (Toronto, 1931), pp. 91-92, but extravagantly countered by V.A. Apushkin, General ot porazhenii V.A. Sukhomlinov, (Leningrad, 1925), and Pares, pp. 194-195. In this, the last followed most émigré assessments. These are exemplified by Golovin's Russian Army, pp. 11-14; Voennaya usiliia, v. 1, pp. 24-27, and Iz istorii kampanii 1914 goda na russkom fronte. Nachalo voyny i operatsii v Vostochnoi Prussii, (2 vols.; Prague, 1926), pp. 36-39. Also see A.I. Denikin, The Russian Turmoil, (New York, 1922), pp. 29-30, and Staraya armia, v. 1, pp. 151-153. Soviet opinions, like that of K.F. Shatsillo (Rossia pered, pp. 47-48), have also generally continued to be hostile, as is Leon Agourtine's Le General Sukhomlinov, (Clichy, 1951). One noted exception was Lukomskii's (v. 1, pp. 88-90) restrained defense of his former chief.

29

Wildman, pp. 68-69; Stone, The Eastern Front, pp. 25ff.; Fuller, pp. 241-242; Gerua, v. 1, pp. 251ff., and comments in the other works listed in notes 22 and 28 above.

30

See especially Pinchuk, pp. 187-188; Fuller, pp. 235-236, 243; Lukomskii, v. 1, pp. 43-45; Polivanov in Padenie, v. 7, pp. 58-64. According to the Finance Minister, Polivanov was fired for providing Guchkov with secret information on plans to establish an agency to monitor the officers' political loyalties; V.N. Kokovtsov, Iz moego proshlago. Vospominaniia 1903 - 1919, (2 vols.; Paris, 1933), v. 2, pp. 59-60. Other contemporary comments that place this event in the political setting of the day are those of O'Beirne and Knox in British Documents on Foreign Affairs: Russia, 1859-1914, v. 6, pp. 240-242. Also see the references in notes 18 and 28 above. The Duma's attitude to Sukhomlinov is summed up by its president's alleged comment to him: "You are to us [as] a red flag to a bull;" Denikin, Turmoil, p. 36.

31

On this issue, the subsequent "Miasoedov affair," and the reactions of officers, see M. Grulev, Zapiski, pp. 245-246; Denikin, Turmoil, pp. 17, 27-28; Put', pp. 248-249, 278-279, 283; Staraiia armia, v. 1, pp. 149-150; 2, pp. 36-38; Walz, pp. 154, 213-216; Agourtine, pp. 18-23; Pinchuk, p. 190; Katkov, chapter 6, especially pp. 123-125; Mikhail Lemke, 250 dnei v tsarskoi stavke, (Petrograd, 1920), pp. 728-729; K.F. Shatsillo, "Delo polkovnika Miasoedova," Voprosy istorii, (April, 1967), No. 4, pp. 108-110; and Fuller, pp. 212-218, 238, 244-258.

In his memoirs (pp. 187-188), Sukhomlinov defends using gendarmes, and A. Tarsaidse (pp. 70-71) is generally sympathetic. However, the police official S.P. Beletskii later testified that the War Minister initiated the measure solely because of fears about the security of his personal position within the army; see Padenie, v. 4, p. 519. One of the best surveys of the whole issue remains O.G. Freinat's Pravda o dele Miasoedova i dr., (Vilna, 1918), and one of the least reliable guides to its later development is M.D. Bonch-Bruvevich's Vsia vlast' soveta. Vospominaniia, (Moscow, 1957), pp. 56ff. For Guchkov's attitude see his "Iz vospominanii," No. 5633, and his testimony in Padenie, v. 6, pp. 291-292.

32

Pinchuk, pp. 191-192, and Goldstein, pp. 241ff., both stress Nicholas II's strong commitment to the navy as a major motivating force behind the prewar shipbuilding programs. But the latter makes it clear that the Duma only released the needed funds thanks to dissatisfaction with the War Ministry. Also see Shatsillo, Russkii imperiializm, pp. 163ff., and his "Problemy pervoi mirovoi voiny v osveshchenii sovetskoi istoricheskoi literatury, 1964-1966"

gg., "Istoriia SSSR," (July-August, 1967), No. 4, p. 136-137; Polivanov, Iz dnevnik, p. 114; and Walz, p. 224 ff. The development of the Russian shipbuilding and related enterprises from 1906 to 1916 is described in some detail in the section "Vossozhdanie flota" in V.V. Polikarpov, "Iz istorii voennoi promyshlennosti v Rossii (1906-1916 gg.)," Istoricheskie zapiski, (Moscow, 1979), kn. 104, pp. 136-157, with pp. 136-151 being devoted to the period up to 1914. Also see the other works cited in note 21.

33

On the mood in 1914, see Lieven's analysis in Russia and the Origins, chapter 4; Leopold Haimson's pessimistic "The Problem of Social Stability in Urban Russia, 1905-1917," Slavic Review, (December, 1964), No. 4, pp. 619-642; (March, 1965), No. 1, pp. 1-22; George Yaney, "Social Stability in Prerevolutionary Russia: A Critical Note," Ibid., (September, 1965), No. 3, pp. 521-527; Hans Rogger, "Russia in 1914," Journal of Contemporary History, (October, 1966), no. 4, pp. 95-120, and Tsuyoshi Hasegawa, The February Revolution: February, 1917, (Seattle, 1981), pp. 3-23.

The course of wartime politics is traced in the works cited in note 20. Also see Stone, The Eastern Front, chapter 9; Katkov, pp. 3-16, 39-43, 133ff.; Hasegawa, pp. 24-62; V.I. Gurko, Features and Faces of the Past: Government and Opinion in the Reign of Nicholas II, (New York, 1970), pp. 537ff.; T.D. Krupina, "Politicheskii krizis 1915 g. i sozdanie Osobogo soveshchaniia po oborone," Istoricheskie zapiski, (1969), kn. 83, pp. 58-75; Lewis H. Siegelbaum, The Politics of Industrial Mobilization in Russia, 1914-17. A Study of the War Industries Committees, (London, 1983), chapters 2-4; Jones, "Nicholas II," passim; N. Lapin, ed., "Progressivnyi Blok," Krasnyi arkhiv, (1930), kn. 50-51, pp. 117-160; and "Kadety v dni Galitsiiskogo razgroma," Ibid., (1933), kn. 59, pp. 110-144.

34

The phrase is Katkov's, p. 153.

35

The "Voluntary Organizations" were the Unions of Municipalities and of the Zemstvos (i.e., the rural local councils). The two subsequently merged their administrations into the Main Committee for the Supply of the Army, known as "Zemgor." In 1915 a third group appeared in the form of the War Industries Committees (WICs), whose national office was headed by Guchkov. These organizations competed with the central government's agencies and the Red Cross in establishing hospital trains, bath houses, etc.,

for the field armies, but they cooperated closely with the Duma (which had established its own hospital train service when war broke out).

By January 1916, the Union of Municipalities had facilities containing 55,958 hospital beds, which figure had risen to 80,894 by August 1917. By that October, its records showed 622,240 patients had been admitted to its hospitals, which also had handled 1,795,504 dispensary cases, 510,080 dental cases, and 186,796 inoculations. Meanwhile, its tea rooms and canteens had served over 116,000,000 meals, and it also supported 49 engineering detachments, 24 sanitary detachments, 424 disinfecting stations, 833 bathhouses, and 263 laundries; see Gronskey and Astroff, pp. 203, 229-230. Also see Katkov, pp. 3-8; M.V. Rodzianko, The Reign of Rasputin: An Empire's Collapse, trans. C. Zvegintzoff, (2nd ed.; Gulf Breeze, Fl., 1973), pp. 106ff.; Kratkaya svedeniis o deiatel'nosti Komiteta chlenov Gosudarstvennoi Dumy dlia okazaniia pomoshchi ranenym i postradavshim vo vremia voyny. Sostavlenn za period vremeni s 1 Avgusta 1914 g. po 1 Aprelia 1915 g. (Petrograd, 1915); A.P. Pogrebinskii, "K istorii soiuzov zemstv i gorodov v gody imperialisticheskoi voyny," Istoricheskie zapiski, (1941), kn. 12, pp. 41-60; A.P. Pogrebinskii, "Voenno-promyshlenniye komitety," Istoricheskie zapiski, (1941), kn. 11, pp. 160-200; and Peter Gatrell, "Aspects of the Mobilization and Demobilization of Industry, 1915-1917," (Unpublished paper presented the Study Group on the Russian Revolution in Keele, January 1976).

While these partial figures refer only to the institutions established by the towns, they still give an impression of the extent of the network established by Zemgor. For the work of the Union of Zemstvos, see T.J. Polner, V. Obolensky, and S.P. Tyurin, Russian Local Government During the War and the Union of Zemstvos, (New Haven, 1930), and Florinsky, pp. 128-136. One should note that Pogrebinskii ("K istorii," pp. 43-43) gives even higher figures for the hospital beds maintained by the Union of Municipalities, and that he estimates that by 1 January 1916, the combined beds of the two unions' (Zemgor's) hospitals totaled over 174,600.

Although the evidence is fragmentary, the fact that this network was used to spread anti-government propaganda is clear from the surviving documents, and from the memoirs of both nurses and patients; e.g., Marie de Bašmakoff, Memoirs, (Paris, 1958), p. 134; Florence Farmborough, Nurse at the Russian Front: A Diary, 1914-1918, (London, 1979), pp. 245-249; Olga Poutiatine, War and Revolution: Excerpts from the letters and diaries of the Countess Olga Poutiatine,

ed. G. Lensen, (Tallahassee, c. 1979), pp. 11, 41; Khristina D. Semina, Tragediia Russkaia Armia. Pervoi Velikoi Voiny, 1914-1918 g.g. Zapiski Sestry Miloserdia Kavkazskogo Fronta, (2 vols.; New Mexico, 1963-1964), v. 1, p. 209; v. 2, pp. 147, 159; Ian Vorres, The Last Grand Duchess, (London, 1964), pp. 148-149; and Max Star, In the Lion's Den, (Tampa, 1964), p. 97.

Pitrim A. Sorokin has left a vivid picture of the mood of the young intellectuals who provided the staff for this network - in Leaves From a Russian Diary -- And Thirty Years After, (Boston, 1950), pp. 1-2. At the same time, Soviet historians openly admit the use made by Bolshevik propagandists, like M.V. Frunze, of Zemgor's facilities; e.g., Vl. Arkhangel'skii, Frunze, (Moscow, 1970), pp. 239-242, and A.P. Steklov, Revoliutsionnaia deiatel'nost' bol'shevistskikh organizatsii na Kavkazskom fronte, 1914-1917 gg., (Tbilisi, 1969), pp. 29-30. The published documents also present the same picture; e.g., A.L. Sidorov, ed., Revoliutsionnoe dvizhenie v armii i na flot v gody pervoi mirovoi voiny, 1914-fevral' 1917, (Moscow, 1966), pp. 206-207.

36

For the text of Guchkov's letter, see V.P. Semennikov, Monarkhiia pered krusheniem, 1914-1917. Bumagi Nikolaia II i drugie dokumenty, (Moscow, 1927), pp. 281-282, and Golovin, Voennyya usilia, v. 2, pp. 167-168. On the background to this document, see Katkov, pp. 181-186. On another occasion, in 1916, Guchkov openly criticized the government to officers of the 9th Siberian Regiment, whose officers howled him down; Victorin M. Moltchanoff, The Last White General, (University of California at Berkeley Oral History Office; Interview with B. Raymond, 1972), p. 34. Also see A.I. Spiridovich, Velikaia Voina i Fevral'skaia revoliutsiia, 1914-1917 g.g., (3 vols.; New York, 1960-1962), v. 2, pp. 112-113.

37

The so-called "Guchkov Plot" is discussed by Katkov, pp. 173-177, who follows S.P. Melgunov's classic Na putiakh k dvortsovomu perevorotu (Zagovory pered revoliutsiei 1917 goda), (Paris, 1931), pp. 143ff. On the plots in general, also see Melgunov, Legenda, pp. 116ff., 437ff.; Katkov, pp. 211ff.; Hasegawa, pp. 172-197; Denikin, Turmoil, pp. 38-39; and E.N. Burdzhakov, Vtoraia russkaia revoliutsiia. Vosstanie v Petrograde, (Moscow, 1967), pp. 77-80. The extent of rumors of an impending coup is clear from a statement of one officer to the daughter of the British ambassador. When sounded as to whether he would lead his Cossacks against the government, he responded that at best, he would remain neutral and resign his command; Muriel

Buchanan, Ambassador's Daughter, (London, 1958), p. 139. For details of a plot in the Baltic Fleet, see "Feyral'skaia revoliutsiia v Baltiiskom Flote," Krasnyi arkhiv, (1929), kn. 32, pp. 88-124.

38

On Nikolai Nikolaevich and the Moscow plot, see A.I. Khatsov, "U pokoleblennago trona... Iz istorii predrevoliutsionnykh dner," Illustrirovannaia Rossiia, Paris, (5 December, 1931), No. 50(343), pp. 1-4; Melgunov, Na putiakh, pp. 158-164; and Katkov, pp. 215-217.

39

The mood of the soldiers, based both on their letters and a rising incidence of disorders, is reviewed by Wildman, pp. 107ff. He also provides a good guide to the literature, but has comparatively little to say about the impact of liberal and revolutionary propaganda on the officers (see pp. 110-113).

He concludes (p. 113), however, that "internal politics became a major preoccupation of the officers," and this is borne out by numerous sources; e.g., Golovin, The Russian Army, pp. 238-246; Denikin, Turmoil, pp. 16-19, 35-36; I.V. Lomonosov (Lomonosoff), Die russische März-Revolution, 1917: Erinnerungen, (Munich, 1922), pp. 12-13; A.V. Gorbachev, Years Off My Life, (London, 1964), p. 69; P.P. Petrov, Rokovye gody, 1914-1920, (California, 1965), p. 46; Aleksei Tarasov-Rodionov, February, 1917: A Chronicle of the Russian Revolution, (New York, 1931), p. 25; G.N. Chemodanov, Poslednye dni staroi armii, (Moscow, 1926), pp. 66-71; Pavlo Shandruk, Arms of Valor, (New York, 1959), p. 37; Fedor Stepan, Iz pisem praporshchika-artillerista, (Odessa, 1919), pp. 160ff.; P.N. Wrangel, Vospominaniia generala barona P.N. Vrangelia, (Frankfurt, 1969), pp. 21-23; Dimitry V. Lehovach, White Against Red. The Life of General Anton Denikin, (New York, 1974), pp. 66-67; and so on.

The impact of this propaganda on the generals and members of the high command is equally well documented, and it has been portrayed in its darkest colors in V. Kobylin, Imperator Nikolai II i General-ad'iutant M.V. Alekseev, (New York, 1970), pp. 135ff. Typical and more balanced accounts of Stavka's role in the events of February 1917 are Wildman, pp. 202ff.; Katkov, pp. 241-244, 306ff.; Hasegawa, pp. 431-507; Fuller, p. 261; Ioffe, "Verkhii," pp. 78-98; E.N. Burdzhakov, Vtoraia russkaya revoliutsiia. Moskva, Front, Periferiia, (Moscow, 1971), pp. 90-106; and S.P. Melgunov, Martovskie dni 1917 goda, (Paris, 1961), pp. 139ff.

For more personal accounts of the mood at the end of 1916, see Nicholas de Basily, Memoirs: Diplomat of Imperial Russia, 1903-1917, (Stanford, 1973), pp. 106-107; Mikhail Svechin, Zapiski starago generala o bylom, (Nice, 1964), p. 129; K.A. Meretskov's account of General G.D. Bazilevich's comments in Serving the People, (Moscow, 1971), pp. 63-64; the Grand Duke Sergei Mikhailovich's letter in V.P. Semennikov, ed., Nikolai II i Velikie Kniazia, (Leningrad, 1925), pp. 123-124; A.A. Brusilov's comments in A Soldier's Notebook, 1914-1918, (London, 1930), pp. 263, 279-285; his explanation of his attitude to K.M. Oberuchev, Ofitsery v Russkoi Revoliutsii, (New York, c. 1918), p. 9; and Finance Minister Peter Bark's memoir, "The Last Days of the Russian Monarchy -- Nicholas II at Army Headquarters," in Dimitri Von Mohrenschildt, ed., The Russian Revolution of 1917. Contemporary Accounts, (New York, 1971), pp. 75-84.

One should not assume that the opposition had an easy time in undermining the military's traditional loyalties, even despite the horrors and changes brought by war. In retrospect, conservative officers remained unconvinced that Guchkov's WICs had played a significant role in producing supplies; e.g., Ekli, "Iz nedavniago proshlago (Istoricheskaiia spravka)," Russkaia letopis', (Paris, 1922), kn. 2, p. 170. They also resented the numbers (estimated by one as 150,000) of educated youths whom they believed had escaped active service at the front as officers by working as zengusari, or "Zemhussars," with the Voluntary Organizations in the rear; e.g., Danilov, Rossia, pp. 112-113; Petrov, pp. 34-35; and M.N. Gerasimov, Probuzhdenie, (Moscow, 1965), pp. 72-73. In addition, most officers seem to have been aware of the harmful impact of the Duma opposition's speeches and activities on the army's morale; see Shandruk, p. 37; Denikin, Turmoil, pp. 28-29, 37-38; Petrov, pp. 40-41, 47-48; de Basily, pp. 106-107; Svechin, p. 129; "Politicheskoe polozhenie Rossii nakanune Fevral'skoi revoliutsii v zhandarmskom osviaschenii," Krasnyi arkhiv, (1926), kn. 17, pp. 18-19; and "Iz dnevnika Generala V.Iu. Selivacheva," Ibid., (1925), v. 9, p. 105, among others. The effect of such bitterness on the officers' later relations with liberal politicians in the White Movement is noted in David R. Jones, "The Officers and the October Revolution," Soviet Studies, (April, 1976), no. 2, pp. 207-223.

See figures in George Vernadsky, The Tsardom of Moscow, 1547-1685, (2 vols.; New Haven, 1969), v. 1, pp. 731-732, and P.N. Miliukov, Gosudarstvennoe khoziaistvo Rossii v pervoi chetverti XVIII stoletia i reforma Petra Velikago, (2nd ed.; St. Petersburg, 1905), p. 76.

41 S.M. Troitskii, Finansovaya politika russkogo abso-
lyutizma v VIII veke, (Moscow, 1966), p. 224.

42 N.D. Chéchulin, Ocherki po istorii russkikh finansov
v tsarstvovanie Ekateriny II, (St. Petersburg, 1906), p.
313. Two excellent studies of the defense burden on Impe-
rial Russia are Walter M. Pintner's "Russia as a Great
Power, 1709-1856: Reflections on the Problem of Relative
Backwardness, with Special Reference to the Russian Army
and Russian Society," Kennan Institute for Advanced Russian
Studies, Occasional Paper, no. 33, (Washington, 1978); and
his "The Burden of Defense in Imperial Russia, 1725-1914,"
The Russian Review, (July, 1984), No. 3, pp. 231-259.
Fuller (pp. 47-74) provides a useful account of military
funding during the years 1881-1903, and a brief review (pp.
222-230) for those after 1906. On this period, also see Iu.
N. Shebal'din, "Gosudarstvennyi biudzhët tsarskoi Rossii v
nachale XX v. (Do pervoi mirovoi voyny)," Istoricheskie
zapiski, (Moscow, 1959), kn. 65, pp. 163-190, and Peter
Gatrell, "Industrial Expansion in Tsarist Russia, 1908-14,"
The Economic History Review, (February, 1982), No. 1, pp.
99-110 (especially pp. 104-107).

43 Lieven, p. 12; A.M. Podkolzin, A Short Economic
History of the USSR, (Moscow, 1968), p. 76; George Vernad-
sky, A Source Book for Russian History From Early Times to
1917, (3 vols.; New Haven, 1972), v. 3, pp. 822-824; Pin-
tner, "The Burden," p. 249; Gatrell, "Industrial," p. 104;
and Paul R. Gregory, Russian National Income, 1885-1913,
(Cambridge, UK, 1982), chapter 3.

44 Gregory, p. 252; Pintner, "The Burden," p. 248; Cen-
tral Intelligence Agency, National Foreign Assessment Cen-
ter, The Soviet State Budget Since 1965. A Research Paper,
(ER77-10529; Washington, December 1977), p. 17.

45 A.A. Sidórov, Finansovoe polozenie Rossii v gody
pervoi mirovoi voyny (1914-1917), (Moscow, 1960), pp. 39,
43. Also see the comments in Gatrell, "Industrial," p. 105,
and Gregory, pp. 85-87.

46 Sidórov, Finansovoe polozenie Rossii, p. 43.

47 Ibid., pp. 47-50; Vernadsky, A Source Book, v. 3,
pp. 824-825; Stone, The Eastern Front, pp. 28-29, and

reports in British Documents on Foreign Affairs: Russia, 1859-1914, v. 5, pp. 180-183, 235-237, 240-242, 380-381, 385-386, 393-394; v. 6, pp. 5-6, 24-25; 63-64, 82-83, 127-129, 133-134, 143-144, 232-234, 271-276, 328-331, 373-374.

48

Stone, The Eastern Front, p. 29.

49

Lieven, pp. 12-13; Vernadsky, A Source Book, v. 3, pp. 823-824; Podkozlin, pp. 78-79; A.P. Pogrebinskii, Gosudarstvennye finansy tsarskoi Rossii v epokhu imperializma, (Moscow, 1968), pp. 71-75.

50

Cited in Sidorov, Finansovoe polozhenie Rossii, pp. 32-33, who outlines in detail Kokovtsov's analysis of 2 January 1910. For this minister's later comments on defense expenditure at that time, see his Iz moego prošlago, v. 2, pp. 412ff.

51

He made this point in the Moskovskii ezhenedel'nik, (7-November, 1909), no. 44, and his argument is cited by Lieven, p. 12. Other contemporary discussions of this problem are L.N. Yasnopol'skii, "Finansy Rossii i ikh podgotovlennost' k voine," Velikaia Rossiia, kn. 2, pp. 89-122, and P.B. Struve, "Ekonomicheskaia problema 'Velikoi Rossii,'" Ibid., pp. 143-154.

52

See the sources listed in note 17, and especially Pinchuk, pp. 65-66.

53

Ibid.; Fuller, pp. 225-230. The problems associated with developing Russia's military industries during this period are discussed at length in Goldstein, chapters 4-5, and touched on in Polikarpov, pp. 124-125, while the economic impact of these programs is considered by Gatrell, "Industrialization," pp. 105-107.

54

Pinchuk, pp. 189-190. On the navy's expansion, apart from sources listed above in notes 17-18, 21, 23, 28 and 32, see Sidorov, Finansovoe polozhenie Rossii, pp. 48-50. He, like Goldstein (pp. 237ff.), suggests that attention to the fleet harmed the army's preparedness. But before 1914, few generals seem to have seriously held this view. Although the military suffered from the more general budgetary constraints outlined by Pintner ("Burden," pp.

235ff.), the interrelationship of the various aspects of defense and strategic issues, as well as their immense cost, were stressed by some contemporary analysts; see, for example, the critique of Bobrov, "Vozstanovlenië sily," Velikaia Rossiia, kn. 2, pp. 67-88. Overall, however, Stone is quite correct in concluding that other causes played a larger role in Russia's initial disasters than did "material weakness, or the supposed unreadiness of 1914;" The Eastern Front, p. 35.

55

Ibid., 201ff.; Ekli, p. 170; Siegelbaum, pp. 118-120, 183-199; and Ia. M. Bukshpan, Voenno-khoziaistvennaia politika. Formy i organy regulirovaniia narodnogo khoziaistva za vremia mirovoi voiny 1914-1918 gg. (Moscow, 1929), pp. 286-305, and Chast 2, chapter 2, passim.

56

Podkolzin, p. 79. See Sidorov, polozhenie Rossii, pp. 113-132, for an analysis of the monetary costs of the conflict to Russia. Also, see P.I. Liashchenko, History of the National Economy of Russia, (New York, 1949), who provides, in millions of rubles, (p. 769) the following figures on wartime military expenditures and budget deficits, respectively: 1914 -- 1,234 and 1,898; 1915 -- 8,620, and 8,561; 1916 -- 14,573, and 14,573; and 1917 -- 22,561, and 22,568. Needless to say, those for the last year are far from reliable since revolutions hardly promote accurate accounting.

57

Podkolzin, p. 79. See Sidorov, Finansovoe polozhenie Rossii, pp. 132-150, on the increases in the money supply, and 165-172 on the inflation and the resulting crisis.

58

On the Russian economy at war see Stone, The Eastern Front, chapter 9; Florinsky, chapter 2; Sidorov, Finansovoe polozhenie Rossii, chapters 2ff., and especially his comments (pp. 415-526). Also see his analysis of Russia's indebtedness by the end of 1917 (pp. 224ff.). Britain's role as "Russia's banker" is outlined as well in Neilson, chapters 2ff. Other useful studies include R. Klaus, Voina i narodnoe khoziaiatvo Rossii, 1914-1917 gg., (Moscow, 1928); Boris E. Nolde, Russia in the Economic War, (New Haven, 1928); and A.L. Sidorov, Ekonomicheskoe polozhenie Rossii v gody pervoi mirovoi voyny, (Moscow, 1973). The impact of the war in general, and the developments discussed here in particular, on Russian workers and peasants, and on these groups' potential for revolution, are outlined briefly by Hasegawa, pp. 73-103, 198-211, and John L. H.

Keep, The Russian Revolution. A Study in Mass Mobilization, (London, 1976), pp. 28-63, among others.

59

I. Maevskii, Ekonomika russkoi promyshlennosti v usloviakh pervoi mirovoi voiny, (Moscow, 1957), p. 63. Also see the more sophisticated comments of Roger Pethybridge in his The Social Prelude to Stalinism, (London, 1974), pp. 79-81.

60

For Stavka's excuses and the government's reactions, see Michael Cherniavsky, ed., Prologue to Revolution. Notes of A.N. Iakhontov on the Secret Meetings of the Council of Ministers, 1915, (Englewood Cliffs, N.J., 1967), pp. 21-26, 36, 43. This is a translation of A.N. Iakhontov's "Tiazhelye dni. Sekretnye zasedaniia Soveta Ministrov, 16 iulia - sentiabria 1915 goda," Arkhiv russkoi revoliutsii, (Berlin, 1926), kn. 18, pp. 5-136.

Also see Spiridovich, v. 1, p. 148; Alfred W.F. Knox, With the Russian Army, 1914-1917, (2 vols.; London, 1921), v. 1, pp. 301. For Stavka's own assessment, as reported later, see Danilov, Rossia, pp. 252ff., 373ff. His account was popularized in the West by Pares, pp. 214-237, and critized by Stone first in his essay, "Organising an Economy for War: The Russian Shell Shortage, 1914-17," in Geoffrey Best and Andrew Wheatcroft, eds., War, Economy and the Military Mind, (London, 1976), pp. 108-119.

61

This, for example, is a major theme in Golovin's Voennyya usiliia Rossii, v. 2, pp. 24-27. For critical assessments of the Artillery Department's work, see E. Z. Barsukov, Podgotovka Rossii k mirovoi voine v artilleriiskom otnoshenii, (Moscow, 1928), pp. 66ff., and Goldstein, pp. 240ff. A recent Soviet account that places the production of shells and other armaments firmly within the prewar context, is L.G. Beskrovnyi, "Proizvodstvo vooruzheniia i boepripasov dlia armii v Rossii v period imperializma (1898-1917 gg.)," in Istoricheskie zapiski, (Moscow, 1977), kn. 99, pp. 88-139.

62

Stone, The Eastern Front, p. 29.

63

P.D. Duz', Istoriia vozdukhoplavaniia i aviatsii v SSSR. Period pervoi mirovoi voiny (1914-1918 gg.), (Moscow, 1960), p. 10. A memorandum prepared by M.V. Rodziianko in 1916, and now housed with his other papers in the Hoover

Institution, gives a slightly higher figure of 263 machines for July, 1914. Golovin used this when writing his section on aviation in Voennyya usiliya, v. 2, pp. 46-49. On the background of this report see D. R. Jones, "Rodzianko's Memoirs: A Half Century Later," in the reprint of Rodzianko's The Reign of Rasputin, (Culf Breeze, Fl., 1973), pp. xviii - xx.

The Russians' early interest in aviation is also apparent in the journal Vozdukhoplavatel, which was published in St. Petersburg from 1903 to 1917; in N. Popov's Voina i let voinov, (Moscow, 1912), which is one of the earliest books on aerial warfare, and in the patronage given aviation by Grand Duke Aleksandr Mikhailovich from 1909 onwards. For a report on this last, see British Documents on Foreign Affairs: Russia, 1859-1914, pp. 4-5, and David R. Jones, "The Birth of the Russian Air Weapon, 1909-1914," Aerospace Historian, (Fall/September, 1974), No. 3, pp. 169-170.

64

N. Kozlov, Ocherk snabzheniya russkoi armii voenno-tekhnicheskimi imushchestvom, (Moscow, 1926), pp. 35ff.

65

Duz', p. 209.

66

On engine production, see Ibid., p. 232. With regard to the matter of imports, see the comments in Golovin, The Russian Army, pp. 149-150, and Sidorov, Ekonomicheskoe pozozhenie Rossii, pp. 172-188, and on engines in particular, the British Air Board's report of 9 November, 1917 to Lord Milner, entitled "Aero engines on Order in France and Italy for the British and Russian Governments," in the Milner Papers (AB 130-31), Bodlian Library, Oxford.

For a fuller account of Russian aviation in World War I, and a full bibliography, see David R. Jones, "The Beginnings of Russian Air Power, 1907-1922," in Robin Higham and Jacob W. Kipp, eds., Soviet Aviation and Air Power: A Historical View, (Boulder, Co., 1977), pp. 19-25, 31-33. The development of the Sikorski four-engined bomber force, the best known achievement of Imperial aviation, is recounted in E.N. Finne, Russkiye vozdushnye bogatstva I. I. Sikorskago. Materialy dlia istorii Russkoi aviatsii, (Belgrade, 1930).

67

A.A. Manikovskii, Boevoe snabzhenie russkoi armii v 1914-1918 gg., (1st ed., 3 vols., Moscow, 1920-1923), v. 3,

p. 192.

68

Stone, The Eastern Front, p. 196. The problems that private companies had in getting orders is illustrated by those of the "Pulemet" company. Its offers to take orders were turned down by the War Ministry, and the directors subsequently sought the help of Grand Duke Andrei Vladimirovich; see V.P. Semennikov, ed., Dnevnik b. velikogo kniazia Andreia Vladimirovicha 1915 god. (Moscow, 1925), pp. 90-91.

69

A.L. Sidorov, "K voprosu o stroitel'stve kazennykh voennykh zavodov v Rossii v gody pervoi mirovoi voiny," Istoricheskie zapiski, (1955), v. 54, p. 161. Also see his Ekonomicheskoe polozhenie Rossii, pp. 424-449; Polikarpov, "Iz istorii," pp. 125-136; and E.Z. Barsukov's early study, Rabota promyshlennosti na boevoe snabzhenie armii v mirovoi voine, (Moscow, 1928), for discussions of the tsarist government's expansion of the net of state factories, and of the promotion of private firms, during 1914-1917. Future plans, which were forestalled by the revolution of 1917, are discussed in V.V. Polikarpov, "O tak nazyvaemoi programme Manikovskogo" 1916 goda," Istoricheskie zapiski, (Moscow, 1983), kn. 109, pp. 281-306, which also deals with the relative costs of state and private enterprises.

70

Sidorov, "K voprosu," p. 159; Stone, The Eastern Front, pp. 145-146. In his Ekonomicheskoe polozhenie Rossii, pp. 5-18, Sidorov outlines Russian theories on the nature of a future war, and the steps taken by the Ministry of War, the Main Artillery Administration and other agencies, to prepare materially for the expected short conflict.

71

Quoted in A.M. Zaionchkovskii, Podgotovka Rossii k mirovoi voine v mezhdunarodnom otnoshenii, (Moscow, 1926), p. 87.

72

Rostunov, Russkii front, pp. 96-98. As he points out, a commission on the supply of artillery shells, headed by Polivanov, had planned for a war that would last only two to six months. The state of Russian stocks in 1914 is also described in Golovin, Voennyya usiliia, v. 1, 54-69; 2, v. pp. 34-37; Stone, The Eastern Front, pp. 145-146; Manikovskii, v. 1, pp. 15ff.; v. 2, pp. 55ff.; v. 3, p. 234; Danilov, Rossia, pp. 256-257; Beskrovnyi, "Proiz-

vodstvo," pp. 107-108; E.Z. Barsukov, Russkaia artilleriia v mirovuiu voinu, (2 vols.; Moscow, 1938-1940), v. 1, pp. 66ff.; and E.Z. Barsukov, Artilleriia russkoi armii (1900-1917), (4 vols.; Moscow, 1948-1949), v. 1, pp. 296ff; v. 2, pp. 183ff.

73

Manikovskii, v. 3, p. 9.

74

Stone, The Eastern Front, pp. 29-32, 147-149; Zaionchkovskii, Podgotovka, pp. 66, 75-76; Sidorov, Finansovoe polozhenie Rossii, pp. 65-66; and Barsukov, Podgotovka, pp. 57-58, 88-95. The cost to field artillery units created by demands for rearming fortresses also becomes evident from the discussions in P.N. Chizhov, "Znachenie i razvitiie Tiazheloi Artillerii v Rossiiskoi Imperatorskoi Armii," Voennaia byl', (January, 1963), No. 58, pp. 30-41; Colonel K, "Tiazhelaa artilleriia v Rossiiskoi armii," Ibid., (November, 1963), No. 64, pp. 11-15; and Barsukov, Artilleriia, v. 1, pp. 171-173.

According to calculations of this last writer, in 1914 Russian fortresses had some 1,200 obsolescent weapons designed for their use. They were supposed to have 4,884 modern fortress and shore-defense weapons, but by February 1913 only 2,813 guns (or 57 %) were in place or on order, the deficit having partly been made up by weapons from disbanded siege artillery units. In all, he complains that before 1908 1,131 guns had been ordered; that from 1908 to 1912 another 1,744 fortress weapons had been ordered, that these were followed by another 516 in 1913; but that in fact, only 1,603 (30 %) had been delivered.

Despite this, the author of "Rossiia khotet mira, no gotova k voine," who is usually considered to be Sukhomlinov, asserted in early 1914 that Russian "coastal and fortress artillery is supplied with weapons that are technically far superior to those in many countries of Western Europe," see the column "Vecherniia izvestiia" in Rech', (St. Petersburg), 28 February (13 March), 1914, No. 57, p.2.

Given the poor showing of Russian fortresses in 1914-1915, apart from those of Ivangorod and Osovets, as well as the need for heavy guns evident in the field armies, it is difficult to sympathize either with Sukhomlinov's confidence, or Barsukov's complaints. As Stone notes (p. 49), both the defenses just mentioned were well-planned, but both were costly. That of Osovets consumed 1,000 rounds per gun, and yet it did little but demonstrate the high techni-

cal quality of the Russian artillerists involved; see A. Khmelikov, Bor'ba za Osovets, (Moscow, 1939), pp. 55ff.; his "Kratkoe opisaniie Osovetskoi kreposti i rezul'taty ee bombardirovaniia v 1914-15 gg.," Voennye inzhenernyi zhurnal, (Petrograd, 1921), No. 1-2, pp. 45-78; and V. Bunikovskii, "Kratkii ocherk oborony kreposti Osovtsa," Voennyi Sbornik, (Belgrade, 1925), kn. 5, pp. 289-307.

The defense of the obsolete and relatively weak fortress of Ivangorod was described by its commander A.V. Shvarts in Oborona Ivangoroda v 1914-1915 gg. Iz vospominanii komandanta kreposti, (Moscow, 1922); his Ivangorod v 1914-1915. Iz vospominanii, (Paris, 1969); and V. Ia., "Inzhenernye raboty po usileniiu kreposti Ivangorod. (S noiabria 1914 g. po iul' 1915 g.)," Voennye inzhenernyi zhurnal, (Petrograd, 1920), No. 2, pp. 22-33. But as mentioned, these successes were exceptions. More typical was the collapse of those forts that immediately defended Warsaw, whose condition is described graphically in P.N. Chizhov, "Artilleriiskaia oborona Varshavy v 1914 godu v raione 2-go Sektora," Voennaya byl', (September, 1969), No. 99, pp. 1-9, and the fall of the fortress of Kovno. On this latter see A.V. fon Shvarts, Kak byla atakovana i vziata krepost' Kovna -- 1915 god, (unpublished typescript, Buenos Aires, n.d.). Deposited in the Russian Military-Historical Archives in Paris, a very limited number of xerox copies are available in the Russian Emigre Archives, v.4, (Fresno, CA, 1973).

75

Manikovskii, v. 1; pp. 25, 70-71, 84ff.; Beskrovnyi, pp. 91-93; Barsukov, Artilleriia, v. 1, pp. 353-354, 360-361; v. 2, pp. 298-300; Danilov, Rossia, p. 283; Stone, The Eastern Front, p. 146; Golovin, Voennyya usiliia, v. 2, pp. 6-12; and Sidorov, Ekonomicheskoe polozhenie Rossii, pp. 11-12.

76

Manikovskii, v. 1, pp. 84-85.

77

Golovin, Voennyya usiliia, v. 2, pp. 12-13; Barsukov, Artilleriia, 1, pp. 366ff.; v. 2, 258ff.; Beskrovnyi, "Proizvodstvo," pp. 97-98.

78

Golovin, Voennyya usiliia, v. 2, pp. 12; Barsukov, Artilleriia, v. 2, p. 259, 262ff., 298ff.; Beskrovnyi, "Proizvodstvo," p. 98. Interestingly enough, A.A. Brusilov gives the War Ministry credit for quickly recognizing the deficiencies in munitions as well, and with "making inhuman efforts" to develop industry and solve the crisis; see his

Moi vospominaniia, (4th ed.; Moscow, 1946), p. 57.

79

Rostunov, Russkii front, pp. 98-99; Beskrovnyi, "Proizvodstvo," p. 107; Barsukov, Artilleriia, v. 1, pp. 167-176.

80

Stone, The Eastern Front, pp. 37-38. On this issue, compare Tables 15 and 16 in Barsukov, Artilleriia, v. 1, pp. 168-169.

81

Wildman, pp. 73-74; Manikovskii, v. 3, pp. 215ff.; Golovin, Voennyya usiliia, v. 1, pp. 54ff.; A.A. Brusilov, Moi vospominaniia, (1946), pp. 57-58; and Table 18 in Barsukov, Artilleriia, v. 1, p. 170. But in spite of this argument, Stone (The Eastern Front, pp. 23-24, 29ff.) does fully recognize the weaknesses of the prewar planning of Russia's artillerists.

82

See Rostunov, Russkii front, pp. 98-102; Golovin, Voennyya usiliia, v. 2, pp. 42ff.; Stone, The Eastern Front, pp. 210-211; and Kozlov, passim, on materiel in general. On small arms munitions in particular, see Beskrovnyi, "Proizvodstvo," pp. 100-104; Rostunov, Russkii front, pp. 96-97; Golovin, Voennyya usiliia, v. 2, pp. 14-23; Manikovskii, v. 1, pp. 105ff.; Barsukov, Artilleriia, v. 2, pp. 260-262.

83

This took the form of the unsigned article, "Rossiia k khochet mira, no k gotova' voine," which first appeared in Barzhevia Vedomosti and then was republished in Rech', No. 57, p. 2, on 28 February (13 March) 1914. For more on Sukhomlinov's boast and its broader implications, see Lieven, pp. 108ff., and Sir George Buchanan's telegram to Sir Edward Grey, No. 11456, dated 15 March 1914, in British Documents on Foreign Affairs: Russia, 1859-1914, v. 6, pp. 377-378.

84

Wildman, p. 74; Golovin, Voennyya usiliia, v. 1, p. 26.

85

Wildman (chapters 1 and 2), along with writers like Bushnell and Shatsillo (Rossia, pp. 101-103), basically accept that various forms of social and economic "backwardness" made it difficult, if not impossible, for Tsarist Russia to field an efficient, modernized army in 1914.

Interestingly enough, Beskrovnyi ("Proizvodstvo," pp. 132-135) grants tsarist Russia the specialist technical and organizational capabilities to wage modern war, and sees its social-political backwardness as part of the more general process leading to the "crisis of imperialism."

⁸⁶ Ibid., pp. 132-133; Brusilov, Moi vospominaniia, (1946), p. 58-61; Sidorov, Ekonomicheskoe polozhenie Rossii, pp. 6-8; Stone, The Eastern Front, p. 145. The extent to which this and other fallacies were shared by other European armies is evident from J. A. L. G. Luvaas' essay "European Military Thought and Doctrine, 1870-1914," in Michael Howard, ed., The Theory and Practice of War. Essays Presented to Captain B. H. Liddell-Hart, (London, 1965), pp. 71-93.

One should note, however, that in 1913 Russia's leading strategist, N. P. Mikhnevich, revised his opinion in his unpublished lecture series entitled "Foundations of Strategy." In these he pointed to the resiliency of modern industrial nations and warned of their ability to quickly raise and field new armies. For this reason, he gloomily concluded that only the destruction of the enemy's armies and physical occupation of his population and industrial centers could bring a complete victory, which meant that the struggle might prove more protracted than expected; L. G. Beskrovnyi, ed., Russkaia voenno-teoreticheskaiia mysl' XIX i nachala XX vekov, (Moscow, 1960), p. 36. For more on Russian views in particular, see von Wahlde, chapters 5-6, and P. A. Zhilin, ed., Russkaia voennaia mysl' konets XIX-nachalo XX v., (Moscow, 1982), passim.

⁸⁷ Lieven, p. 111; Stone, The Eastern Front, p. 35-36; Rostunov, Russkii front, p. 59.

⁸⁸ Shatsillo, Rossia, pp. 97-100; Knox, v. 1, pp. xviii-xix, xxiii; Barsukov, Artilleriia, v. 1, pp. 174-176; Engel'gardt, Potomuvshii mir, pp. 73-74.

⁸⁹ Showalter, p. 62; also see Fritz Fischer, Griff nach der Weltmacht. Die Kriegszielpolitik des kaiserlichen Deutschland 1914/1918, (Düsseldorf, 1964), pp. 43-46, and Stone, The Eastern Front, pp. 38ff. Some Russian soldiers, however, considered that they had been fortunate that the war had broken out in 1914, rather than in 1915. By then, they believed, implementation of the "Grand Program" would have disrupted their military machine; see, for instance, Palitsyn's comments in Dnevnik ... Andreia Vladimirovicha,

pp. 39.

90

Quoted in Golovin, Voennyya usiliya, v. 2, pp. 35.

91

Ibid.

92

Ibid., p. 36. See also Sidorov, Ekonomicheskoe polozhenie Rossii, pp. 18-20. Stavka's recurring wails over shortages of munitions are contained in "Perepiska V.A. Sukhomlinova s N.N. Ianushkevichem," Krasnyi arkhiv, (Moscow, 1922), kn. 1, pp. 209-272; kn. 2, pp. 130-175; and kn. 3, pp. 29-74.

93

Gronsky, pp. 26-31; Jones, "Central Military," p. 151. On the Duma's patriotic reaction to the outbreak of war, see Hasegawa, pp. 4-5.

94

Gronsky, p. 152. The laws governing supply in World War I are conveniently collected in Snabzhenie armii i flota. Sbornik postanovlenii, opredeliazushchikh uchastie grazhdanskikh vlastei, obshchestvennykh uchrezhdenii i naseleniia v obezpechenii voisk razlichnymi vidami dovol'stviia, (2 vols., Petrograd, 1916).

95

A. Kavtaradze, "Iz istorii russkogo general'nogo shtaba (avgust 1914 goda - mai 1918 goda)," Voennno-istoricheskii zhurnal, (March, 1976), No 3., p. 103. The range and expanse of roles carried out by GUGSh by the war's end is indicated by the items in its proposed budget for 1917; see Smeta Voennago Ministerstva po Glavnomu Upravleniiu General'nago Shtaba na 1917 god, (Petrograd, n.d.), in the Russian Research Collection, Dalhousie University. Also see Erickson, The Russian Imperial, pp. 39-42, on the role of the General Staff and the arguments with Stavka during 1914-1915. The key role of the Main Artillery Administration in supply matters is highlighted in Sidorov's discussion in Ekonomicheskoe polozhenie Rossii, pp. 20-27, and Barsukov, Artilleriia, v. 2, pp. 19-22, 39-43.

96

Ibid., pp. 24-36; Stone, The Eastern Front, pp. 23-24, 146-147. On the attitude of artillery officers towards the infantry, also see his "The Historical Background," pp. 10-13 and Barsukov, Russkaia artilleriia, v. 1, pp. 148ff.

97

Stone, The Eastern Front, pp. 149-150. Sukhomlinov's account (pp. 395-405) well reflects his suspicions. On relations between the Main Artillery Administration, the active armies and Stavka in 1914-1915, see Barsukov, Artilleriia, v. 2, pp. 40-48; Barsukov, Russkaia artilleriia, v. 2, pp. 165-170; and P.K. Kondzerovskii, V Stavke Verkhovnogo, 1914-1917. Vospominaniia Derzhurnogo Generala pri Verkhovnom Glavnokomanduiushchem, (Paris, 1967), pp. 40-43, as well as the correspondence between Sukhomlinov and Ianushkevich cited in note 92.

98

On the Artillery Department's efforts to verify reports of shell shortages, see Manikovskii, v. 3, pp. 66-83. Also see Stone, The Eastern Front, pp. 149-150.

99

Ibid., pp. 148-149. For the proportion of guns allocated to fortresses and coastal defensive works, see Barsukov, Artilleriia, v. 2, pp. 144-145, and sources in note 74 above.

100

Golovin, Voennyya usilia, v. 2, p. 36. Also see Brusilov, Moi vospominaniia, (1946), p. 57, and Barsukov, Artilleriia, v. 2, pp. 61-65.

101

Golovin, Voennyya usilia, v. 2, pp. 36-37. Also see Barsukov, Artilleriia, v. 2, pp. 183ff.

102

Jones, "Central Military," pp. 152-154. These laws are detailed in Snabzhenie armii i flota, v. 1, Sections IV-VI, and discussed by Bukhshtan, pp. 253ff.

103

Jones, "Central Military," p. 154; Snabzhenie armii i flota, v. 1, pp. 507-510.

104

Stone, The Eastern Front, p. 149. Also see Sidorov's assessment in Ekonomicheskoe polozhenie Rossii, pp. 35-36, and Polikarpov's account of the Artillery Department's early efforts in "Iz istorii," pp. 125-126.

105

Sidorov, Ekonomicheskoe polozhenie Rossii, pp. 30-34; Beskrovnyi, "Proizvodstvo," p. 123; Barsukov, Artilleriia, v. 2, pp. 32-33; Stone, The Eastern Front, p. 150.

106

Ibid., pp. 151-152.

107

D.S. Babichev, "Deiatel'nost' Russkogo pravitel'stvennogo komiteta v Londone v gody pervoi mirovoi voiny (1914-1917 gg.)," Istoricheskie zapiski, (Moscow, 1956), kn. 57, pp. 276-292; Neilson, pp. 66, 101-102; Jones, "Central Military," p. 154. The later mood in the London Committee is described in Nikolai Gubsky, Angry Dust. An Autobiography, (London, 1937), pp. 223ff., and N. G-V, "Prakticheskie strel'by Russkov artillerii na poligone bliz Londona (v dni pervoi mirovoi voine)," Voennaya byl', (March, 1974), No. 127, pp. 6-7. A valuable insight into the problems of Russia's agents in America may be gained from the Papers of General N.N. Khrabov (Khrabov), in the Manuscript Division of the New York Public Library.

108

Barsukov, Artilleriia, v. 1, pp. 19-22; Neilson, p. 75; Jones, "Central Military," p. 154; Sidorov, Ekonomicheskoe polozhenie Rossii, pp. 36ff.; and Bukshpan, pp. 272ff. Aspects of the practical work of this body are outlined by Polikarpov, "Iz istorii," pp. 126-133.

109

Barsukov, Artilleriia, v. 2, pp. 34-36; Knox, v. 1, pp. 273-276; Stone, The Eastern Front, pp. 155-156.

110

Ibid., p. 152; Barsukov, Artilleriia, v. 2, pp. 223-228; Beskrovnyi, "Proizvodstvo," p. 123. On the history of Russia's wartime orders abroad, see Sidorov, Ekonomicheskoe polozhenie Rossii, pp. 252ff.

111

Stone, The Eastern Front, p. 152. Also see Table 56 in Barsukov, Artilleriia, v. 2, p. 299, and Beskrovnyi, "Proizvodstvo," pp. 94-95. A sign of Russian expectations was the War Ministry's issue of Kratkie ukazaniia po obucheniiu voisk strel'be iz 3-x-lin. vinovok Vinchestora, obraztsa 1895 goda, (Petrograd, 1915). According to Max Star, in the Lion's Den, p. 113, he and his fellow soldiers disliked these "rifles with their long wide bayonets that we found difficult to use. We were used to a lighter, more rounded, three-pointed bayonet, and those that were sent us were too clumsy for us to handle well."

112

Golovin, Voennaya usuliia, v. 2, pp. 6-7. Also Beskrovnyi, "Proizvodstvo," pp. 93-95, and Barsukov, Artilleriia, v. 2, pp. 298-300.

113

Golovin, Voennyya usiliya, v. 2, pp. 7-8; Wildman, pp. 83-84; Stone, The Eastern Front, pp. 144-145.

114

See the argument in Sidorov, Finansovoe polozhenie Rossii, chapter 1. For an example of the anti-Allied sentiments of some tsarist officers see Bonch-Bruевич, pp. 200-201, and the remarks of F.F. Palitsyn in his memoirs, "V shtabe Severo-Zapadnogo fronta," Voennyi sbornik, (Belgrade, 1922), kn. 3, p. 184. Even when ordered equipment did arrive, it sometimes was practically useless. This, for example, was the case of second-hand French aircraft in 1915; N. Voevodskii, "Varshava - Mokotovo Pole," Chasovi, Brussels, (July, 1959), No. 400(7), pp. 16-17. On the anti-Allied feeling in the army in general, see Lehovich, White Against Red, pp. 60-65.

115

Jones, "Central Military," p. 155; Gronskey, pp. 32ff.; Sidorov, Ekonomicheskoe polozhenie Rossii, pp. 55ff.; Bukshpan, pp. 307-317. On the Grand Duke's commission, also see the comments in Dnevnik ... Andreia Vladimirovicha, pp. 42-44.

116

Ibid.; A. Terne, "Osoboe soveshchanie po oborone gosudarstva 1915-1916 gg.," Vozrozhdenie, (Paris, 1967), no. 188, p. 67; Rodzianko, pp. 128ff.; and Gatrell, "Aspects," pp. 2-5.

117

Jones, "Central Military," pp. 155, 157-159; Bukshpan, pp. 317ff. The fullest English account of the work of the Special Councils is O. Zagorsky, State Control of Industry in Russia during the War, (New Haven, 1928). The appropriate laws establishing these councils are available in Snabzhenie armii i flota, v. 1, pp. 549-567, and the Councils' minutes recently became available as L.G. Beskrovnyi, et al., ed., Zhurnaly Osobogo soveshchaniia dlia obsuzhdeniia i ob'edineniia meropriatii po oborone gosudarstva (Osoboe soveshchanie po oborone gosudarstva), 1915-1918 g.g., (Moscow, 1975 -), 10 vols. to date. The extent to which certain elements of the "free market" gained from the war is discussed in T.M. Kitagina, Voenno-inflatsionnye-kontserny v Rossii, 1914-1917 gg. Fontsern Putlova-Stakheeva-Batalina, (Leningrad, 1969). Chapter 1 of this work provides a useful overview of the Russian economy at war.

118

Stone, The Eastern Front, pp. 210-211. Also see the

figures for different types of guns in Beskrovnyi, "Proizvodstvo," pp. 107-118; the discussion in Barsukov, v. 2, pp. 144-182, especially pp. 172-177; and the figures in Knox, v. 2, pp. 545-547.

119

Ibid., pp. 548-549; Stone, The Eastern Front, pp. 210-211;; Golovin, Voennyya usiliia, v. 2, p. 12ff.; Barsukov, v. 2, pp. 258-260, 304-313; Beskrovnyi, "Proizvodstvo," pp. 89-104.

* 120

Golovin, Voennyya usiliia, v. 2, pp. 42-46; Stone, The Eastern Front, p. 210. On the expansion of the automobile industry, see S.V. Voronkova, "Stróitel'stvo avtomobil'nykh zavodov v Rossii v gody pervoi mirovoi voyny (1914-1917)," Istoricheskie zapiski, (Moscow, 1965), kn. 75, pp. 147-169.

121

Stone, The Eastern Front, p. 211. Also see Knox's (v. 2, pp. 551-552) comments about conditions at the end of 1916, and Petrov, Rokovy, pp. 40-47.

122

Rostunov, Russkii front, p. 52. For an historical evaluation of the burden of conscription, also see Pinner, "The Burden," pp. 251-259.

123

Ibid. On the army before the Crimean War, see John S. Curtiss, The Russian Army Under Nicholas I, 1825-1855, (Durham, NC, 1965). Chapter 12 deals with the life of peasant recruits. Also see Golovin, Voennyya usiliia, v. 1, pp. 9-10.

124

The case for a military imperative for the "great reforms" is presented in A.J. Rieber, The Politics of Autocracy, (The Hague, 1966), pp. 23-30. A.V. Fedorov, Russkaia armia v 50-70 gg. XIX veka. Ocherki, (Leningrad, 1959), pp. 9-49, outlines the security considerations involved at greater length. Also see Jacob W. Kipp, "M. Kh. Reutern on the Russian State and Economy: A Liberal Bureaucrat During the Crimean War, 1854-1860," Journal of Modern History, (September, 1975), No. 3, pp. 439-453; Kipp's The Grand Duke Konstantin Nikolaevich and the Epoch of the Great Reforms, 1855-1866, (Unpublished PhD Dissertation, Pennsylvania State University, 1970), passim; his "Consequences of Defeat: Modernizing the Russian Navy, 1856-1863," Jahrbücher für Geschichte Osteuropas, (June, 1972), pp. 210-225;

and his article, with Bruce Lincoln, "Autocracy and Reform: Bureaucratic Absolutism and Political Modernization in Nineteenth-Century Russia," Russian History, v. 6, pt. 1, (1979), pp. 1-21. Also see Forrest A. Miller, Dmitrii Miliutin and the Reform Era in Russia, (Vanderbilt, 1968), pp. 26ff., and Fuller, pp. 3-13.

125

Wildman, p. 125.

126

Quoted in Golovin, Voennyya usiliia, v. 1, p. 10. Also see the comments in Rittikh, pp. 18ff.

127

Ibid. The best discussion of the preparation of this statute is Robert F. Baumann, The Debates over Universal Military Service in Russia, 1870-1874, (Ph.D. dissertation; Yale University, 1982). Also see P.A. Zaionchkovskii, "Podgotovka voennogo reformy 1874 g.," Istoricheskie zapiski (Moscow, 1948), kn. 27, pp. 170-201, his Voennye reformy 1860-1870 godov v Rossii, (Moscow, 1952), chapter 7, and Fedorov, Russkaia armia, chapters 8-9.

128

Vernadsky, A Source Book, v. 3, p. 819. This echoes the earlier teaching of M.I. Dragomirov that a Russian soldier was "a soldier of Christ;" see his Memento du Soldat, (Paris, 1889), p. 9. On the traditional credo see Shaiditskii, pp. 516-517, and the more critical comments in Zalesskii, pp. 71-72, and L.M. Bolkhovitinov, "Sviashchennyi dolg," Velikaia Rossiia, kn. 2, pp. 23-42.

For an interesting description of a soldier's life in the post reform army see F. Orlov, Prima molodogo soldata. (Posviashchaetsia mladshim ofitserov, 2nd ed., St. Petersburg, 1898). Also see Denikin, Staryi v. 1, pp. 32-5; v. 2, pp. 125ff. It is interesting to note that the Soviets still retain a trinitarian credo: today's soldiers are expected to fight and die for "my people, my Soviet Homeland, and the Soviet Government;" A.I. Odintsov, Uchebnoe posobie po nachalnoi voennoi podgotovke, (3rd ed., Moscow, 1971), pp. 4-5.

129

Wildman, pp. 26-27, 30; Rostunov, Russkai-front, pp. 48-52; Golovin, Voennyya usiliia, v. 1, pp. 16-20. For a brief discussion of the impact of the concept of "nation in arms" on Imperial military thinkers, see P. Spilberg, "Nation in Arms" in Russian Military Thought," in J.C. Purves and D.A. West, eds., War and Society in the Nine-

teenth Century Russian Empire, (Toronto, 1972), pp. 164-169. A classic account of the implementation of the statute of 1874 is A. Rediger's Komplektovanie i ustroistvo vooruzhennoi sily. Chast 1: Komplektovanie armii, (4th ed.; St. Petersburg, 1913), pp. 127-201, and a useful Soviet review is S. Kliatskin's "O sisteme komplektovaniia staroi armii," Voенно-istoricheskii zhurnal, (January, 1966), No. 1, pp. 107-109.

130.

Wildman, p. 36.

131

Ibid., pp. 38-40.

132

On attempts to use the army to combat illiteracy, see Bushnell, "Peasants," pp. 565-566, and Matiny and Repression, pp. 7-9; Grulev, pp. 112-113; Ritterkh, pp. 37-38; P.A. Zaionchkovskii, Samoderzhavie i russkaya armiya, pp. 275-279; Mstislav Levitskii, Vospitanie soldat, (St. Petersburg, 1911), passim; and various articles in the Warsaw newspaper Ofiterskaya zhizn': N.N., "Narodnyi universitet v armii," (3/16 February, 1907); Atom, "Narodnyi universitet v armii," (2/15 May, 1909); I. Bilievskii, "Ofitser i diad'ka," (19-26 June/2-9 July, 1910).

Also of interest are the remarks in N.V. Nagaev, "Leib-Gvardii 2-i strelkovyi Tsarskoel'skii polk. Ocherki bytia i sluzhby Tsarru i Rodine za period ot Iaponskoi do mirovoi voyny. Iz vospominanii Tsarskoel'skago strelka," in E.A. Verbitskii, ed., Pamiatnye dni. Iz vospominanii Gvardeiskikh strelkov, kn. 2, (Tallinn, 1937), pp. 56-57; B. Kuznetsov, "Zhizn' i sluzhba v otdalennykh garnizonakh Rossiiskoi Imperii," Voennaiia byl', (July, 1966), No. 80, p. 7; V. Kamenskii, "Otryvki vospominanii o sluzhbe ofitsera Gvardeiskoi Pekhoty v S.-Peterburge do voyny 1914 g.," Ibid., (January, 1968), No. 89, pp. 4-5; and K.K. Ofitsnovskii, "Moia sluzhba v ofiterskikh chunakh," Ibid., (March, 1972), No. 115, p. 33.

But also see the comments in Vladimir Lattauer, Russian Hussar, (London, 1965), p. 62. He claims that in 1913, illiteracy in Russia amounted to 73 percent, that the Sumskaia Hussars "provided no lessons in reading and writing, and often illiterate soldiers were even preferred: no reading, no ideas." On the question of literacy in Imperial Russia in general, see Jeffrey Brooks, When Russia Learned To Read: Literacy and Popular Literature, 1861-1917, (Princeton, NJ, 1985), especially pp. 3-34. As for civilian antimilitarism, see the works cited in note 16 and

Kenez, "Profile," pp. 154-155.

133

Wildman, p. 28.

134

Ibid., pp. 28-29. On these volunteers also see Kenez, "Profile," pp. 145-146; Golovin, Voennyya usiliya, v. 1, pp. 42-46; Rittikh, pp. 33-36; Littauer, pp. 62-63; For the views of one volunteer, see Dmitrii I. Abrikossov, Revelations of a Russian Diplomat, ed. G.A. Lensen, (Seattle, 1964), pp. 70-77.

After 1906 the War Ministry took steps to improve the quality of these reserve officers; see E. Iankovskii, "Neskol'ko slov v zashchitu Rossi i Russkoi Imperatorskoi Armii," Voennaya byl', Paris, (September, 1966), No. 81, pp. 22-23; "The Year 1912 in Foreign Armies: Russia," Journal of the Royal United Services Institute, v. 57, (June, 1913), pp. 939-940, 948; "Training of Reservists, 1913," Ibid., (October, 1913), pp. 1403-1404, and "Short Term Volunteers," Ibid., p. 1404.

135

Wildman, pp. 76-80, examines the response to war in some detail. A Soviet examination of the reaction of the peasants in particular is A.B. Berkevich, "Krest'ianstvo i vseobshchaya mobilizatsiia v 1914 g.," Istoricheskie zapiski, (Moscow, 1947), kn. 23, pp. 3-43.

A typical account of the patriotic fervor allegedly reigning in 1914 is that of Rodzianko, Reign, pp. 106-112. Also see the remarks in Jules Légras, "Souvenirs sur la Guerre en Russie," Révue d'Histoire de la Guerre, v. 9, (Paris, 1933), pp. 222-223. He tells of officers in one regiment who feared that the war would end before they saw action, a feeling also shared by officer candidates in the military schools. One such later insisted he "went to war consciously 'ideino,'" and recalls how he and his comrades, who had been assigned coastal defense duties, grumbled until they won assignments at the front; see Valentin V. Fedoulenko, Russian Emigré Life in Shanghai, (Interview with Boris Raymond in Berkeley Oral History Project), pp. 4-5.

Légras also comments on the smoothness with which the first mobilization was carried out, but considers later ones, and especially that of the Central Asians in 1916, to be marked by bureaucratic blundering (p. 223). On the spirit of 1914, also see Hasegawa, pp. 9-18.

136

Golovin, Voennyya usiliya, v. 2, p. 124. Some tried to give the soldiers a slightly more sophisticated view of the war by stressing their role in promoting "Russia's mission" as the "liberator of peoples," and especially of their Balkan Slav brothers; see, for example, Prince Evgenii Trubetskoi, Smysl' voyny, vyp. 1, (Moscow, 1914), p. 9. A later effort at explaining the conflict, this time by a "defensist" Social Democrat, is Nik. Sukhanov, Pochemu my voiuem? (Petrograd, 1916).

137

Golovin, Voennyya usiliya, v. 2, p. 120.

138

Quoted in ibid., p. 119.

139

Danilov, Rossia, pp. 111-112.

140

Wildman, pp. 36-38. His views receive support from the experiences of a French officer who had served six months in the Imperial Army in 1913, and who is cited in L'even, pp. 113-114.

For the role of religion in the army in the preceding period, see Arkhorij Fri', "Religion in the Russian Army in the XIX Century," in Purves and West, pp. 23-33; the comments of Nagaeu, p. 57; and the hostile Soviet assessments of E.F. Grekulov, Tserkov', samoderzhavie, narod (2-ia polovina XIX - nachalo XX v.), (Moscow, 1969), especially pp. 151-164 (the period 1914-1917), and G.A. Suglobov, Soiuz kresta i mecha (Tserkov' i voyna), (Moscow, 1969), pp. 23-42. For a portrait and appreciation of the role of a regimental priest, see Kolyvanets, "Otets Fedor. Iz bogovoi zhizni 40 pekhet. Kolyvanskogo polka," Voennaya byl', (November, 1962), No. 57, pp. 21-23.

141

Golovin, Voennyya usiliya, v. 1, p. 41. However, according to figures of one Soviet scholar, between 1907 and 1909 the literacy rate among conscripts averaged 63 percent; A.G. Rashin, "Gramotnost' i narodnoe obrazovanie v XIX i nachale XX v.," Istoricheskie zapiski, (Moscow, 1951), kn. 37, p. 45. However, the War Ministry's newspaper Russkii Invalid reported that in the recruit contingent of 1907, 53.2 percent had received a primary education, of whom 40.9 percent could read and write, and 12.3 percent could only read. Comparable figures, reported for 1903, were 32.5 and 6.9 (a total of only 39.4 percent); for 1904, 31.3 and 8.6 (39.9 total); for 1905, 32.6 and 8.8 (41.4

total); and for 1906, 36.8 and 9.2 (46 percent total).

While matters might seem to have been improving, the paper noted that the total of 46.8 percent of illiterates in 1907 nonetheless created great difficulties for the training of NCOs; and that consequently, the lower commissioned ranks lost considerable time by performing the NCOs' duties; cited in "Russia: The Primary Education of the 1907 Recruit Contingent," Journal of the Royal United Services Institute, v. 53, (1909), p. 1243. The absolute figures of each category of these contingents appeared in "Russia: The Contingent for 1907," Ibid., v. 52, (1908), p. 998. The latter also contains breakdowns on those released from service, and on the contingent as inducted, statistics on religion, and so on.

On the literacy level in the earlier period, see A.V. Fedorov, "Zakon o vsesoslovnoi voinskoj povinnosti 1874 goda i krest'ianstvo," Istoricheskie zapiski, (Moscow, 1954), kn. 46, pp. 194-195. Even if a large portion -- 22 out of the 68 percent of all the soldiers who were counted as literate in the Voenno-statisticheskii ezhegodnik armii za 1910 god, (St. Petersburg, 1910), p. 276 -- were merely semiliterate, this still makes nonsense of Denikin's claim that 200,000 illiterates were inducted annually; Denikin, Pu', p. 123; Staraja armia, v. 2, p. 166. Also see the sources cited in note 132, especially Brooks, pp. 18-22, on the need for literacy among the troops.

142

This seems clear from the analysis in Wildman, pp. 332ff., and from the multitude of other accounts of the "revolutionizing" of the army. With regard to the spread of revolutionary ideas in 1917 in general, as well as the implications of literacy in this process, see the interesting studies in Roger Pethybridge, The Spread of the Russian Revolution: Essays on 1917, (London, 1972). He deals with the role of the railways (pp. 11-56), the postal and telegraph system (pp. 57-82), the press (pp. 111-139), and of outright political propaganda and rumor (pp. 140-175). He deals more directly with literacy in his Social Prelude, pp. 132-142.

143

Colonel "Billy" Oliferov to the present writer in an interview in San Francisco, June 1968.

144

on the continuing personal magnetism exercised by the tsar, see Wildman, p. 37; Levien, p. 114; P.N. Krasnov, "Pamiati Imperatorskoj Russkoj Armii," Russkaia letopis',

(Paris, 1921), kn. 1, pp. 25-28, 55ff.; and Krasnov's novel, From Double-Headed Eagle to Red Flag, (London, 1928), pp. 96ff. For personal accounts, see Vorres, pp. 150-151; E.M. Almedingen, The Romanovs. Three Centuries of an Ill-Fated Dynasty, (London, 1966), pp. 305-306; and Vasilii Vyrypaev, "Tsarskii smotr," Voennaiia byl', (July, 1969), No. 98, 26-27. The public relations aspect of his wartime activities are clear from Major-General Dubenskii, ed., Ego Imperatorskoe Velichestvo Gosudar' Imperator Nikolai Aleksandrovich v deistvuiushchei armii, 1914-1916 g. (4 vols.; Petrograd, 1915-1916), and in P. Sokolov, "Gosudar' v Peremyshle," Chasovoi, Brussels, (July, 1959), No. 400(7), pp. 18-20.

145.

Quoted in Neilson, p. 8.

146

Stone, The Eastern Front, p. 213; Golovin, Voennaya usiliia, v. 1, pp. 11-12, 32-38, 41-46. The exemptions granted national groups are detailed in Robert F. Bauman, "Universal Military Service and the Russian Empire," (Unpublished paper presented to a conference at Cornell University, September, 1984), and the comments in Rediger, pp. 192-195, and Rittikh, pp. 26-42.

147

Stone, The Eastern Front, pp. 212-213; Kostunov, Russkii front, pp. 51-52, 58. A detailed breakdown of the law's practical operation is provided in "Russia: The Contingent for 1907," pp. 998-999. Personal accounts of the process of selecting and handling recruits are Littauer, pp. 64-66; V. Kochubei, "Razbivka novobrantsev po polkam gvardii," Voennaiia byl', (January, 1967), No. 83, pp. 24-27; and A. Nevzorov, "Sluzhba v polku molodogo ofitsera," Ibid., (May, 1969), No. 97, pp. 8-12.

148

Stone, The Eastern Front, p. 213; Fuller, pp. 47-74, discusses the problems and politics of military funding before 1904, as does Pintner in "Burden," pp. 237-244. Under Nicholas II, according to this last authority, 80 percent of total defense expenditures "went for everything except weapons and ships" (p. 244, italics his). A.N. Kuropatkin, Minister of War from 1898 to 1904, and then the commander in Manchuria, complained that insufficient funds prevented the army from fulfilling its responsibilities during this period; A.N. Kuropatkin, Zapiski generala Kuropatkina o russko-iaponskoi voine. Itogi voyny, (Berlin, 1909), pp. 106-117.

149

Rostunov, Russkii front, p. 52.

150

Ibid., pp. 46-47; Wildman, pp. 25-27; Golovin, Voennyya usiliia, v. 1, pp. 12-16; Golovin, The Russian Army, pp. 3-7; and Pintner, "Burden," pp. 250-255.

151

Golovin, Voennyya usiliia, v. 1, pp. 13-14.

152

Ibid., v. 1, pp. 34-38; Wildman, pp. 25-27; Rostunov, Russkii front, pp. 48-50. The changes after 1906 in particular are detailed in "Changes and Tendencies in the Russian Army since the War against Japan," Journal of the Royal United Services Institute, v. 54, (1910), pp. 1449-1450, and "Events of the Military Year, 1911, in the Armies of Foreign Powers. Russia," Ibid., v. 56, (July, 1912), pp. 958-962. In the wake of the Manchurian defeats, the training battalions -- the units responsible for the wartime preparation of reservists for active units -- were reorganized as well; see "New Organization of the Infantry Depot Battalions," Ibid., v. 53, (1909), pp. 1244-1245.

153

On the reorganization of 1909-1910, see Ibid., pp. 52-58; Shatsillo, Rossia, pp. 43-49; K.F. Shatsillo, "O disproportsii v pazvitii vooruzhennykh sil Rossii nakanune pervoi mirovoi voyny (1906-1914 gg.)," Istoricheskie zapiski, (Moscow, 1969), kn. 83, pp. 130ff.; Barsukov, Artilleria, v. 1, pp. 11-15, 52ff., on the artillery, and V. Fedulenko, "Kratkii ocherk o formirovanii vtoroocherednykh polkov russkoi Imperatorskii armii," Voennaia byl, (September, 1963), No. 62, pp. 42-44, on the much-despised, second-line formations. Contemporary accounts are provided in British Documents on Foreign Affairs, Russia 1859-1914, v. 6, pp. 22-24, 137-140; "Projected Reform in the Russian Army," Journal of the Royal United Services Institute, v. 54, (1910), pp. 1524-1525; and "Reorganization of the Russian Army," Ibid., v. 55, (1911), pp. 1455-1472.

154

Golovin, Voennyya usiliia, v. 1, pp. 46-49; Wildman, pp. 27-28. For a more detailed account of its provisions see "The Year 1912 in Foreign Armies," pp. 948-950.

155

Wildman, pp. 66-67; Shatsillo, Rossia, pp. 86-87. For details of the deployments brought by the new mobilization plan, see British Documents of Foreign Affairs, Russia 1859-1914, v. 6, pp. 140-142; "Reorganization of the Russian Army," pp. 1455-1457; "The Year 1912 in Foreign Armies," p. 940; and "The Year 1913 in Foreign Armies: Rus-

sia," Journal of the Royal United Services Institute, v. 59, (August-November, 1914), pp. 101-102. The problems caused in July 1914 by its rigidity are well known and fully described in such studies of the outbreak of the war as Sidney B. Fay, The Origins of the World War, (New York, 1930), v. 2, pp. 286ff., 439ff., and Michael Florinsky, "The Russian Mobilization of 1914," in Sidney Harcave, ed., Readings in Russian History, v. 2: The Modern Period, (2 vols.; New York, 1962), v. 2, pp. 134-150. With regard to the technical implementing of the mobilization of 1914, see S. Dobrorolskii, "O mobilizatsii russkoi armii v 1914 g.," Voennyi sbornik, (Belgrade, 1921), kn. 1, pp. 91-116.

156

Rostunov, Russkii front, p. 58; Shatsillo, "O dispropertsii," p. 135.

157

Stone, The Eastern Front, pp. 42-43, and other sources cited in note 89 above.

158

Rostunov, Russkii front, p. 58.

159

Central Statistics Department, Rossia v Mirovoi Voine 1914-1918, (Moscow, 1925), table 2.

160

Wildman, p. 23.

161

Golovin, Voennaya usiliia, v. 1, p. 81.

162

Stone, The Eastern Front, p. 215.

163

Ibid. On the keeping of casualty statistics during 1914-1917, and the resulting Soviet studies, see "Les Pertes en Hommes de l'Armée russe pendant la Grande Guerre," Révue d'Histoire de la Guerre, v. 6, (Paris, 1927), No. 1, pp. 48-56; V. Larionov, "Problema ispol'zovaniia ljudskikh resursov v armiakh kapitalisticheskikh stran v mirovykh voynakh," Voenno-istoricheskii zhurnal, (January, 1968), No. 1, pp. 108-115; L.M. Gavrilov and V.V. Kutuzov, "Novyi istochnik o chislennosti russkoi armii nakanune Oktabri'skoi revoliutsii," in Institut istorii, Akademiia nauk SSSR, Istochnikovedenie istorii Sovetskogo obshchestva, (Moscow, 1964), pp. 130-152; and B. Uralis, Wars and Population, (Moscow, 1971), pp. 46-55. Also see the

production and manpower figures in "Nekotorye tsifry pervoi mirovoi voyny," Voenno-istoricheskii zhurnal, (July, 1964), No. 7, pp. 72-80, and Stanislas Kohn and Alexander F. Meyendorff, The Cost of the War to Russia, (New Haven, 1932), pp. 133-142.

164

Rossia v Mirovoi Voine, table 2.

165

Both figures cited in Golovin, Voennyya usiliya, v. 1, p. 82.

166

Stone, The Eastern Front, pp. 213. Also see his comments on sources (n. 5, pp. 324-325). His figure of 180,000,000 for the total population of the Russian empire may be somewhat exaggerated. Other sources give a figure of 169,400; see, e.g., A.A. Stokov, Istoriia voennogo iskusstva kapitalisticheskoe obshchestva perioda imperializma (Do kontsa Pervoi mirovoi voyny 1914-1918 gg.), (Moscow, 1967), p. 167, and the discussion in B. Kumanin, "Pomni voynu!" Posviashchaetsia pamiati admirala Stepana Osipovicha Makarova, 31 marta 1904 - 1914, (Moscow, 1914), pp. 14ff.

167 Golovin, Voennyya usiliya, v. 1, p. 82.

168

Stone, The Eastern Front, p. 213; Larionov, p. 112, provides comparative figures on the numbers mobilized vis-a-vis total populations.

169

Golovin, Voennyya usiliya, v. 1, pp. 180-181.

170

Stone, The Eastern Front, p. 215. Also see tables in "Nekotorye tsifry," p. 77, and Larionov, p. 109, as well as the figures in L.S. Kaminskii and S.A. Novosel'skii, Poteri v proshlykh voynakh, (Moscow, 1947), pp. 59-78.

171

Golovin, Voennyya usiliya, v. 1, p. 181. On early losses also see Wildman, pp. 84-87.

172

Stone, The Eastern Front, p. 215; Golovin, Voennyya usiliya, v. 1, chapter 5 on losses, and pp. 181-184 on strengths over time; and Wildman, pp. 95-96. Uralis (p.

99) gives a set of figures for monthly losses (killed, wounded and prisoner) that set the levels at 65,000 in 1914, 207,000 in 1915, and 224,000 in 1916.

173

Golovin, Voennyya usiliya, v. 1, pp. 75-84.

174

Wildman, p. 96. On this situation see L.M. Gavrilov and V.V. Kutuzov, "Istoshchenie liudskikh rezervov russkoi armii v 1917," in A.L. Sidorov, et al., eds., Pervaya mirovaia voina 1914-1918, (Moscow, 1968), pp. 145-157.

For a summary of call-up orders, also see Kohn and Meyendorff, pp. 13-17, 142-145. They also discuss (pp. 18-31, 145-152) the related issues of the relative proportion of available men called up, rates of marriages, and so on. The actual callup orders are recorded chronologically with other laws in D.I. Averbakh's, Zakonodatel'nyy akt, vyzvannyye voynoru 1914-1917 g.g. zakony, fiktivnyy, pokriy, ukazy, polozheniya Sovetskikh Ministerov, Voennogo i Administrativnogo Sovetov, Rasporyazheniya i postanovleniya Ministerov i dr., (5 vols.; Vilna-Petrograd, 1915-1918). For an account of service in a wartime reserve training battalion in Kazan, see K.R.T., "Zapasnyy batal'on," Voennaya byl', (January, 1974), No. 126, pp. 26-40.

175

Wildman, p. 96; Stone, The Eastern Front, pp. 215-217.

176

Ibid., p. 214.

177

Ibid., pp. 216-217; Golovin, Voennyya usiliya, v. 1, pp. 80-82.

178

Wildman, pp. 97-99. There is a vast Soviet literature on the Central Asian uprisings, of which Z.B. Kaktel'skaia, Osnovnye predposylki vosstaniia 1916 goda v Uzbekistane, (Moscow, 1972), and B.S. Sulermenov and V.Ya. Basin, Vosstanie 1916 goda v Kazakhstane, (Alma-Ata, 1977), are typical. In English, see Edward D. Sokol, The Revolt of 1916 in Russian Central Asia, (Baltimore, 1954).

179

Wildman, pp. 99, 104. On the Petrograd garrison in particular, see B.M. Kochakov, "Sostav petrogradskogo garnizona v 1917 goda," Uchenie zapiski IGU, no. 205: 12

istorii SSSR, (Leningrad, 1956), pp. 50-86.

180

Wildman, p. 99.

181

Ibid. For Knox's data and his own estimate of Russia's manpower problems, see Knox, v. 2, pp. 541-545. His picture of the state of the army in January 1916 (pp. 551-552) is considerably more cheerful than is Wildman's.

182

S.V. Utechin, "Bolsheviks and Their Allies After 1917: The Ideological Pattern," in Harcave, Readings in Russian History, v. 2, pp. 195-200; Jones, "The Beginnings of Russian Air Power," pp. 17-18; and "The Birth of the Russian Air Weapon, 1909-1914," pp. 169-171; and Rita Cipolla, "Aviation in Russia: Was there life before the revolution?" Smithsonian Institution Research Reports, (Autumn, 1985), No. 46, pp. 3-4. The continuing interest of the technologically informed section of Russian society in aviation is clear from the support given the "Aerial Fleet" by the Imperial All-Russian Aero Club; see, for instance, its efforts in late 1916 as outlined in the journal of its 39th General Assembly, and the minutes of its Council and Executive Board, from 24 September 1916 to 24 January 1917, as preserved in the Russian Research Collection, Dalhousie University. For a self-portrait of one Russian aerial enthusiast, see Colonel Nizhevskii's "Moi sluzhebnyi put' vozdukhuplavatel'ia, dirizhablista i voennogo letchika," Voennaya byl', (September, 1966), No. 81, pp. 24-35.

183

See D.A. Garkavenko, "Sotsialnyi sostav vooruzhennykh sil Rossii v epokhy imperializma," in I.I. Mints, ed., Revoliutsionnoe dvizhenie v russkoi armii v 1917. godu. Sbornik statei, (Moscow, 1981), pp. 30-45.

184

On the shortage of officers in 1914, see Peter Kenez, "Changes in the Social Composition of the Officer Corps During World War I," Russian Review, (October, 1972), p. 373, and Golovin, Voennaya usilia, v. 1, p. 49.

The measures taken to make an officer's career more attractive, and to improve the quality of those entering the service, are outlined in Tankovskii, "Neskol'ko slov," pp. 22-23; "Changes and Tendencies in the Russian Army," pp. 1450-1456; "The Year 1912 in Foreign Armies," pp. 940, 946-947, 953-954; and "The Year 1913 in Foreign Armies," pp. 105-109. The figures for NCOs are taken from A.F.

Rediger, Komplektovanie i ustroistvo Vooruzhennoi sily, (3rd ed.; St. Petersburg, 1900), p. 206.

185

Golovin, Voennaya usiliia, v. 1, p. 49; P.A. Zai-onchkovskii, Samoderzhavanie i russkaia armia, p. 123. Also see Rostunov, Russkii front, p. 51, who suggests that in fact, by 1909 the army was only 11 % short of NCOs. For an assessment of the state of the officer corps in 1914 see Knox, v. 1, pp. xxvi-xxix.

186

Stone, The Eastern Front, pp. 167; Brooks, pp. 20-21; Bushnell, "Peasants in Uniform," pp. 570-571, and Mutiny and Repression, pp. 17-18, 163-164; Knox, v. 1, pp. xxix-xxx; Levitskii, pp. 17, 23; Littauer, pp. 62-63; Rit-tikh, pp. 48-49.

The efforts to improve this situation are outlined in British Documents of Foreign Affairs: Russia 1859-1914, v. 5, pp. 114, 243-244, 389; v. 6, pp. 134-135, 275; "Changes and Tendencies in the Russian Army," pp. 1456-1457; "New (or 2nd) Class of Extended-Service Non-Commissioned Officers," Journal of the Royal United Services Institute, 56, (January, 1912), p. 113; "Events in the Military Year, 1911," pp. 959-961; and "The Year 1912 in Foreign Armies," pp. 939-940.

For a personal memoir of the role played by NCOs in the elite Guards, see T.V. Parkhomenko, "Unter-ofitsery Imperator'skoi Gvardii (stranichka iz zhizni leib-gvardii Preobrazhenskogo polka)," Voennaia byl', (January, 1966), No. 77, pp. 32-33. The situation in the 25th Infantry Division with regard to this class of personnel, at the time of mobilization in 1914, is described in A. Nevzorov, "Nachalo Pervoi Velikoi Voiny 1914 goda," Ibid., (May, 1966), No. 79, pp. 4-6. For other portraits of NCOs, see Littauer, p. 110; Kuznetsov, "Zhizn'," p. 3; and B.D. Prikhodkin, "Staryi tel'dfebel'," Voennaia byl', (November, 1961), No. 51, pp. 7-10.

A number of former NCOs later became leading Soviet commanders and have left brief descriptions of their experiences before 1917; see, for example, S.M. Budennyi, Proidennyi put', (Moscow, 1958), pp. 10-37, and G.K. Zhukov, Vospominaniia i razmyshleniia, (2nd ed.; 2 vols.; Moscow, 1974), v. 1, pp. 34-48. Rarer are the memoirs of emigre NCOs, such as T.V. Parkhomenko, "Vospominaniia o moei voennoi sluzhbe," Voennaia byl', (March, 1965), No. 72, pp. 6-10.

187

Danilov, Rossia, p. 247; Wildman, p. 125; Stone, The Eastern Front, p. 166.

188

Kenez, "The Officer Corps," pp. 370-371, and "Profile," pp. 146-149; Danilov, Rossia, p. 246; Stone, The Eastern Front, p. 166. On the promotion of NCOs and ensigns in particular, see V. Bastunov, "O praporshchikakh proizvodstva 1 iul'ia 1914 g. (Istoricheskaya spravka)," Voennoia byl', (June, 1974), No. 128, p. 19.

189

Stone, The Eastern Front, p. 217.

190

Letter of 3(16) August, published in A.M. Zalonskii, Mirovaia voina, (Moscow, 1929), pp. 405-408.

191

Stone, The Eastern Front, p. 166; Kenez, "The Officer Corps," p. 373.

192

Stone, The Eastern Front, p. 217. As Fritz Fischer points out (p. 183), the Germans hoped that the entry of students into the officer corps would spread revolutionary propaganda within the ranks. Also see the comment in Golovin, Voennaya usiliia, v. 2, p. 120.

193

Kenez, "The Officer Corps," pp. 369, 373-374, and "Profile," p. 149.

194

See the figures and sources cited in David R. Jones, "The Officers and the Soviets, 1917-1920," in D.R. Jones, The Soviet Armed Forces Review Annual 1: 1977, (Academic International Press, 1977), pp. 176, 183.

195

S.S. Khessin, Oktiabr'skaia revoliutsiia i flot, (Moscow, 1971), p. 23ff., and his "Lichnyi sostav russkogo flota v 1917 godu," Voenno-istoricheskii zhurnal, (November, 1965), No. 11, pp. 99-104.

196

Kenez, "The Officer Corps," pp. 369. Other figures suggest the higher figures of 90,000 wartime officers and 130,000 ensigns; see N.V. Piatinskii, Voennaya organizatsiia gosudarstvennoi oborony SSSR, (2 vols.; Paris, 1932), v. 2, p. 14; Golovin, Voennaya usiliia, v. 1, p.

160; and L. Spirin, "V.I. Lenin i sozdanie sovetskikh kommandnykh kadrov," Voenno-istoricheskii zhurnal, (April, 1965), no. 4, pp. 10-11.

197

Kenez, "The Officer Corps," pp. 371-372, and "Profile," pp. 147-148. For details of the schools found in the capital, and the social diversity of their students, see Kochakov, "Sostav petrogradskogo garnizona," pp. 79-83.

198

Kenez, "The Officer Corps," pp. 374-375; Wildman, pp. 100-101; Golovin, Voennyya usiliia, v. 1, pp. 159-162; and General Chernavin, "K voprosu ofitser'skago sostava Russkoi armii k kontsu eia sushchestvovaniia," Voennyi sbornik, (Belgrade, 1924), kn. 5, p. 227. The composition of the officers in an artillery division in October 1917 is recounted in N.N.R., "1917 god," Chasovoï, Brussels (January 1964), No. 451 (1), p. 13.

199

On promotions from the ranks see Stone, The Eastern Front, pp. 166-167; Kenez, "The Officer Corps," p. 371; the comments in A.V. Gorbatov, Years Off My Life, (London, 1964), p. 60; and in Aleksandr N. Lenkoff, Life of an Emigre Soldier, (Interview with Boris Paymond, Berkeley Oral History Series, 1967), pp. 1-2. This last is particularly interesting since Lenkoff was one of 300 workers from his plant, located near Petersburg, who volunteered for service as a soldier in 1914. He later became an NCO, and in 1915 an officer, who by 1917 had risen to the rank of captain.

200

F.V. Rusanov, Leib-Gvardii Grenaderskii Polk (1760-1956), (New York, 1960), p. 85.

201

Stone, The Eastern Front, p. 166. However, the evidence is mixed even with regard to the demoralization brought about by the disasters of 1915. Thus while V. F. Fedoulenko (pp. 5-8) admits that by mid-year his regiment was reduced to 800 men and the artillery "was almost silent," he maintains that the troops remained "very disciplined" and that the grumbling occurred primarily among the young officers. "During the fighting in July, 1915," he insisted, "our morale was excellent" (p. 8).

202

This issue is briefly reviewed by Wildman, pp. 105ff. His conclusions are borne out by numerous sources,

of which those mentioned in notes 35-38 above are representative, as are the occasional accounts left by enlisted men; see, for example, Max Star's In the Lion's Den, pp. 110ff, and D. Oskin's, Zapiski soldata, (Moscow, 1929), pp. 121ff.

Despite their selectivity, a number of Soviet documentary publications are also of use. See, for instance, N.B. Kakurin, ed., Razlozhenie armii v 1917 godu, (Moscow-Leningrad, 1925), pp. 1-24, and A.L. Sidorov, ed., Revolutsionnoe dvizhenie v armii i flote, pp. 388ff. At the same time, the assessment of Knox (v. 2, pp. 532-552) on the army's material position and continued combat capability cannot be dismissed. His view was shared by many others, such as P.P. Makovoi, Stranisty proshlogo, 1916-1920, a typescript (San Francisco, n. d.) in the Russian Military-Historical Archives in Paris and available in xerox form in Russian Emigre Archives, vol. 4. In effect, it merely represents the other side of the coin and as Star, for all his complaints, admitted (pp. 113, 120), by late 1916 he and his comrades had gasmasks, rifles, new uniforms, and so on.

203.

Wildman, p. 107.

204.

On this consensus, see Lieven, pp. 5ff.

205

Ibid., 21ff. For an introduction to Russian foreign policy in the period before 1914, see Barbara Jelavich, St. Petersburg and Moscow. Tsarist and Soviet Foreign Policy, 1814-1974, (Bloomington, 1974), pp. 249-280, and Serge Sazonov, Fateful Years, 1909-1916. The Reminiscences of Serge Sazonov, (New York, 1971), passim.

A prominent opponent of the prevailing support for the French alliance, who also favored a pro-German policy and insisted that the empire should avoid participation in any war, was ex-Minister of the Interior P.N. Durnovo. His famous memorandum of February 1914 warned that a conflict would result in revolution; see Mark Aldanov, "P.N. Durnovo -- Prophet of War and Revolution," in Von Mohrenschildt, The Russian Revolution, pp. 62-74. His position, and the whole question of Russia's international stance in 1914, is reviewed by Dominec Lieven in his "Russia and the Origins of the First World War," Study Group on the Russian Revolution, Sbornik 10, (Leeds, 1984), pp. 13-22.

206

The evolution of Russia's war plans is outlined at length in A.M. Zaionchkovskii, Podgotovka Rossii k imperialisticheskoi voine. Ocherki voennoi podgotovki i pervonachal'nykh planov, (Moscow, 1926), and most recently in Jack Snyder, The Ideology of the Offensive. Military Decision Making and the Disasters of 1914, (Cornell, 1984), pp. 157-198.

On the "French connection," see Frank Miller Laney, The Military Implementation of the Franco-Russian Alliance, 1890-1914, (PhD dissertation; University of Virginia, 1954); Derek Spring, "Russia and France, 1905-1914: Dependence or Interdependence," (Unpublished paper presented to meeting of Study Group on the Russian Revolution, Oxford UK, January 1985; abstract in Sbornik 11, pp. 104-105); George F. Kennan, The Fateful Alliance. France, Russia, and the Coming of the First World War, (New York, 1984), and on the military planning in particular, Louis Garros, "En marge de l'alliance franco-russe, 1902-1914," Revue historique de l'armée, (June, 1950), pp. 29-44.

For other comments on prewar planning, see Lieven, Russia, pp. 101-106; Stone, The Eastern Front, pp. 32-35; N.N. Golovin, "The Russian War Plan of 1914," Slavonic and East European Review, (April, 1936), pp. 564-584, and (July, 1936), pp. 70-90; Rostunov, Russkii front, chapter 2; Danilov, Rossia, chapter 4; and S. Dobrorol'skii, "Strategicheskie plany storon k nachalu mirovoi voiny," Voennyi sbornik, (Belgrade, 1922), kn. 2, pp. 22-82 (especially pp. 50-71). The relevant details are outlined as well in the entry "'A' (War Plan, 1914)," in Jones, Military-Naval Encyclopedia, (1978), v.1, pp. 3-6, which has a bibliographical note. The naval aspects of prewar planning are described in N.B. Pavlovich, Flot v pervoi mirovoi voine, (2 vols.; Moscow, 1964), 1: Deistviia russkogo flota, pp. 62-85, 321-327, and in N. Chirikov, "Plan voiny, podgotovka i mobilizatsiia Imperatorskogo Flota v 1914 godu," Voennaya byl', (September, 1965), No. 75, pp. 12-18.

207

Russian opinion on these issues is examined at length by Lieven, Russia, p. 3, 24-27, 105-106.

208

The considerations involved are examined in Rostunov, Russkii front, pp. 60-89; Snyder, pp. 157-160; Stone, The Eastern Front, pp. 32-33; and "'A' (War Plan, 1914), p. 4. On the state of Russia's strategic rail system, see the relevant passages of K. Ushakov, Podgotovka voennykh soobshchenii Rossii k mirovoi voine, (Moscow, 1928), passim; the secret documents of the Ministries of War, of

Communications, and of the Gendarme Administration, in Measures for Mobilizing Russia's Railways Before 1914, in the Dalhousie University Russian Research Collection; "Increase of Railway Troops," Journal of the Royal United Services Institute, v. 54, (1910), p. 260; "Reorganization of the Russian Army," pp. 1464-1466, 1471-1472; "Events of the Military Year, 1911," p. 972; "The Year 1913 in Foreign Armies," pp. 109-112; and J.N. Westwood, A History of Russian Railways, (London, 1964), pp. 167-177.

209.

Rostunov, Russkii front, pp. 89-92; Snyder, pp. 166-172; Stone, The Eastern Front, pp. 33-34; Zaionchkovskii, Podgotovka Rossii k imperialisticheskoi voine, pp. 183-230. The fortresses and strategic issues involved are described and evaluated in "Reorganization of the Russian Army," pp. 1459-1469.

210

Snyder, pp. 172-179; Stone, The Eastern Front, p. 34; Zaionchkovskii, Podgotovka Rossii k imperialisticheskoi voine, pp. 206-245.

211

Ibid., pp. 241-278; Rostunov, Russkii front, pp. 92-95; Snyder, pp. 197-181; Stone, The Eastern Front, pp. 30-32; Danilov, Rossia, pp. 76ff.

212

Ibid., p. 35; Lieven, p. 106; Snyder, pp. 181-188; "A" (War Plan, 1914), p. 5.

213

This also is the view of General Sir Edmund Ironside. Although he criticized the early date of the Russian offensive, he nonetheless concluded that the "initial advance into East Prussia failed owing to bad leadership and bad administration [i.e., command and control];" see his Tannenberg, The First Thirty Days in East Prussia, (Edinburgh, 1933), p. 285. In this regard, also see V.N. Ponomarevskii, Mirovaia voina. Kampaniia 1914 goda. Dostizheniia storon za pervyi mesiatz kampanii -- avgust, (Paris, 1929), pp. 50-54. For a critique suggesting more fundamental flaws were responsible, see Snyder, pp. 189ff. The 2nd Army's conduct is examined in depth by Ironside, pp. 147-196; Golovin, Iz istorii, chapter 7-10; and a series of articles in Voennyi sbornik, (Belgrade, 1923), kn. 4: V. Fuks, "Kratkii ocherk operatsii Nareyskoi armii gen. Samsonova v Vost. Prussii v Avguste 1914 g.," pp. 120-154; "Prichiny neudach II arm. gen. Samsonova v Vost. Prussii v Avguste 1914 g. (po zapiske gen. Kliueva)," pp. 154-162;

and I. Patronov, "Deistviia VI arm. kor-sa i glavn. pri-chiny neudach II arm. v Vost. Prussii," pp. 163-176. Also see the references in note 249 below.

214

Showalter, passim.

215

Eleven, p.106. On the Russians' dedication to the offensive, see David R. Jones, The Advanced Guard and Mobility in Russian and Soviet Military Thought and Practice, "SAFRA Papers," No.1, (Academic International Press, 1985), chapter 9. Snyder (pp. 183ff.) examines this issue in some detail, and "Reorganization of the Russian Army," pp. 1466-1471, provides an informed contemporary foreign critique.

216

See, for example, J.F.N. Bradley, "The Russian Secret Service in the First World War," Soviet Studies (1968-1969), pp. 242-248; K.K. Zvonar'ev, Agenturnaia razvedka; 1. Russkaia agenturnaia razvedka vsekhn vidov do i vo vremia voyny 1914-1918 gg., (Moscow, 1929); I. Bol'shakov, "Russkai razvedka v pervoi mirovoi voine 1914-1918 godov," Voенно-istoricheskii zhurnal, (May, 1964), No. 5, pp. 44-48; and William C. Fuller, Jr., "The Russian Empire," in Ernest R. May, ed., Knowing One's Enemies: Intelligence Assessment Before the Two World Wars, (Princeton, 1984), pp. 98-126. The major coup of the prewar period is discussed in M. Mil'shtein, "Delo polkovnika Redlia," Voенно-istoricheskii zhurnal, (January, 1966), No. 1, pp. 46-56.

For the memoirs of two officers involved in intelligence collection with the General Staff, see A. Samoilov, Dve zhizni, (Moscow, 1958), pp. 101-136, and Mikhail Svochin, Zapiski starago generala o bylom, (Nice, 1964), pp. 96-99. The responsibility and role of the Main Administration of the General Staff's 2nd Over-Quartermaster's Section -- headed after 1909 by Colonel N.A. Monkevits -- in this work is described by A. Kavtaradze, "Iz istorii russkogo general'nogo shtaba (1909. - iudl' 1914)," Voенно-istoricheskoi zhurnal, (December, 1912), No. 12, pp. 81, 84, and Samoilov, pp. 132-135.

In assessing the strengths of potential enemies, military attaches or agents played a major role. For the memoirs of one assigned first to Athens, and later to Constantinople, see I.A. Khol'msen, Na voенnoi sluzhbe v Rossii, Unpublished typescript (New York, 1953) in Russian Military-Historical Archives in Paris, and available in xerox form in Russian Emigre Archives, No. 4. But there is

some dispute over the quality of data accumulated, especially that concerning Germany, about which some later complained; see B.M. Shaposhnikov, Vospominaniia. Voenno-nauchnye trudy, (Moscow, 1974), p. 215. Nonetheless, Russian military planners had a pretty good idea of German and Austro-Hungarian intentions.

Monkevits' section also produced a confidential Sbornik Glavnago Upravleniia General'nogo Shtaba, later simply entitled Sbornik, that reviewed foreign military developments in considerable, and usually accurate, detail. First appearing in March, 1909, by August, 1914, this publication had run to 62 issues. In general, the biggest defect in Russian intelligence was the fact that General "Staff officers did not listen to diplomats, nor did they listen to civilian journalists," and so "remained in bondage to their prejudices;" Fuller, "The Russian Empire," p. 126. However, as the studies edited by May demonstrate, both a lack of coordination between the intelligence agencies and the diplomats, as well as between both these groups and the political decision-makers, are perennial problems, and not only in Russia.

217

Russian-Allied relations in general are covered in Jelavich, pp. 280-288; C. Jay Smith, The Russian Struggle For Power: 1914-1918. A Study of Russian Foreign Policy During the First World War, (New York, 1956); V.A. Emets, Ocherki vneshnei politiki Rossii v period pervoi mirovoi voyny. Vziamootnosheniia Rossii s soiuznnikami po voprosam vedeniia voyny, (Moscow, 1977); and the essays in A. Dalin, et al., Russian Diplomacy and Eastern Europe, 1914-1917, (New York, 1963).

On the particular issue of the Dardanelles, see Sazonov, pp. 239ff.; Danilov, Rossia, 312ff; A. Bubnov, V tsarskoi stavke. Vospominaniia admirala Bubnova, (New York, 1955), pp. 237-289; and E.A. Adamov, ed., Razdel Aziatskoi Turtsii po sekretnym dokumentam b. ministerstva inostrannykh del, (Moscow, 1924), pp. 74ff. With regard to the Balkans in general, as well as the troops sent to Salonika and France, see Gr.N. Trubetskoi, Russkaia diplomatiia 1914-1917 g.g. i voina na Balkanakh, (Montreal, 1983); N. Korsun, Balkanski front mirovoi voyny, 1914-1918 gg., (Moscow, 1939); V.A. Emets, "Pozitsiia Rossii i ee soiuznnikov v voprose o pomoshchi Serbii osen'iu 1915 g.," Istoricheskie zapiski, (Moscow, 1965), kn. 75, pp. 122-146; Alan Palmer, The Gardeners of Salonika. The Macedonian Campaign, 1915-1918, (London, 1965), pp. 73-89, 125-126, 136-137; Yu. A. Pisarev, "Russkie voiska na Saloniskom fronte v 1916-1917 gg.," Istoricheskie zapiski, (Moscow, 1967), kn. 79, pp. 109-139;

D. Shaevskiy, "Russkie soldaty na Balkanakh (Vospominaniia uchastnika pervoi mirovoi voiny)," Voenno-istoricheskii zhurnal, (October, 1964), No. 10, pp. 66-74; Iu. N. Danilov, Russkie otriady na frantsuzskom i makedonskom frontakh, 1914-1918 g.g., (Paris, 1933); N. Valentinov, "Russkie voiska vo Frantsii i Salonikakh," Voenno-istoricheskii sbornik, (Moscow, 1921), vyp. 4, pp. 3-22; G.M. Derenkovskii, "Vosstanie russkikh soldat vo Frantsii v 1917 g.," Istoricheskie zapiski, (Moscow, 1952), kn. 38, pp. 71-103; and Richard M. Watt, Dare Call It Treason, (London, 1964), pp. 175-180, 224-232, 252-253; and Marshal R.Ia. Malinovsky's, Soldaty Rossii, (Moscow, 1969).

On the Russian campaign in Persia, see A.G. Emel'ianov, Persidskii front (1915-1918), (Berlin, 1923). For the relationship of Allied pressure to the attack at Lake Naroch, and subsequently on the Brusilov offensive; see the sources listed in Stone, The Eastern Front, pp. 221-222 and 246-247. Russian historians, both emigre and Soviet, naturally have made much of their nation's contributions to the common cause. Typical of the former's views is K.M. Perepelovskii's two-part article "Rol' i znachenie russkogo fronta v voinu 1914-1917 gg. po inostrannym voennym istochnikam," Voennaia byl', (July, 1971), No. 111, pp. 7-12; Ibid., (September, 1971), No. 112, pp. 1-6. Early Soviet writers argued that thanks to the dynamics of world imperialism, the tsarist command was subordinated to Allied interests and Russian lives were squandered recklessly for the glory of Britain and France; see, e.g., M. Balabanov, Tsarskaia Rossiia XX veka (Nakanune revoliutsii 1917 goda), (Kharkov, 1927), pp. 41ff. This position subsequently softened, especially during 1941-1945; see M.V. Savin, Rol' russkogo fronta v pervoi mirovoi voine (1914-1918 gg.), (Moscow, 1944). Nonetheless, pride in the sacrifices made by Russian arms and dislike of Allied ingratitude still is present in studies like Emets, "O roli," and the other works of this author noted above.

218

On this issue see Arthur J. Rieber, "Russian Diplomacy and Rumania," in Dalling, et al., Russian Diplomacy and Eastern Europe, pp. 269ff, and V.A. Emets, "Protivorechiria mezhdu Rossiei i soiuznikami po voprosu o vstuplenii Rumynii v voinu (1915-1916 gg.)," Istoricheskie zapiski, (Moscow, 1956), kn. 56, pp. 52-90. On the disastrous Rumanian campaign that followed, see F.I. Vasil'ev, Strategicheskii ocherk voiny 1914-1918 gg. Rumynskii front, (Moscow, 1922).

219

See the discussions of operations as mentioned in

note 217; and the relevant sections of N. Valentinov, Snosheniia s soluznikami po voennym voprosam vo vremia voyny 1914-1918 gg., (Moscow, 1920), Chast 1, which covers the period to the end of 1916.

220

Stone's comments (pp. 218-219) are apposite here.

221

Jones, "Central Military," p. 143. For a full account of Russian regulations on the command and administration of field armies, see D. Filat'ev, "Nashe polozhenie o polevom upravlenii voisk," Izvestiia imp. Nikolaevskoi voennoi akademii, (1911), No. 19, pp. 750-785, No. 21, pp. 940-979; (1912), No. 22, pp. 1027-1054. The last two of these articles deal with the Polozhenie of 1890, and the changes that were needed in the light of subsequent experience. As such, they were themselves part of the process that led to the regulations of 1914.

222

On the preparation and issuing of the new regulations see Rostunov, Russkii front, pp. 112-113; Danilov, Rossia, pp. 51-52, 105ff; Danilov, Velikii Kniaz, pp. 100ff; Daniel W. Graf, The Reign of the Generals: Military Government in Western Russia, 1914-1915, (University of Nebraska: Unpublished PhD dissertation, 1972), pp. 9-10; Daniel W. Graf, "Military Rule Behind the Russian Front, 1914-1917: The Political Ramifications," Jahrbücher für Geschichte Osteuropas, Band 22, (1974), No. 3, p. 390; and the comments of Palitsyn in Dnevnik... Andreia Vladimirovicha, pp. 36-37. For an interesting account of an earlier effort to define the role of a Supreme Commander-in-Chief, see F.P. Rerberg, Istoricheskie tainy velikikh pobed i neob'iasnimykh porazhenii. Zapiski uchastnika Russko-Iaponskoi voyny 1904-1905 g.g. i chlena Voenno-istoricheskoi Komissii po opisaniiu Russko-Iaponskoi voyny, 1906-1909 g.g., (Madrid, 1967), pp. 300-302. The law itself appeared as the Polozhenie o polevom upravlenii voisk v voennoe vremia, (Petrograd, 1914).

223

"Dnevnik A.N. Kuropatkina," pp. 29-30. For the tsar's attitude in 1904-1905, see E. Bing, ed., Letters to the Tsar Nicholas and the Empress Maria, (London, 1937), p. 177.

224

Jones, "Central Military," pp. 143-144; Graf, Reign of the Generals, pp. 10-11; Rostunov, Russkii front, pp. 113-114. On the authority of the new Supreme Commander-in-

Chief, and his relations with the central government, see Polozhenie, Articles 6, 14, 17, 20, 21, 27, and 30. For the position of Chief of Staff, see Article 41.

225

Jones, "Central Military," pp. 144-145; Graf, "Military Rule," pp. 390-392. Article 21 of the Polozhenie does deal with relations with the ministers in general, and Article 27 with those between the Supreme Commander and the Minister of Finance. But both were too vague to prevent conflicts once the Emperor did not serve in the former post.

226

Danilov, Velikii Kniaz', pp. 104ff.; Danilov, Rossia, 105ff.; Sukhomlinov, pp. 368-369; I.A. Blinov, ed., "Dnevnik generala Sukhomlinova," Dela i dni, I, (Petrograd, 1920), No. 1, pp. 220-221; A.M. Spiridovich, pp. 89-90; and V.N. Voikov, S tsarem i bez tsaria. Vospominaniia posledniago Dvortsovago Komendanta Gosudaria Imperatora Nikolaia II, (Helsingfors, 1936), pp. 89-90.

227

Danilov, Velikii Kniaz, pp. 102ff.; Jones, "Nicholas II," pp. 59-60; Spiridovich, v. I, p. 173; G.V. Gerurá, Vospominaniia o moei zhizni, v. 2, pp. 97-99; Knox, v. 2, p. 333; and Palitsyn's complaints in Dnevnik... Andreia Vladimirovicha, pp. 35-39.

228

Jones, "Central Military," pp. 150-151. As Voikov (p. 11) noted, when Sukhomlinov did visit Stavka, Nikolai Nikolaevich would not even meet with him.

229

Jones, "Central Military," pp. 149-150; Graf, Reign of the Generals, pp. 393ff. Despite his popularity and reputation, the Grand Duke proved incapable of providing either firm military direction in the theater of war, or of working with the civilian authorities in the rear. Yet both his position as a senior member of the dynasty and his popularity with the Duma, made it difficult for any other person but the Tsar to replace him. Such a step had the added virtue of solving the legal difficulties raised by the Polozhenie as well. For a full review of the problems created by Nikolai Nikolaevich, see Jones, "Nicholas II," pp. 58-62, and Sazonov's comments in Dnevnik... Andreia Vladimirovicha, pp. 67-73. The mood of the day is captured in V.M. Borel, ed., "Vesna i leto 1915 goda (Iz pisem gen. ot infanterii M.V. Alekseeva)," Voennaia byl', (March, 1973), No. 121, pp. 36-38.

230

This fact underlines Palitsyn's comments in Dnevnik... Andreia Vladimirovicha, p. 35. On the Supreme Council, see Jones, "Central Military," pp. 148-149; Jones, "Nicholas II," p. 60; Erik Amburger, Geschichte der Behördenorganisation Russlands von Peter dem Grossen bis 1917, (Leiden, 1966), p. 304.

231

Jones, "Central Military," pp. 149-150; Voeikov, p. 11; Rodzianko, pp. 128-133; Graf, "Military Rule," pp. 403-409; Graf, Reign of the Generals, pp. 156-180. For a critical description of Nikolai Nikolaevich's Stavka, also see Stone, The Eastern Front, pp. 51-54.

232

Ibid., pp. 118-135. Also see, for example, R.R. McCormick, With the Russian Army, (New York, 1915), p. 51, and the works cited on the "Miasoedov affair" in note 31 above. On the subsequent plight of Russia's Jewish population, see Katkov, pp. 55-62.

214.

233

Cherniavsky, pp. 108-109, 120-121, 147-148.

234

Jones, "Central Military," pp. 157-158. On the politics of the summer of 1915, also see Krupina, pp. 58-75, and Jones, "Nicholas II," pp. 60-63.

235

Stone, The Eastern Front, pp. 94-96; Rostunov, Russkii front, pp. 154ff. The latter account is based largely on Varshavsko-Ivangorodskaiia operatsiia, Sbornik dokumentov, (Moscow, 1939).

236

Jones, "Central Military," pp. 150, 155-156; Stone, "Organizing the Economy," pp. 111-115; Krupina, pp. 60-63. Also see note 20 above. On Nikolai Nikolaevich's mental state, see Jones, "Nicholas II," p. 60.

237

For the impression supposedly made by Nicholas II's calmness during the battles of August/September 1915, as noted by General Dubenskii, see "Razsvetnyi," "Svetloi pamiati Gosudaria Imperatora Nikolaia Vtorogo," Vozrozhdenie, (August, 1968), No. 200, p. 60, and K. Popov, "Byli polkovodtsem Imperator Nikolai II?" Voennaia byl', (July, 1960), No. 43, pp. 2-4. The argument here is not intended to suggest the Tsar was a talented warlord.

Indeed, he carefully left the details of military planning to Alekseev and the other generals, but threw his support behind Stavka's efforts to unify control over the fronts, and so -- unlike the Kaiser -- avoided having his authority usurped by the military. Otherwise, as "supreme administrator" and commander, he ensured that relations between the generals and his ministers ran more smoothly, and as Emperor, he sought to use his presence with the troops as a means of raising morale.

For the details of General Alekseev's handling of the autumn crisis, see I. Evseev, Sventsianskii proryv (1915 g.). Voennye deistviia na vostochnom fronte mirovoi voyny v sentiabre-oktiabre 1915 g., (Moscow, 1936), especially pp. 13-21, 60-72. On the new Stavka, see Jones, "Central Military," pp. 157ff; Stone, The Eastern Front, pp. 187-193; Rostunov, Russkii front, pp. 144-145; and A.G. Kavtaradze's entry "Stavka Verkhovnogo Glavnokomanduiushchego" in Sovetskaiia istoricheskaiia entsiklopediia, (Moscow, 1971), v. 13, pp. 775-777.

On the Rumanian negotiations, see the articles by Rieber and Emets cited in note 218, and Rostunov's comments (p. 326). The importance of French pressure on the planning of the Naroch battles is noted in N.E. Podorozhnyi, Narochskaia operatsiia v marte 1916 g. na russkom fronte mirovoi voyny, (Moscow, 1938), pp. 11-15.

238

Interallied affairs are covered by references in notes 217-219 above. In particular, the Chantilly meeting is discussed in Valentinov, ch. 1, pp. 103-148, and the conference of April 1916 is described by Brusilov in Moi vospominaniia, (4th ed.; Moscow, 1946), pp. 184ff. Also see Rostunov, Russkii front, pp. 289-294; V.N. Klembovskii, Strategicheskii ocherk voyny 1914-1918 gg., Chast 5: Period s oktiabria 1915 g. po sentiabru 1916 g.: Pozitsionnaia voina i proryv avstraitsev iugo-zapadnym frontom, (Moscow, 1920), pp. 7-9, 15-16, 26-32; Nastuplenie Iugo-Zapadnogo fronta v mae-i iune 1916 g. Sbornik dokumentov, (Moscow, 1960), pp. 36-82; and Alekseev's memorandum in Golovin, Voennyya usiliia, v. 2, pp. 174-178.

239

Knox, v. 2, pp. 540, 545-549; Stone, The Eastern Front, pp. 210-211. For an example of the continued advocacy of slow advances backed by massive materiel, even after Brusilov's success, see Knox, v. 2, pp. 452-453, 455-456. Indeed, as Stone (pp. 256, 270) notes, even after his initial successes with unconventional methods, Brusilov "too relapsed into orthodoxy" while others -- like Evert --

"had no faith in Brusilov's methods" and by August had won a return to attacks by massed phalanxes.

240

Ibid., p. 49. Snyder (pp. 161-172, 189-203) is especially critical about Russian prewar logistical planning, and sees it as a major cause of the 2nd Army's disaster.

241

Rostunov, Istoriia pervoi mirovoi voiny, v. 1, p. 63. On the problems with the railways, also see Ushakov, passim.; Golovin, Voennyya usiliia, v. 1, pp. 56-62, 99-118; Rostunov, Russkii front, pp. 102-103; Pethybridge, The Spread, pp. 1-16; Inzhener Gonzal', "Obzor seti zheleznnykh dorog Severnogo fronta," Voenno-istoricheskii sbornik, (Moscow, 1921), vyp. 4, pp. 132-172; N. Vasil'ev, Transport Rossii v voine 1914-1918 gg., (Moscow, 1939), passim.; General S.A. Korzhin, Zheleznnyia dorogi v voennoe vremia. (Po opytu rnvustici voiny, (typescript, dated Balich, Yugoslavia, 1925), in the Hoover Institution); Westwood, pp. 171-177; and A.L. Sidorov, "Zheleznodorozhenyi transport Rossii v pervoi mirovoi voine i obostrenie ekonomicheskogo krizisa v strane," Istoricheskie zapiski, (Moscow, 1948), kn. 26, pp. 3-64.

As in other areas of the economy, the war had brought a significant expansion of the railway system. This is evident in the miles of track laid annually: 813 in 1911, rising to 1,814 in 1914, and to 2,654 in 1916. Similarly, the volume of military stores carried also naturally soared, from 2,450,000 tons in 1914 to 42,338,000 tons in 1917. But over the same period, the number of working engines reportedly dropped from 20,071 at the end of 1914 to a mere 9,201 in 1917. That year, given the chaos of revolution, is undoubtedly a poor one for comparison. Even so, the number of railway trucks available in 1916, before the revolution, had dropped to 463,419 from 539,549 in 1914. Given the increase in military traffic, this created great difficulties for the regime; see Zagorsky, State Control, pp. 46-51; H. Hunter, Soviet Transportation Policy, (Cambridge, Mass., 1957), p. 11; and the various debates in the Special Council on State Defense's Zhurnaly; e.g., those on the Caucasian Front's system on 31 December 1916 (13 January 1917) in Zhurnaly 1916, vyp. IV, pp. 775-793.

242

Golovin, Voennyya usiliia, v. 2, pp. 104-110; Knox, v. 2, pp. 449; Stone, The Eastern Front, pp. 133-135. In the end, however, the capability of Russia's rail system

and its inefficient exploitation may have had less to do with Stavka's inability to support Brusilov's initial successes than did his colleagues' inbred skepticism about his chances. As two American specialists point out, "even though he knew that lateral railroad connections were inadequate between the southern and northern parts of the Russian front, Alekseev had taken no steps to move at least a part of the Russian strategic reserves south of the Pripet River, in order to exploit any success Brusilov might achieve;" Trevor N. Dupuy and Woldzimierz Onaciewicz, Triumphs and Tragedies in the East, 1915-1917, (New York, 1967), p. 51. For worries about the state of the railways in mid-1916, see Knox, v. 2, pp. 423-429.

243

Westwood, pp. 173-174; Golovin, Voennyya usiliya, v. 2, pp. 110-111; Ronzhin, p. 15ff., 34ff.; Jones, "Central Military," pp. 164-165; Gonzal', pp. 133-134.

244

V.A. Semenov, Kratkii ocherk razvitiia sovetskogo operativnogo iskusstva, (Moscow, 1960), pp. 17-18; N. Pavlenko, "Iz istorii razvitiia teorii strategii (Istoriograficheskii obzor)," Voенно-istoricheskii zhurnal, (October, 1964); No. 10, pp. 115-116.

245

Stone, The Eastern Front, p. 35. Lieven (p. 106) basically agrees.

246

Filat'ev, pp. 1035ff.; Rostunov, Russkii front, pp. 114-115.

247

Ibid.; Jones, "Central Military," pp. 147-148; Polozhenie, Articles 143-153.

248

Jones, "Central Military," pp. 147-148; Kavtaratz, "Iz istorii," (1976), p. 103.

249

Showalter, pp. 68-72, demonstrates the impact of this attitude on the German command in the first stages of that campaign; his remarks seem to apply equally to the Russian commanders involved. That this view of conducting operations was shared by the latter is abundantly clear from such accounts of the East Prussian campaign as those of Ironside (in particular see his comments on p. 282); Domanevskii, pp. 38-54; Golovin, Iz istorii, passim;

Stone, The Eastern Front, pp. 44-69; Rostunov, Russkii front, pp. 117-129; Ia.K. Tsikhovich, "Operatsiia 2. armii v V. Prussii v Avguste 1914 g.," Voенно-istoricheskii sbornik, (Moscow, 1920), vyp. 3, pp. 96-172; the discussion in A. Zal'f, Osnovnoi zakon i printsipy vooruzhennoi bor'by. Tannenbergskaiia katastrofa i eia vinovniki, (Tallinn, 1932), pp. 103-170; and P.N. Bogdanovich, Vtorzhenie v Vostochnuiu Prussiiu v avguste 1914 goda. Vospominaniia ofitsera general'nogo shtaba Armii generala Samsonova, (Buenos Aires, 1964), especially pp. 262-272, among others. Also see the references in note 213 above.

The problems of coordinating semi-autonomous armies within a front structure, especially in these new conditions of war, are evident from L. Radus-Zenkovich, "Otchego 1. russkogo armiiia Rennenkampfa v avguste 1914 g. ne pomogla 2. russkoi armii Samsonova," Voенно-istoricheskii sbornik, (Moscow, 1921), vyp. 4, pp. 82-93; D. Verzhkovskii, "Nachal'nye operatsii pervoi mirovoi voiny na vostochnoevropeiskom teatre," Voенно-istoricheskii zhurnal, (August, 1964), No. 8, pp. 123-126; and Domanevskii, pp. 50-54. The deficiencies of Zhilinskii as a front commander are stressed in Jean Savant, Epcpee russe. Campagne de l'armee Rennenkampfi en Prusse-Orientale, (Paris, 1945), pp. 243ff. For a documentary account of this campaign see Vostochno-Prusskaiia operatsiia. Sbornik dokumentov, (Moscow, 1939).

250

Showalter, p. 80.

251

Stone, The Eastern Front, p. 51. He draws his figures from the analysis in N.V. Abakanovich, "Istoricheskii obzor organizatsii i ustroistva provolochnoi sviazi vo 2-i armii v voiny 1914-1918 g.," Voенно-inzhenernyi sbornik, (Moscow, 1918), vyp. 1, pp. 198-202. Also see the figures and discussion of Samsonov's communications in Ironside, pp. 144-146.

Russian recognition of the need for field communications is clear from the discussion of the war of 1904-1905 in N. Petin, "Vazhneishia sredstva sluzhby sviazi -- telegraf i telefon," Obshchestvo revnitelei voennykh znaniia, (St. Petersburg, 1906), kn. 4, pp. 163-173. The growth of communications equipment in the 2nd Army over the years 1914-1917 is described in detail by Abakanovich (pp. 197-336). His account illustrates both an increased appreciation of this aspect of war and the greater availability of materiel noted above. The same overall process is outlined more briefly in I.P. Grishin, et al., Voennye sviazisty v dni voiny i mira, (Moscow, 1968), pp. 26-33. He compares (pp.

29-30) the weak communications facilities of the 2nd Army in August with those available to the same formation only a few months later, during the battles in Poland. On the navy, see M. Zernov and N. Trukhnin, "Sluzhba svyazi v russkom flote v gody pervoi mirovoi voiny," Voенно-istoricheskii zhurnal, (March, 1966), No. 3, pp. 106-111.

252

Jones, "Central Military," p. 144; Kavtaradze, "Stavka," pp. 776-777; Bubnov, pp. 43-62. The navy's role over these years, as well as its place in the command structure, is described in Pavlovich, Deistviia russkogo flot, passim. Also see Rene Greger, The Russian Fleet, 1914-1917, trans. J. Gearing, (London, 1972); G. Graf, Na "Novike", (Baltiiskii flot v voynu i revoliutsiiu), (Munich, 1922); and on the Black Sea Fleet, A.P. Lukin, Flot. Russkie moriaki vo vremia Velikoi voiny i revoliutsii, (2 vols.; Paris, n.d.).

253

This front's organization is described in E.V. Maslovskii, Mirovaia voina na Kavkazskom fronte, 1914-1917 g. Strategicheskii ocherk, (Paris, 1933), pp. 20, 37, 137-140, 429-430, 438-443. In fact, this front's successes resulted less from the talents of the Viceroy/Commanders-in-Chief than they did from those of their Chief of Staff, General N.N. Iudenich. On this outstanding commander, see P.N. Shatilov, et al., General-ot-Infanterii Nikolai Nikolaevich Iudenich, (pyiatdesiatiletnemu iubileru), (Paris, n.d. [c. 1931]).

The strategic-operational leadership of the Caucasian command is discussed as well by N.G. Korsun, Pervaa mirovaia voina na Kavkazskom fronte, (Moscow, 1946), and W.H.D. Allen and Paul Muratoff, Caucasian Battlefields. A History of the Wars on the Turco-Caucasian Border, 1828-1921, (Cambridge, UK, 1953), pp. 221ff. For a more personal account of the war on this front, see G. Austrin's memoirs, "Ot Batuma k Trapezunda," in Voennaya byl', (November, 1957), No. 27, pp. 11-14; (January, 1958), No. 28, pp. 2-5; (March, 1958), pp. 1-4; and (May, 1958), No. 30, pp. 1-5.

254

The best account of the state of military logistics in 1914 is Martin van Creveld's Supplying War. Logistics from Wallenstein to Patton, (Cambridge, UK, 1977), pp. 96-113. For the impact of this situation on the Russian Front, see Stone, The Eastern Front, pp. 44ff., and Showalter, pp. 64-66.

255

The basic assumptions behind this vision of an expected European conflict are outlined by Snyder, pp. 15-18, 157-164, and S.P. Ivanov, ed., Nachal'nyi period voiny (Po opytu pervykh kampanii i operatsii vtoroi mirovoi voiny), (Moscow, 1974), pp. 29-42. As the latter points out (pp. 36-37), in 1909 Professor A.A. Neznamov of the Academy of the General Staff, like Danilov, still recommended Russia first adopt a defensive stance while her armies mobilized; see his Oboronitel'naiia voina, (St. Petersburg, 1909), pp. 3-12. But while he understood that a defensive phase might still be advisable in certain conditions, his Sovremennaiia voina. Deistviia polevoi armii, (2nd ed., St. Petersburg, 1912), is resolutely offensive in tone and context. His arguments there are outlined in Jones, The Advanced Guard, pp. 82-83, and Pavlenko, "Iz istorii," p. 115.

256

The development of Russian doctrines of combined-arms battle before 1914 are outlined in Jones, The Advanced Guard, pp. 58-89, and in M.A. Gareev, Obshchevoiskovye ucheniia, (Moscow, 1983), pp. 42-85. In his The Eastern Front, pp. 24-25, 45, and "The Historical Background," pp. 11-13, Stone outlines the bones of the rivalry between infantry and artillery. This problem is discussed at greater length in Barsukov, Russkaia artilleriia, v. 1, pp. 148-159. Also see the discussion in chapter 4 on tactics below.

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Jones, The Advanced Guard, pp. 58-59. On the rates of movement see M. Dragomirov's discussion in Kurs taktiki, dlia gg. ofitserov uchebnago pekhotnago bataliona, (2nd ed., St. Petersburg, 1867), pp. 230-251, and comments in van Creveld, pp. 110-113. Sukhomlinov's recognition of the place of the automobile in war is evident from his establishment of new auto units, and from his presumed statement that, in recent years, "the army automobile service in Russia has been raised to a very high level," in the famous article "Rossia khochet mira, no gotova k voine," in Rech', (1914), No. 57, p. 2.

For Mishchenko's raid and Russian interest in using cavalry in this manner, see Christopher Bellamy's articles "Seventy Years On: Similarities Between the Modern Soviet Army and its Tsarist Predecessor," Journal of the Royal United Services Institute for Defence Studies, (1979), No. 3, p. 32; "Heirs of Genghis Khan: The Influence of the Tartar-Mongols on the Imperial Russian and Soviet Armies," Ibid., (March, 1983), No. 1, pp. 58-59; and "Antecedents of the Modern Soviet Operational Manoeuvre Group (OMG)," Ibid., (September, 1984), No. 3, pp. 51-57. He deals at

length with Mishchenko's raid on Inkou at the end of 1904 in the last of these. In addition, see I.I. Rostunov, ed., Istoriia russko-iaponskoi voyny, 1904-1905 gg., (Moscow, 1977), pp. 295-296; Voенно-istoricheskaiа komissia po opisaniiu russko-iaponskoi voyny, Russko-iaponskaia voina, 1904-1905 g.g., T.5: Shankhe-Sandepu, Ch.2: Zimniа period kampanii i srazhenie u Sandepu, (St. Petersburg, 1910), pp. 210-212, 244-247, 283-287, 311-314; the supplement to that volume, Naber na Inkou, (St. Petersburg, 1910); the other works cited by Bellamy; and those listed by V. Euchinin, Russko-iaponskaia voina, 1904-1905 gg. Bibliograficheskiі ukazatel, (Moscow, 1939), p. 63. For the discussion of the composition of a mixed arms cavalry detachment, see V.A. Shakhmatov, "Moi partizanskiі otriad," in his Sbornik statei, (St. Petersburg, n.d.[c.1908]), pp. 97-108.

258

On the feeding of livestock and the railways; see van Grevelde, p. 111; Sidorov, "Zheleznodorozhnyi transport," p. 24; Golovin, Voennыia usiliia, v. 2, p. 77; Stone, The Eastern Front, pp. 49-50, 134-135; F. Shutnikov, "Prodnurazhnyi vopros v sovremennoi operatsii," Voennaiа mysl, (October, 1939), No. 10, pp. 102-110. One should also note that the army's belief in cavalry, and its reliance on horse-drawn transport, led to extensive mobilizations of horses as well as of men. For descriptions of this process in 1914-1915 see V. Milodanovich, "Priem loshadei v mobilizatsiiu 1914 goda," Voennaiа byl, (September, 1981), No. 112, pp. 35-38; M. Zalevskii, "O mobilizatsii konia," Ibid., (March, 1972), No. 115, pp. 18-19; and D. Khar'kov, "Konskaia mobilizatsiia v 1915 godu," Ibid., (July, 1972), No. 117, pp. 32-35.

The operations of Russian cavalry during the war are discussed by Littauer, pp. 131-221; A. Kel'chevskii, "Odnostoronnnyi opyt," Voennыi sbornik, (Belgrade, 1922), kn. 2, pp. 213-220; Alexis Wrangel, The End of Chivalry. The Last Great Cavalry Battles, 1914-1918, (New York, 1982); E.G. i. Val', Kavaleriiskie obkhody Generalа Kaledina, 1914-1915 g.g., (Tallinn, 1933); Georgii Goshtovt, Kaushen. Povest, (Paris, 1931); E. Tikhotskii, Ataka 1-go Linienago polka Kubanskago Kazach'iago Vei'ska v boiakh pod gor. Chertkov 22/9 i Buchach 23/10 avgusta 1914 i gibel' 1-1 Avstro-Vengerskoi batarei 7 Konno-artil. divizionа, (n.p., 1935); E. Tikhotskii, Ataka Avstro-Vengerskoi Konnitsy na 2-iu Svodnuiu Kazach'iu Diviziiu pod m. Gorodok 4-17 avgusta 1914 g., (Belgrade, n.d.); Aleksandr Slivinskii, Konnыi boi 10-1 Kavaleriiskoi Divizii generalа grafa Kellera 8/21 avgusta 1914 goda u d. Iaroslavitse, (Serbia, 1921); and M. Pozek, German'skaia konnitsa v Litve i v Kurliandii v 1915 godu, trans. V. Mikulin, (Moscow, 1930).

All make it clear that 1914 saw the last great cavalry actions, and that from 1915 the actual role of mounted units had become extremely limited. The role of cavalry on the East Prussian and Austrian Fronts in 1914 is also examined in detail by such regimental historians as Boris Govorov, et al., Sumskie gusary, 1651-1951, (Buenos Aires, 1954) [JJ] 171-221, and V.V. Cheslavskii, 67 boev 10-go gusarskago Ingermanlandskago polka v mirovuiu voyny 1914-1917 godakh, (Chicago, 1937), pp. 23-99, respectively. Other similar sources are listed in M. Lyons, comp., The Imperial Russian Army. A Bibliography of Regimental Histories and Related Works, (Stanford, 1968), pp. 35-53, 164-173.

259

Semenov, p. 17; N.V. Ogarkov, Vsegda v gotovnosti k zashchite Otechestva, (Moscow, 1982), pp. 32-34.

260

See the discussion in Ironside, chapter 9, as well as the varied analyses found in the other sources listed in note 249.

261

See, for example, Stone, The Eastern Front, pp. 246ff., and Roštunov, Russkii Front, pp. 321ff.

262

Semenov, pp. 22-24; Ogarkov, pp. 33-34.

263

Lieven, p. 111.

264

On the Credentials Commission and associated measures, see Jones, "Central Military," pp. 133-134; V. Lebedev, "IZ istorii attestovaniia komandnykh kadrov," Voenno-istoricheskii zhurnal, (January, 1966), No. 1, pp. 100-101; Bushnell, "The Tsarist Officer," pp. 777-778; Wilfong, pp. 45, 66, 72; "Osnovy podgotovki komandnago sostava armii," Velikaia Rossiia, kn. 2, pp. 155-174; Denikin, Puti, pp. 246-247; Denikin, Staraiia armia, v. 1, pp. 91-97; Denikin, Turmoil, pp. 23-24; Wildman, pp. 70-71; Fuller, Civil-Military, p. 195, 233-235; M. Grulev, Zloby dnia v zhizni armii, (Brest-Litovsk, 1911), pp. 32, 275; "Chistka komsostava tsarskoi armii v 1906 g." Krasnyi arkhiv, (Moscow, 1932), No. 1-2, pp. 211-225; and "IZ zapisok A.F. Redigera," Ibid., (Moscow, 1933), No. 5, p. 99. As Minister of War, Rediger made his motives for this and other measures clear in an interview with Colonel Wyndham, the British attaché in St. Petersburg; see his report in British Documents on

Foreign Affairs, Russia 1859-1914, v. 5, pp. 29-30. The results of his actions were evident when Ambassador Nicolson wrote his "Russia: Annual Report, 1907." This noted (Ibid., p. 114) that in 1906 "no less than 192 Generals and 309 superior officers were retired" thanks to Rediger's "unswerving strength."

An example of the need of patronage, even to secure the command of a Cossack regiment in far-off Siberia, is provided by P.N. Krasnov in his Na rubezhe Kitaia, (Paris, 1939), pp. 10-13. Family connections also were useful, especially in the Guards; see, e.g., Serge Obolensky, One Man in his Times, (New York, 1958), p. 126, and J.E.O. Screen, "Marshal Mannerheim: The Years of Preparation," Slavonic and East European Review, (June, 1965), pp. 295-296. In this connection, a former ensign in the 4th Guards Rifles told the present writer that after graduation from a military school, his appointment to this unit resulted partly from a traditional family connection; (Interview with Peter Constantinov, Sandhurst, June, 1967.)

On the particular traditions and customs of the Guards, see the various regimental histories listed in Lyons, pp. 7-60, and the comments in such works as Krasnov's From Double Eagle, passim.; McCormick, With the Russian Army, pp. 203-205; Marie de Baschmakoff, Memoirs, (Paris, 1958), pp. 49ff.; G.P. Tschebotarioff, Russia, My Native Land, (New York, 1964), pp. 28ff.; Rusanov, pp. 3-52; Naqiev, pp. 16-36; Yu. Makarov, Moia Sluzhba v Staroi Gvardii, 1905-1917. Mirnoe Vremia i Voina, (Buenos Aires, 1951), pp. 3-69; and Kirasiry Ego Velichestva, 1902-1914. Poslednie gody mirnogo vremeni, (Washington, 1949), among others.

265

The diversity in training is noted by John Bushnell, "The Tsarist Army After the Russo-Japanese War: The View From the Field" (Unpublished paper presented at symposium at Carlisle Barracks, Penn., August 1982), pp. 3-5. His assessment of these trends is basically negative and stresses the extent to which "promising developments degenerated into dreary routine" (p. 5). In his discussion of "the military mind," Kenz, "Profile," pp. 150-158, paints a similarly gloomy picture of the imagination, education and quality of the prewar officer corps. However Fuller (Civil Military, pp. 159-161, 1961ff.) takes a more optimistic view of the "military renaissance" after 1905, and highlights the development of a "new sort of military professionalism" among some officers' circles.

For examples of the varying quality of the winter discussions mentioned, see the negative accounts in Grulev,

Zloby, pp. 37-38; Littauer, pp. 17, 25, 82, 107; and K. Smirnov, "Ofit'serskii vopros," Voennyi sbornik, (October, 1909), No. 10, p. 146. More positive accounts are provided by Nagaev, pp. 58-50, Moltchanoff, pp. 13-14, 18, and Kuznetsov, "Zhizn'," pp. 7-8, as well as in Captain Ivan-ko's remarks on the lectures by staff officers in Shaiditskii, p. 277. One young Guards officer later recalled that although the lectures in his regiment were frequently of excellent quality, he and his colleagues often were too tired to really profit from them; see V. Kamenskii, "Otryvki vospominanii," p. 3. As for the qualities sought in commanders, these were outlined briefly in A.A. Neznamov's lecture, Trebovaniia kotoryia pred'iavliaet sovremennyi boi k podgotovke (obucheniiu) nachal'nikov i mass, (St. Petersburg, 1909), pp. 17ff.

266

Kersnovskii, v. 3, pp. 611-614. For a critique of the Academy see Dragomirov, "Podgotovka," (1923), kn. 4, pp. 100-101, as well as Shaposhnikov, pp. 113-170; and the generally positive assessment of Colonel Shliakhtin, "Imperatorskaia Nikolaevskaia voennaia akademiia," Voennaia byl', (March, 1971), No. 109, pp. 15-20.

267

Bushnell, "The Tsarist Officer," pp. 763-765; Krasnov, From Double Eagle, pp. 88ff.; Gerua, v. 1, pp. 89-91; P.A. Zaionchkovskii, Samoderzhavie, pp. 56-58; P.P. Isheev, Oskolki proshlogo. Vospominaniia, 1889-1959, (New York, n.d.[c.1960]), pp. 57-62; and Iurii Solodkov, "Bol'shie maneuvry pod Pskovom v Vysochaishem prisutstvii v 1903 g.," Voennaia byl', (May, 1973), No. 122, pp. 6-10. A brief history of the role of maneuvers in Tsarist military training is provided in M.A. Gareev, Takticheskie ucheniia i maneuvry (Istoricheskii ocherk), (Moscow, 1977), pp. 61-92.

268

For the diversity in style of maneuvers before 1904 see Ibid. and P.A. Zaionchkovskii, Samoderzhavie, pp. 250-272. For the later situation is described in Denikin, Staraia armia, v. 1, pp. 23-27; V.M. Dragomirov, "Podgotovka," (1923), kn. 4, p. 102; and the other accounts in note 267 above.

Fuller, Civil-Military, p. 220, notes the War Ministry's funding of ever larger maneuvers after 1906. According to Gareev (Takticheskie, p. 90), each major set of maneuvers cost the ministry 500,000 rubles in the early 1900s. But despite increased funding, before 1908 fiscal restraints, and the use of troops to maintain order, prevented the War Ministry from substantially increasing the program of sum-

mer maneuvers; see, for example, the comments in "Russia. Annual Report, 1907;" British Documents on Foreign Affairs, Russia 1859-1914, v. 5, p. 113.

269.

Bushnell, "The Tsarist Army," p. 9.

270

P.N. Krasnov, Nakanune voiny, (Paris, 1937), pp. 38-39, 53.

271

This description is based on the later comments of Denikin, Put', pp. 245-246, and Staraya armiya, v. 1, p. 103ff.; Dragomirov, "Podgotovka," (1923), kn. 4, pp. 114-115; (1925), v. 6, p. 70; and Bushnell, "The Tsarist Officer," p. 778. Also see the contemporary criticisms of L. Radus-Zenkovich, "Nashi bol'shie manevry," Voennyi sbornik, (St. Petersburg, (1910), No. 6, pp. 76-95; M. Kvetsinskii, "Tekhnika organizatsii manevra," Ibid., (1914), No. 1, pp. 27ff.; and A. Voronetski, "K vospitaniyu voisk," Ibid., (1913), No. 11, pp. 24ff.

Logistics seem to have been particularly ignored. In an effort to keep matters inexpensive and simple during large-scale exercises, provisions and forage were supplied by pre-prepared magazines in the rear; see Snyder, p. 192; Radus-Zenkovich, "Nashi," pp. 76-77; and M. Gareev, "Iz istorii razvitiia metodov provedeniia takticheskikh uchenii i manevrov v russkoi armii," Voенно-istoricheskii zhurnal, (February, 1972), No. 2, p. 100. It should be noted that the description given repeats the essence of the criticisms of maneuvers before 1906 that are listed above and in note 267.

272

This account is based on Denikin, Put', pp. 245-246; Apushkin, pp. 64-66; Bushnell, "The Tsarist Army," pp. 7-8; Danilov, Rossia, pp. 99-105; Dragomirov, "Podgotovka," (1923), kn. 4, pp. 102-103; Golovin, Iz istorii, pp. 38-43; Voronetski, p. 34; Sukhomlinov, pp. 294-297; V.A. Melikov, Strategicheskoe razvertyvanie, (Moscow, 1939), pp. 238-239; and A.N. Suvorov, "Voennaya igra starshykh nachal'nikov v aprele 1914 g.," Voенно-istoricheskii sbornik, (1919), vyp. 1, pp. 9-29.

Again, Snyder's comments (pp. 190-193) on the lack of attention to logistics in this war game, as in other prewar exercises and stages of planning, deserve special note. On the organization and goals of prewar Russian exercises, see E.A. Vertsinski, Postanovka strategicheskoi-takticheskikh

zaniatii v 18-m armeiskom korpuse. (St. Petersburg, 1911), pp. 1-81; A. Kel'chevskii, "Ob organizatsii polevykh poezdok ofitserov General'nago shtaba i vysshykh chinov armii," Izvestiia Imperatorskoi Nikolaevskoi Voennoi Akademii, (St. Petersburg, 1910), No. 2, pp. 74-79.

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The debates and prevailing doctrine are discussed in Jones, Advanced Guard, pp. 87-89; Stone, Eastern, pp. 30-35, 45; Danilov, Rossia, chapter 2; Zhilin, Russkaia, pp. 143-146; and Von Wahlde, pp. 182-236. Typical of the later complaints about the quality of command personnel are those in Zalesskii, pp. 145-164.

The effect of "economic" responsibilities on the lower levels of command are stressed by Bushnell, "The Tsarist Officer," pp. 778-779, and "The Tsarist Army," pp. 5-6, 19. For contemporary discussions of this problem, and the measures being implemented to remedy it before 1914, see A.P. Voznesenskii, "O voennom khoziaistve," Obshchestvo revnitatei voennykh znani, (St. Petersburg, 1906), kn.1, pp. 97-123, and "The Present State of the Russian Army," p. 1633. Also see the comments in Kuznetsov, "Zhizn'," pp. 4-6; Kamenskii, "Otryvki vospominanii," pp. 4-6; and Otfinovskii, "Moia sluzhba," pp. 33-34.

274

On the Gumbinnen action see, for example, Domanevskii, pp. 23-37; A.A. Yamanov, Vstrechnyi boi. kn.1: Operativno-takticheskoe issledovanie na voenno-istoricheskoi osnove, (Moscow, 1959), pp. 155-170; N.G. Korsun and P. Kh. Kharkevich, "Taktika russkoi armii v pervuiu mirovuiu voinu 1914-1918 gg.," in D.V. Pankov, comp., Razvitie taktiki russkoi armii. XVIII v. - nachalo XX v. (Sbornik statei), (Moscow, 1957), pp. 286-292; Vladimir Andreev, Pervyi Russkii Marsh-Manevr v Velikuiu Voynu. Gumbinen i Marna, (Paris, 1928), *passim*; Golovin, Iz istorii, chapters 6-7; and L. Radus-Zenkovich, Ocherk vstrechnogo boia po opytu Gumbinnenskoi operatsii v avguste 1914 g., (Moscow, 1921).

For this battle, and the first actions in 1914 on the Austrian front as well, see Ia.K. Tsikhovich, Strategicheskii ocherk voiny 1914-1918 gg., Chast 1: Period ot ob'iaвления voiny do nachala sentiabria 1914 g. Pervoe vtorzhenie russkikh armii v Vostochnyi Prussii i Galitsiiskaia bitva, (Moscow, 1922). On the Galician campaign *per se*, see Domanevskii, pp. 55-61; Korsun and Kharkevich, pp. 292-294; Yamanov, pp. 170-186; Stone, The Eastern Front, pp. 70-91; N.N. Golovin, "The Great Battle for Galicia (1914)," Slavonic and East European Review, (June, 1926), pp. 25-47; V.M. Dragomirov, "Kratkii ocherk voennykh deistvii russkikh

armii v Galitsii i Privislinskom krae v avguste 1914 goda," Voennyi sbornik, (Belgrade, 1922), kn. 2, pp. 135-184; A. Belov, Galitsiiskaia bitva, (Moscow, 1929); Rostunov, Russkii front, pp. 129-154; G. K. Korol'kov, Lodzinskaia operatsiia, 2 noabria - 19 dekabria 1914 g., (Moscow, 1934); Lodzinskaia operatsiia. Sbornik dokumentov, (Moscow, 1936); and P. Korkodinov, "Lodzinskaia operatsiia 1914 goda," Voenno-istoricheskii zhurnal, (November, 1964), No. 11, pp. 126-129.

275

Bushnell, "The Tsarist Army," p. 7, admits that the exercises carried out in the Vilna and Kiev Military Districts were exceptions to his overall gloomy picture of stagnation. The program for the maneuvers in these frontier districts for 1911 is outlined in the notes on "Manoeuvres in 1911" and "Summer Training," Journal of the Royal United Services Institute, 55, (June, 1911), p. 809, and (July, 1911), p. 950.

For favorable comments on improvements in prewar training programs, see those on the tactical exercises introduced by General L. P. Lesh in the Guards Rifle Brigade, traditionally one of the strongholds of military conservatism, in Nagaev, pp. 53-55, and those on his system's later use in Colonel Eliseev, "Nashi turkestanskii nachal'niki: General Lesh," Voennaia byl', (July, 1963), No. 61, pp. 19-21. In addition, see the comments on the work of his colleague in the Guards, in V. B-k, "General Platon Alekseevich Lechitskii," in Ibid., No. 72, (March, 1965), p. 2; those of Fedor Stepun, then a reserve junior artillery officer, on the utility of the summer artillery camp in 1911, in his Byvshee i nebyvsheie, (2 vols.; New York, 1956), v. 1, p. 85; P. N. Krasnov's remarks on the exercises conducted by the Siberian Cossacks in Na rubezhe Kitaia, pp. 75-78; Denikin's less favorable comments on the conditions of his own work in Put', pp. 264-265; and the generally favorable assessment in Ambassador George Buchanan's "Annual Report, 1910," in British Documents on Foreign Affairs, Russia 1859-1914, v. 6, p. 142.

Other useful comments on the atmosphere of immediate prewar training and maneuvers are found in A. P., "Na manevrakh," Voennaia byl', (November, 1962), No. 57, p. 30; Vysotskii, "Na manevrakh," Ibid., (January, 1965), No. 71, pp. 41-42; and Kuznetsov, "Zhizn'," pp. 7-8. Also see "Lagernyi sbor 1907 goda - iz pisem gen. majora M. V. Alekseeva," Ibid., (March, 1972), No. 115, pp. 1-3. On Rennenkampf's efforts in the Vilna Military District, see A. Nevzorov, "General ot kavalerii P. K. Rennenkampf," Ibid., (January, 1967), No. 83, pp. 15-16; V. N. fon Dreier, Na

zakate imperii, (Madrid, 1965), pp. 59-62; and the glowing but documented account of the general's ideas and style of troop training, in Savant, pp. 119-128.

With regard to the exercises in the St. Petersburg Military District, the views of the British officers cited in the text are taken from the General Staff, War Office, Report on Foreign Manoeuvres, 1908, (London, 1909), pp. 149-156. The Grand Duke Nikolai Nikolaevich's aims for these particular maneuvers had appeared in Russkii Invalid, and then were published as "Instructions for the Summer Exercises in the St. Petersburg District," Journal of the Royal United Services Institute, v. 52, (1908), pp. 1132-1134.

276

General Staff, War Office, Report on Foreign Manoeuvres, 1908, p. 153.

277

General Staff, War Office, Report on Foreign Manoeuvres in 1912, (London, 1913), pp. 99-100. The introduction to this year's report is particularly interesting. It provides a brief, comparative summary that permits the Russians' performance to be judged against those of other armies. In this, it is "Japan and, to a lesser extent, Germany," but not Russia, in "which manoeuvres are carried out in accordance with a carefully pre-arranged program." As for the "neglect of infantry covering fire in the attack," this is noted "in nearly every report." Further, the Russians do receive mention for having learned from Manchuria "the value of machine guns," and special attention is called to their "method of laying out telephones;" Ibid., pp. iv-vi.

278

General Staff, War Office, Report on Foreign Manoeuvres in 1913, (London, 1914), p. 79.

279

Ibid., pp. 78-79, 82.

280

Bushnell, "The Tsarist Officer," p. 778. Among others sharing his opinion are Kenéz, "Profile," pp. 150-153; Rutherford, pp. 25-26; and Wildman, pp. 72-74.

281

Ironside, p. 26.

282.

Rennenkampff's prewar career is assessed in glowing but not wholly undeserved tones in Savant, pp. 93-118. Also see the comments in von Dreier, pp. 58 ff., and in Isheev, pp. 74-75. For a more critical comment, see Knox, v. 1, p. 92. For appreciations of Samsonov, see Polkovnik Eliseev, "Nashi turkestanskii nachal'niki: General Samsonov," Voen-naia byl', (September, 1963), No. 62, pp. 40-42, and P. Isheev, "O generale Samsonove," Ibid., (November, 1962), No. 64, p. 43.

On the campaigns waged by Allied commanders like Haig and French, as well as the losses sustained as a result of their leadership, see such works as Anthony Farrar-Hockley's Death of an Army, (London, 1967); Correlli Barnett, The Swordbearers. Supreme Command in the First World War, (New York, 1964); Alistair Horne, Death of a Generation: From Neuve Chapelle to Verdun and the Somme, (London, 1970); Alan Clarke, The Donkeys, (New York, 1962), and so on.

283

A.D. Kalmykov, Memoirs of a Russian Diplomat: Outposts of Empire, 1893-1917, (New Haven, 1971), p. 197.

284

Princess Cantacuzene, Revolutionary Days: Recollections of Romanoffs and Bolsheviks, 1914-1917, (Boston, 1919), pp. 66-67.

285

Cherniavsky, p. 36. For a fuller examination of his conduct see Jones, "Nicholas II," pp. 58-62. On Zhilinskii, see the remarks of Ironside, pp. 25, 44-51, 218-220, and Knox, v. 1, pp. 62, 79, 83, 89, 93.

286

On the winter battles of 1914-1915, see Stone, The Eastern Front, chapters 5; Rostunov, Russkii front, pp. 154-232; and the other references in note 274 above. For further details, see G. Korol'kov, Strategicheskii ocherk voyny 1914-18 gg., Chast 2: Period s 1(14) sentiabria po 15(28) noiabria 1914 g. Avgustovskoe srazhenie, Varshavsko-Ivangorodskaiia, Krakovskaiia i Lodzinskaiia operatsii, operatsii v Galitsii i Kapatakh, Khyrovskoe srazhenie, (Moscow, 1924); A.A. Neznamov, Strategicheskii ocherk voyny 1914-18 g.g. Chast 3: Period s 12(25) noiabria 1914 g. po 15(28) marta 1915 g., (Moscow, 1922); A.M. Zaionchkovskii, Mirovaia voina. Manevrennyi period 1914-1915 gg. na russkom (evropeiskom) teatre, (Moscow, 1929); and I.A. Khol'msen, Mirovaia voina. Nasha operatsii na Vostochno-Prusskom fronte zimoiu, 1915 g. Vospominaniia i mysli, (Paris, 1935).

The repulse of the Turkish offensive in the Caucasus at the end of 1914 is recounted in Allen and Muratoff, pp. 237-292; Maslovskii, pp. 51-134; A.O. Arutiunian, Kavkazskii front, 1914-1917 gg., (Erevan, 1971), pp. 136-161; N. Korsun, Sarykamyshskaia operatsiia na Kavkazskom fronte mirovoi voyny v 1914-1915 godu, (Moscow, 1937); and V.P. Nikol'skii, Sarykamyshskaia operatsiia 12-24 dekabria st. st. 1914 goda, (Sofia, 1933).

287

On the collapse of the Russian front and Great Retreat during April-August 1915, see Stone, The Eastern Front, chapters 6-8, and especially, pp. 133-134 on the railways. Also see Rostunov, Russkii front, pp. 233-262; Danilov, Rossia, chapters 15-17; and A.A. Neznamov, Strategicheskii ocherk voyny 1914-1918 g.g., Chast 4: Proryv Makenzena, (Moscow, 1922).

On the Gorlice-Tarnov Operation in particular, and the subsequent actions, see M.D. Bonch-Bruевич, Poteria nami Galitsii v 1915, (2 parts; Moscow, 1920-1926); Generalstabes des Feldheeres, Der grosse Krieg in Einzeldarstellungen, Heft 21: Gorlice-Tarnow, comp. L. Graf v. Rothkirch-Freiherr v. Trach, (Oldenburg i. Gr.; 1918); Herman v. Francois, Gorlice 1915. Der Karpathendurchbruch und die Befreiung von Galizien, (Leipzig, 1922); Gorlitskaia operatsiia. Sbornik dokumentov, (Moscow, 1941); G. Kellerman, "Proryv 11-i germanskoi armii u Gotlitse 2-5 maia 1915 g.," Voyna i revoliutsiia, (March-April, 1934), pp. 65-85; V. Liakhov, "Proryv russkogo fronta v 1915 godu," Voenno-istoricheskii zhurnal, (June, 1965), No. 6, pp. 122-125; Knox, v. 1, chapters 4-9; G. Korol'kov, Nesbyvshiesia Kanny (Nedavshiesia razgrom russkikh letom 1915 g.), Strategicheskii etiud, (Moscow, 1926); Generalstabes des Feldheeres, Der grosse Krieg in Einzeldarstellungen, Heft: 27/28: Der Durchbruch am Narew (Juli-August 1915), (Oldenburg i. Gr., 1919).

These military events were complicated further by Stavka's panicked policies of anti-Semitism and forced evacuations, which are described in Graf, Reign of the Generals, pp. 118-115, and V. Doroshevitch, The Way of the Cross, (London, 1916). The near disastrous impact on the army's morale is discussed by Guboyin, Voennyya usilia, v. 2, pp. 136-160; Wildman, pp. 87-94; and Stone, The Eastern Front, pp. 165-171. Two well-known personal accounts, presenting a view approved by Soviet historiography, are L. Voitlovskii, Po sledam voyny, (2nd ed.; Leningrad, 1934), chapters 4-8, and A. Pireiko, V tylu i na fronte imperalisticheskoi voyny. Vospominaniia riadovogo, (Leningrad, 1926), pp. 19-32.

288

Rostunov, Russkii front, pp. 273-274, 286; Rostunov, General Brusilov, 108-111; Stone, The Eastern Front, pp. 221-231; Klembovskii, Strategicheskii ocherk, Chast 5, pp. 9-15, 17-26; Podorozhnyi, Narochskaya operatsiia, pp. 15ff.; and Knox, v. 2, pp. 383-384, 404-411. The German view of the Naroch Operation is presented in Generalstabes des Feldheeres, Der grosse Krieg in Einzeldarstellungen, Heft 31: Die russische Frühjahrs offensive 1916, comp. Walter Flek, (Oldenburg i. Gr., 1919)

An interesting analysis of the assault along the Styrpa is presented by A.A. Neznamov in "Dva proryva ukreptennykh pozitsii," Voенно-istoricheskii sbornik, (Moscow, 1920), vyp. 4, pp. 105-115. In this he compares this failure with Brusilov's later success. Also of note is a contemporary, 39-page pamphlet, published by the Quartermaster-General's Administration of Stavka in 1916. Entitled Zapiski po povodu vypolneniia operatsii na iugo-zapadnom fronte v dekabre 1915 goda i severnom i zapadnom v marte 1916 goda, it generally supported the view that the failures occurred because of such factors as bad weather, faulty coordination of the arms involved, and shortages of materiel, not thanks to defects in the planners' operational and tactical conceptions. Interestingly enough, by this time Knox (v. 2, pp. 409, 411) was becoming increasingly dubious about the continued cries for more shell and technical materiel. The artillery support supplied is discussed in Barsukov, Russkaya artilleria, v. 2, pp. 137-148, 340-380.

289

On the operational background of the Brusilov offensive see Semenov, pp. 18-22; Klembovskii, Strategicheskii ocherk, Chast 5, pp. 26-36; Rostunov, Russkii front, pp. 289-294; Stone, The Eastern Front, pp. 224ff.; Brusilov, Moi vospominaniia (1946), pp. 178ff.; M. Rozhdestvenskii, Lutskii proryv, (Moscow, 1938), pp. 3-9; Colonel Bazar'evskii, Nastupatel'naya operatsiia 9-i russkoi armii. Iiun' 1916 goda, (Moscow, 1937), pp. 12ff.; E. Messner and Iv. Eikhenbaum, Velikaia Lutsk-Chernovitskaia pobeda 1916-go goda, (Buenos Aires, 1966), pp. 2-3; Rostunov, General Brusilov, pp. 110-124; Knox, v. 2, pp. 432-438; L. Vetoshnikov, "Brusilovskii proryv (Kratkii operativno-strategicheskii ocherk)," Voennaia mysl', (July, 1939), No. 7, pp. 70ff.; N. Golovin, "Brusilov's Offensive," Slavonic and East European Review, (April, 1935), pp. 571-578; V. Liakhov, "Brusilovskii proryv," Voенно-istoricheskii zhurnal, (June, 1966), No. 6, pp. 121-125; and Nastuplenie Iugo-Zapadnogo fronta, pp. 68-82.

290

See references in note 289, and especially Brusilov,

Moi vospominaniia, (1946), pp. 184-191.

291

Ibid., pp. 193-197, in which the order and other instructions are reprinted as well (pp. 255-259). Also see Rozhdestvenskii, pp. 8-13; Nastuplenie Iugo-Zapadnogo fronta, pp. 114-189; Rostunov, Russkii front, pp. 294-311; Klembovskii, Strategicheskii ocherk, Chast 5, pp. 36-41; and Stone, The Eastern Front, pp. 235-240. On the engineering preparations in particular, see V.A. Zakharov, "Sostoianie i razvitie russkogo voenno-inzhenernogo iskusstva i inzhenernykh voisk s nachalo XX v. do Velikoi Oktiabr'skoi sotsialisticheskoi revoliutsii," in V.P. Andreev and D.S. Borisov, comp., Voенно inzhenernoe iskusstvo i inzhenernye voiska russkoi armii. Sbornik statei, (Moscow, 1958), pp. 164-167, and N.N.R., "Russkie inzhenernye voiska," Voennaia byl', (January, 1962), No. 52, p. 16.

292

E.Z. Barsukov, "Russkaia artilleriia v mirovoi voine," Voennaia mysl', (1939), No. 7, p. 66.

293

This is suggested by both the objections raised by his colleagues in April, and by his own resort to a massive bombardment later in the 1916 campaign; see, for example, Brusilov, Moi vospominaniia, (1946), pp. 183-190; Messner, Lutskii proryv, pp. 54-56, 125ff.; Stone, The Eastern Front, pp. 256ff.; and Knox, v. 2, pp. 452-456, 471-472, 491-495.

294

Rostunov, Russkii front, pp. 325-327; Stone, The Eastern Front, pp. 255-263. With regard to the Russians' recognition of the need for automobile transport, as well as Brusilov's own skepticism about the value of cavalry, see Knox, v. 2, pp. 461, 505-506.

295

For a brief account (with bibliography) of the Mitau Operation, see "Aa(Kurland), Battles on, 1916-1917," Jones, Military-Naval Encyclopedia, v. 1, pp. 25-26. Also see Knox, v. 2, pp. 517-518; Rostunov, Russkii front, pp. 338-343; and N. Stupin, "Bor'ba za ukreplennye pozitsii v usloviakh russkogo teatra voennykh deistvii, Mitavskaiia operatsiia 1916-1917 gg.," Voенно-istoricheskii sbornik, (Moscow, 1919), vyp. 2, pp. 34-64.

296

A. Syromiatnikov, Nastuplenie i oborona v usloviakh pozitsionnoi voiny, (Petrograd, 1917), pp. 94-99.

297

On the capture of Erzerum, see Allen and Muratoff, pp. 344-363; Arutiunian, pp. 227-238; N. Korsun, Erzerum-skaia operatsiia na Kavkazskom fronte mirovoi voiny v 1915-1916 gg., (Moscow, 1938); and K. Akhatkin, "Shturm Erzeruma 2 fevralia 1916 g.," Chasovoi, Paris, (February, 1929), No. 3-4, pp. 19-20. Russian military-naval combined operations along the Black Sea coast are described in Allen and Muratoff, pp. 294-296, 369-372, 378-383; Arutiunian, pp. 240-242; N.V. Novikov, Operatsii na Chernom more i sovmetnye deistviia armii i flota na poberezh'i Iazistana, (Moscow, 1927); the same author's Operatsii flota protiv berega na Chernom more v 1914-1917 gg., (Moscow, 1937); and A.P. Lukin, "Zavladenie Trapezundom," Posledniia Novosti, (24 January, 1933), No. 4325.

298

On the mood of the army at this time, see Marc Ferro's interesting analysis in "The Russian Soldier in 1917: Undisciplined, Patriotic and Revolutionary," The Slavic and East European Review, v. 30, (1970), pp. 483-512; M.S. Frenkin, Russkaia armiiä i revoliutsiia 1917-1918, (Munich, 1978), and the numerous works cited by Wildman, pp. 381-386, and in Gerhard Wettig, "Die Rolle der russischen Armee im revolutionären Machtkampf 1917," Forschungen zur Osteuropäischen Geschichte, (Berlin, 1967), Band 12, pp. 46-389. On the abortive June offensive see Rostunov, Russkii front, pp. 351-366; Knox, v. 2, pp. 627-652; A. Kavtaradze, "Iiun'skoe nastuplenie russkoi armii v 1917 godu," Voenno-istoricheskii zhurnal, (May, 1967), No. 5, pp. 111-117; and A.M. Zaionchkovskii, Strategicheskii ocherk voiny 1914-1917, Chast 7: Kampaniia 1917 g., (Moscow, 1923)..

299

The state of the Russian tactical "art" in 1914 is described in Jones, Advanced Guard, pp. 87-89; and Korsun and Kharkevich, pp. 264-286.

300

General Staff, War Office, Report on Foreign Manoeuvres in 1912, pp. 111-112.

301

On this issue, see the discussion in Von Wahlde, pp. 241ff., and Zhilin, Russkaia voennaia mysl', pp. 143-146. Extracts from many of the relevant texts are readily available in L. G. Beskrovnyi, ed., Russkaia voenno-teoreticheskaia mysl', pp. 415ff.

302

These are outlined at length in Fuller, Civil-

Military, pp. 196ff.

303

Ibid., pp. 34-36.

304

This almanach had five sections that included articles on current military affairs, bellettres, military history, book reviews, and a chronicle of recent events in general science and military technology.

305

Fuller, Civil-Military, pp. 35-36.

306

Ibid., pp. 198-207.

307

On efforts by officers to create a nationalist youth movement by founding the Russian Boy Scouts, and their interest in new technologies like aviation; see Jones, "Russian Military Traditions," p. 30, 43-44; Oleg Pantukhov, O dniakh bylykh. Semeinaia khronika Pantukhovykh, (Maplewood, NJ, 1969), pp. 210-217, and A.M. Viaz'mitinov, ed., Russkie skauty, 1909-1969, (San Francisco, 1969), pp. 13-36, on the scouts, and Zhilin, Russkaia voennaia mysl', pp. 205-233, on military-technical developments, aviation included. For the work of the military-historical society, see A. Kochetkov, "Russkoe voenno-istoricheskoe obshchestvo (1907-1914)," Voenno-istoricheskii zhurnal, (September, 1965), No. 9, pp. 94-99.

308

L.G. Beskrovnyi, Russkaia voennaia periodicheskara pechat' (1702-1916). Bibliograficheskii ukazatel', (Moscow, 1959), pp. 83-114.

309

Typical of the tactical discussions of the day were publications such as the Neznamov volumes mentioned above, his Tekushchie voennye voprosy, (St. Petersburg, 1909), and Boi (Etiud po prikladnoi taktike), (St. Petersburg, 1913); A.G. Elchaninov's Vvedenie sovremennoi voiny i boia, (St. Petersburg, 1909); N.B. Mikhnevich's Vliianie noveishikh tekhnicheskikh izobretenii na taktiku voisk, (St. Petersburg, 1913); N.N. Golovin's Vvedenie v kurs taktiki, (St. Petersburg, 1912); M.D. Bonch-Bruevich's, Uchebnik taktiki dlia voennykh uchilishch, Chast I, (St. Petersburg, 1914); and the Imperial Nicholas War Academy's two volumes, Ukazaniia po nekotorym voprosam taktiki, (St. Petersburg, 1911) and Ukazaniia po taktike, (St. Petersburg, 1913).

310.

Russia. War Ministry, Nastavlenie dlia vedeniia boia pekhotou. Proekt, (St. Petersburg, 1910). Typical of the semi-official handbooks is K.A. Vitsnuda, et al., Polevaja spravocnaia knizhka ofitsera, (6th ed., Odessa, 1913), pp. 114-327.

311.

See, e.g., Major General Turbin's lecture of 24 February (10 March) 1912 to the "Society of Zealots of Military Knowledge," Vospitanie v voiskakh. Distsiplina, kak osnova etogo vospitania, (St. Petersburg, 1912), pp. 20-24; M.D. Bonch-Bruevich's systematic criticism, "Proekt 'Nastavlenie dlia vedeniia boia pekhotnogo'," Izvestiia Imperatorskoi Nikolaevskoi Voennoi Akademii, (1910), No. 11, pp. 945-957; and the comments in V.M. Dragomirov, "Podgotovka," (1924), kn. 5, pp. 202-203.

312.

Russia. War Ministry, Nastavlenie dlia deistvii pekhoty v boiu.

313.

Russia. War Ministry, Stroevoi pekhotnyi ustav, (St. Petersburg, 1908). These are conveniently summarized in "Military Notes," Journal of the Royal United Services Institute, 52, (1908), pp. 1131-1134.

314.

"Criticism on the Draft of the Infantry Drill Regulations," ibid., pp. 1418-1420.

315.

See Korsun and Kharkevich, pp. 272-279, 282-284, and A. Ageev, ed., "Iz dnevnika N.P. Mikhnevicha," Voenno-istoricheskii zhurnal, (May, 1976), No. 5, p. 73.

316.

Other official regulations of note are the Nastavlenie dlia deistvii v boiu otriadov iz vsekh rodov oruzhii of 1908; the Nastavlenie po samookapyvaniu, Ustav stroevoi sluzhby artillerii, and Ustav stroevoi kavaleriiskoi sluzhby of 1909; the Nastavlenie po voiskovomu inzhenernomu delu dlia ofitserov vsekh rodov voisk of 1910; the Polozhenie ob obuchenii pekhoty and Obuchanie shtykovomu boiu of 1911; the Ustav polevoi sluzhba of 1912; the Nastavlenie dlia inzhenernykh voisk po spetsial'nomu obrazovaniiu. Podryvnyia raboty of 1913; and the Nastavlenie dlia strel'by iz vintovok and Perechen izmenenii v nastavlenii dlia strel'by iz vintovok, karabinov i revol'verov of 1914. These and numerous other manuals on all aspects of military service are listed in "Changes and Tendencies in the Russian Army," p. 1459; "The Present State of the Russian

Army," p. 1633; "New Regulations," Journal of the Royal United Services Institute, v. 56, (June, 1912), p. 869; and "Events of the Military Year 1911," p. 972.

317 Bushnell, "The Tsarist Army," pp. 2-6; Kenez, "Profile," pp. 150-158.

318 Jones, Advanced Guard, pp. 74-89. The manuals involved are listed in note 316 above. The development of the new field regulations is outlined in Korsun and Kharkevich, pp. 269-280, and K. Shkurak and N. Murzaev, "K istorii razvitiia russkikh polevikh i boevykh ustavov," Voennno-istoricheskii zhurnal, (November, 1962), No. 11, pp. 118-120. A critical analysis of the ustav used in Manchuria was made in A.G. Elchaninov, "Nash ustav polevoi sluzhby," Obshchestvo revnitelei voennykh znanii, (St. Petersburg, 1906), kn. 4, pp. 103-180.

On the maneuvers in general, see Gareev, Takticheskie, pp. 79-84; Gareev, "Iz istorii," pp. 100-101, and the comments in Korsun and Kharkevich, pp. 278-279. The directions for maneuvers in 1907, which sought to integrate the lessons of 1904-1905, are outlined in "Instructions for Summer Assemblies," Journal of the Royal United Services Institute, v. 51, (1907), pp. 1282-1284 (from the Vilna and Kazan Military Districts); "Observations on the Manoeuvres of 1907 of the St. Petersburg Military District," Ibid., pp. 1284-1286; and "Tactical Instructions to the Troops by the Governor-General of Varsovie," Ibid., pp. 1562-1567. On those after 1908, see General Staff, The War Office, Report on Foreign Manoeuvres 1908, pp. 151-156; Ibid. in 1909, pp. 190-191; and Ibid. in 1912, pp. 100-111. Efforts were made to tighten the refereeing by issuing new regulations in the form of N.A. Lokhvitskii's O posrednikakh na manevrakh, (St. Petersburg, 1911). Others dealing with the use of artillery, already had appeared in Russkii Invalid, (19 October, 1909); see "The Indication of Artillery Fire at Manoeuvres," Journal of the Royal United Services Institute, v. 54, (1910), pp. 260-261.

319

For example, see General Staff, The War Office, Report on Foreign Manoeuvres 1908, p. 154; Ibid. in 1909, p. 190; and Ibid. in 1913, p. 79. Also see the judgements of Knox, v. 1, pp. xxxi-xxxii; the earlier analysis of the American Major M.M. Macomb, "The Russian Infantry Soldier," Journal of the United Services Institute, v. 50, (1906), pp. 1015-1022, 1160-1168; and Colonel Wyndham's comments of 1908 in British Documents on Foreign Affairs: Russia, 1859-

1914, v. 5, p. 178.

320

On the very limited role played by Russia's cavalry after 1914, see the works cited in note 258 above. A critical review of the effectiveness of cavalry in maneuvers, and on the battlefield, written in light of the Manchurian defeats, is A. Matkovskii, "Konnitsa v boiu i na manevraakh," Obshchestvo revnitelei voennykh znanii, (St. Petersburg, 1906), kn. 1, pp. 111-118.

321 This point is made in "Voennye aforizmy M.I. Dragomirova," Voенно-istoricheskii zhurnal, (March, 1962), No. 3, pp. 119-123. Also see Bruce W. Menning, "The Army of D.A. Milutin and M.I. Dragomirov," (Unpublished paper presented at a conference at Cornell University, September, 1984), pp. 17-19, and A.M. Zhigulev's modern collection of Russkie voennye poslovitsy i pogorovki, (Moscow, 1960), pp. 4-5.

322

See, for example, Major-General A.N. Apukhtin, "O boevoi podgotovke pekhoty," Obshchestvo revnitelei voennykh znanii, (St. Petersburg, 1906), kn. 1, pp. 61-82; Major-General A.N. Rozenshil'd Paulin, "Boevaya posgotovka lichnago sostava armii," Ibid., kn. 2, 38-72; Drozd-Boniachevskii, "Sovremennye neopredelennost' i neustoiichivost' odnochnogo obucheniia v kavalerii," Voennyi sbornik, (September, 1909), No. 9, pp. 79-83; Turbin, Vospitanie, pasim; and the other works cited in the notes above.

323

These reforms can be traced in greater detail in "Progress of the Russian Cavalry Since the Russo-Japanese War," Cavalry Journal, v. 6, (1911), pp. 504-507; the "Russia" section of "Notes" in Ibid., v. 9, (1914), p. 121; "Machine-Gun Detachments," Journal of the Royal United Services Institute, v. 57, (1913), p. 128; "Events of the Military Year, 1911," pp. 962-963; and "The Year 1913 in Foreign Armies," pp. 103-104. The same sources also note the extensive, and expensive, efforts undertaken to ensure the quality of mounts. In particular, see "Army Remounts," Journal of the Royal United Services Institute, v. 52, (1908), p. 1309, and "New Organization of the Remount Department," Ibid., v. 54, (1910), pp. 258-259.

324

Wrangel, The End, p. 2.

325

On this, see the comments in Ibid.; Zaleskii, pp. 125-130; Shakhmatov, pp. 163ff.; Knox, v. 1, pp. xxvi; and

General Staff, The War Office, Report on Foreign Manoeuvres 1908, pp. 154-155; Ibid. in 1909, pp. 190-191; Ibid. in 1912, pp. v-vi, 106-107; and Ibid. in 1913, p. 80. These reports also contain much data on the rearmament and up-graded training then being introduced:

326

A.A. Neznamov, Tekushchie voennye voprosy, (St. Petersburg, 1909), p. 56. I

327

Neznamov, Trebovaniia, p. 10.

328

Neznamov, Sovremennaiia volna, pp. 6, 142-143.

329

Ibid., pp. 163, 167.

330

"Changes and Tendencies," p. 1460.

331

"Tactical Instructions to the Troops," pp. 1563, 1565.

332

Nikolai Staff College, Ukazaniia (1911), p. 33. Italics in the original. On this issue, also see Jones, Advanced Guard, pp. 66-87.

333

"Changes and Tendencies," p. 1460.

334

Barsukov, Russkaia Artilleriia, v. 1, pp. 148-149, 153-159; v. 2, pp. 127-128, 284-286, 366-381; Barsukov, Artilleriia, v. 3, pp. 8-9, 285-289; Stone, "Historical Background," pp. 10-14.

335

Bushnell, "The Tsarist Army," pp. 2-4, 12-13.

336

Ibid., p. 4.

337

Amburger, pp. 312-313.

338

Bushnell, p. 4; Dragomirov, "Podgotovka," (1924), kn.

5, pp. 189-190; and on Zarubaev himself, Markov, Moya sluzhba, pp. 126ff..

339

"New Programme in the Infantry and Cavalry Military Schools," Journal of the Royal United Services Institute, v. 52, (1908), pp. 415-416.

340

"Instructions for the Summer Assemblies," p. 1284. Italics in the original.

341

"Tactical Instructions to the Troops," p. 563.

342

Bushnell, "The Tsarist Army," p. 3.

343

General Staff, "The War Office, Reports on Foreign Manoeuvres, 1908, p. 154.

344

On these and other developments, see "Changes and Tendencies," pp. 1462, 1465. V.A. Zakharov, "Sostoianie i razvitiie," pp. 150-164, discusses the work of Russian engineers during the years 1904-1916.

345

"Changes and Tendencies," pp. 1462, 1465.

346

British Documents on Foreign Affairs: Russia, 1859-1914, v. 5, p. 30; "Musketry Courses for Infantry Officers," Journal of the Royal United Services Institute, v. 52, (1908), pp. 989-990; and "Changes and Tendencies," p. 1456.

347

"Instructions for the Summer Assemblies," p. 1283.

348

British Documents on Foreign Affairs: Russia, 1859-1914, v. 5, p. 178.

349

"Changes and Tendencies," p. 1461.

350

"Musketry," Journal of the Royal United Services Institute, v. 55, (July, 1911), p. 951.

351 Ibid., p. 951; "Machine Gun Practice Camps," Ibid., v. 56, (January, 1912), pp. 113-114; "Events of the Military Year, 1911," pp. 968-970; and General Staff, The War Office, Report on Foreign Manoeuvres in 1912, pp. 104-106. For other comments on the state of Russian rifleman-ship, see Bushnell, "The Tsarist Army," pp. 2, 11-12; Makarov, Moia sluzhba, p. 129; Kamenskii, "Otryvki vospominanii," pp. 3-4; and Eliseev, "General Lesh," pp. 19-21.

352 Snyder, pp. 191-193.

353 See the measures discussed in Intendantskoe Delo, (St. Petersburg, 1909-1910) and discussion in "The Tsarist Officer," pp. 778-779.

354 Snyder, p. 191-192.

355 Bushnell, "The Tsarist Army," pp. 2-6; Bellamy, "Seventy Years," pp. 30-32; Korsun and Kharkevich, pp. 269-286; and the various texts and manuals mentioned above.

356 General Staff, The War Office, Report on Foreign Manoeuvres in 1913, p. 79.

357 Stone, The Eastern Front, pp. 23-24; General Staff, The War Office, Report on Foreign Manoeuvres in 1912, pp. 107-108; "Changes and Tendencies," pp. 1463-1464; Wyndham, in British Documents on Foreign Affairs: Russia, 1859-1914, v. 5, p. 178; Barsukov, Russkaia Artilleriia, v. 1, pp. 103-114; and Golovin, Iz istorii, p. 29.

358 Ibid., pp. 29-31. Golovin also gives high marks to the first-line cavalry.

359 Yamanov, pp. 155-170; Korsun and Kharkevich, pp. 286-292. For further on Gumbinnen, see note 274.

360 Bellamy, "Seventy Years," p. 30; Jones, "Advanced Guard," pp. 2-3.

361 The cavalry's disappointing role in East Prussia in 1914 is noted, for example, in Ironside, pp. 71-85, 110-111, 143; Stone, The Eastern Front, pp. 50, and the diary

of Baron Aleksēi P. Budberg in his Papers in the Hoover Institution.

362

N. Menzelintsev, "Partizany 1915 goda," Voennaya byl', (July, 1967), No. 86, pp. 9-12.

363

See the duties described in Littauer, pp. 188-221; V.N. Zvegintsov, Kavaleriia v Velikuiu i grazhdanskuiu voynu, 1914-1920 god, (3 vols.; Paris, 1936-1966), v. 2, pp. 123ff.; v. 3, pp. 12-34, 48-76; and Kirasir Ego Velichestva v Velikuiu Voynu, (3 vols.; Paris, 1938-1944), v. 2, pp. 148ff.; v. 3, pp. 13-30.

364

Knox, v. 2, pp. 505-508.

365

General Staff, The War Office, Reports on Foreign Manoeuvres, 1908, p. 154.

366

See Stone, The Eastern Front, pp. 128-138, and the other references on these actions cited in note 287. The tactics employed by the Russians on the eve of the disaster are described in V.V. Fedulenko's "Nastuplenie 1-i brigady 68-i pekhn. div. v Vost. Prussii v marte 1915 g.," Voennaya byl', (January, 1958), No. 28, pp. 21-22. A description of trench warfare on the Eastern Front is provided by E.A. Milodanovich, "Na Dvina v 1915-1917 gg.," Ibid., (January, 1963), No. 120, pp. 8-19; (March, 1973), No. 121, pp. 22-23. The changes in the equipment provided the troops in accord with changing tactics during 1914-1917 are described in "Vooruzheniie i obmundirovanie," Ibid., (January, 1970), No. 102, pp. 33-34.

Zakharov, "Sostoianie i razvitie," pp. 162-172, discusses the attempts of Russia's military engineers to come to terms with the changed conditions brought about by trench warfare, and Korsun and Kharkevich (pp. 294-314) deal with the tactical problems involved. The development of the army's engineering service per se is outlined in considerable detail in A.V. Viktorov, "Organizatsiia polevykh inzhenernykh voisk v kampaniiu 1914-1918 goda," Voenno-inzhenernyi sbornik. Materialy po istorii voyny 1914-1918 gg., (Moscow, 1918), kn. 1, pp. 1-120; and "Organizatsiia voenno-inzhenernogo upravleniia v deistvuiushchei armii," Ibid., (Moscow, 1919), kn. 3, pp. 1-192.

The growth in trench systems on the Eastern Front can be

followed in detail from S.A. Tsabel's articles "Ukreplenie pozitsii," Ibid., kn. 1, pp. 133-170; "Sredstva preodoleniia iskusstvennykh prepiatstviu," Ibid., pp. 171-196; "Avstriiskaia ukreplennaia pozitsiia pod g. Galich," Ibid., (Moscow, 1919), kn. 2, pp. 293-318; "Ukreplenie pozitsii," Ibid., Kn. 3, pp. 215-284; V. Polianskii, "Evolutsiia ukreplenn. pozitsii v mirov. voine i nekotorye vyvody dlia budushchago, Voennyi sbornik, (Belgrade, 1923), kn. 4, pp. 213-215; and the official manual published by Stavka in 1916, Ukazaniia po ukrepleniiu pozitsii. Insights into these developments can be gained from G.K., "Vospominaniia sapernogo ofitsera o voine 1914-1917 gg. Teoriia i praktika," Voennaia byl., (January, 1970), No. 102, pp. 27-30.

367

Messner and Eikhenbaum, p. 4. Also see Stone, The Eastern Front, pp. 222-223; and Korsun and Kharkevich, pp. 298-305. As for new manuals, during 1916 Stavka published Obshchie ukazaniia dlia bor'by za ukreplennye polosy, Chast I, in two editions, and Ukazaniia po inzhenernoi podgotovke ataki nepriatel'skikh pozitsii. On the training of the artillery, and the appropriate manuals, see Barsukov, Russkaia artilleriia, v. 2, pp. 248-262. A number of other new manuals on military engineering also appeared and are listed in Zakharov, "Sostoianie i razvitiie," p. 171.

368

Stone, The Eastern Front, pp. 213-214; Messner and Eikhenbaum, p. 3; Barsukov, Russkaia artilleriia, v. 2, pp. 359-366; and the various references cited in notes 239, 288, and 367 above.

369

Korsun and Kharkevich, pp. 312-313; Stone, The Eastern Front, p. 223. See Knox, v. 2, pp. 397-398, 405-411, and 452-456, for reports on the attitude of senior Russian commanders in 1916.

370

Stone, The Eastern Front, pp. 227-231, outlines these problems admirably, while the diagrams of trench systems presented by Korsun and Kharkevich (p. 314) illustrate the dimensions of the problem. On the course of operations from December 1915 to April 1916, see the references in note 288 above.

The failure of other Russian efforts during the summer and autumn of 1916 is outlined in general histories like Rostunov, Russkii front, pp. 318-325. The disastrous battles of the Guards or Special Army are detailed by Knox (v. 2,

pp. 483-509), by various regimental histories like Gosh-tovt, Kirasir'y, v. 2, (pp. 69-83), and B. Adamovich's Trysten, 15-28, VII 1916, (Paris, 1935), passim, and in memoirs such as Baron S.A. Törnau's S rodnym polkom (1914-1917 gg.), (Berlin, 1923), pp. 93-111, Makarov's, Moia sluzhba, (pp. 305-347), Ia. Dem'ianenko's, "Reka Stokhod i Rudka-Chervishchenskii platsdarm," Voennaiia byl', (July, 1966), No. 80, pp. 26-29, and V. Milodanovich's "1916 god. Iz boevoi zhizni L. Gv. 1-go Strelkovogo Ego Velichestva polka," Ibid., (October, 1963), No. 63, pp. 23-30. The lack of success, despite the high costs in men and materiel, provoked a memorandum or Zapiski from Duma President Rodzianko that was extremely critical of the high command. The only extant copy is available in his papers in the Hoover Institution, but its conclusions were quoted by Golovin "Voenniaia usilia," v. 2, pp. 165-166), who presented it to that library.

371

The tactical preparation for this offensive is discussed in Korsun and Kharkevich, pp. 299-304; Stone, The Eastern Front, pp. 232-240; Messner and Eikhenbaum, pp. 3-7; Neznamov, Dva proryva, pp. 115-131; Bazarevskii, pp. 27-60; Rostunov, General Brusilov, pp. 124-139; Rostunov, Russkii front, pp. 294-311; Nastuplenie Iugo-Zapadnogo fronta, pp. 114-189; Colonel Boiarintsev, "Stranitsy slavy russkogo oruzh'ia - Lutskaia proryv," Voennaiia byl', (January, 1967), No. 83, pp. 30-32; and the other sources listed in notes 289-291. Also see the Staff of the Southwest Front's Ukazaniia Iugo-Zapadnogo fronta po podgotovke ataki ukreplennykh pozitsii, issued in 1916.

On the role of the artillery and engineers, see Barsukov, Russkaia artilleriia, v. 2, pp. 340-381; V. Kirei, Artilleriia ataki i oborony. Vyvody iz primeneniia artillerii na Russkom fronte v 1914-1917 gg., (2nd ed.; Moscow, 1936), passim; V. Milodanovich, "Proryv fronta 9-oii Armiei 22-28 maia 1916 goda (Lichnye vospominaniia)," Voennaiia byl', (March, 1966), No. 78, pp. 10-14; his "General Vasilii Fadeevich Kirei," Ibid., (March, 1959), No. 35, pp. 6-10; and Zakharov, "Sostoiianie i razvitie," pp. 164-172. Of special interest is the attempt to integrate aerial units into the ground troops' operational and tactical planning; on this see Duz', pp. 56-66.

372

See the discussion in Messner and Eikhenbaum, pp. 6-8, and Stone, The Eastern Front, pp. 249ff, among others.

373

For such signs, see the Mitau Operation discussed

above, along with the works cited in note 295; the discussion in Syromiatnikov's Nastuplenie i oborona; the preparations for the summer offensive of 1917 (see note 298); the issue by Stavka in 1917 of Nastavlenie dlia bor'by za ukreplennye polosy, Chast' II: Deistviia artillerii pri proryve ukreplennoi polosy, and Chast' III: Deistviia artillerii pri oborone ukreplennoi polosy; the publication of V. Kirei's, Artilleriia oborony, (Izd. Armeiskogo Vestnika, 1917); and the appearance of Russia's first manual for combatting armor, the Nastavlenie dlia bor'by s nepriatel'skimi sukhoputnymi bronenostsami, (Tip. Stavka, 1917).

374

Stone, The Eastern Front, pp. 166-171, 224-225.

375

Ibid.; Wildman, pp. 91-94, 106-107; Golovin, Voen-nyia usilia, v. 2, pp. 157-174; and the documents in Sidorov, Revoliutsionnoe dvizhenie v armii i na flote, pp. 146-310, 343-405, and Kakurin, Razlozhenie, pp. 1-9. Echoes of these symptoms also are found in memoirs such as A.I. Chereponov's, V boiakh rozhdennaia, (Moscow, 1970), pp. 11-30; V.B. Stankevich's, Vospominaniia, 1914-1919 g., (Berlin, 1920), pp. 48-59; in many of those collected in P.A. Golub, ed., Oktiabr' na fronte. Vospominaniia, (Moscow, 1967), and in those listed in notes 35 and 39 above.

376

For example, Wildman, p. 107. The same assumption naturally underlies such Soviet studies S.G. Kapshukov, Bor'ba bol'shevistskoi partii za armiiu v period pervoi mirovoi voiny (1914 g. - mart 1917 g.), (Moscow, 1957), and F.A. Shurygin, Revoliutsionnoe dvizhenie soldatskikh mass severnogo fronta v 1917 godu, (Moscow, 1958), pp. 7-26, among others.

377

David R. Jones, "The Imperial Russian Life Guards Grenadier Regiment, 1906-1917: The Disintegration of an Elite Unit," Military Affairs, (October, 1969), pp. 289-301.

378

Bushnell, "Peasants in Uniform," pp. 567-570; also see his Mutiny and Repression, pp. 11-23.

379

Lieven, pp. 113-114; Krasnov, "Pamiat'," passim.; Jones, "The Imperial Russian Life Guards," pp. 296-298. While such traditions were especially important in such elite units as those of the Guards, the cavalry and the

grenadiers, the regimental histories of line units demonstrate that similar traditions existed throughout the lowly infantry; see, for example, the numerous titles listed in Lyons, pp. 75-140.

380

This is the conclusion to be drawn from Jones, "The Imperial Life Guards," pp. 298-300. Further, an examination of numerous other regimental histories suggests the fate of the Life Guards Grenadiers was fairly typical. For similar accounts, see K. Popov, ed. Leib-Grivantsy v Velikoi Voine, (Paris, 1959), pp. 175-188; S. Andolenko, L.-gv. Preobrazhenskii polk v Velikuiu Voynu, (n.p., c.1964), pp. 12-16; Sergei Shpakovskii, Pamiatka 14-go Olonetskogo Korollia Serbskogo Petra I pekhotnogo polka, (Buenos Aires, 1972), pp. 6, 11, 27-32; B.V. Vevern, 6-ia Batareia, 1914-1917 g.g., Povest' o vremeni velikago Rodine, (2 vols.; Paris, 1938), pp. 131-182; N.V. Kudashev and V. Azar, Krimskii Konnyi ee Velichestva Gosudaryni Imperatritsy Aleksandry Feodorovny polk, 1784-1922, (San Francisco, 1978), pp. 102-112, among others. A typical account of the process is S. Novikov's, "Konets rodnogo polka," Voennaia byl', (January, 1968), No. 89, pp. 17-25.

381

Knox, v. 2, pp. 551-552; Rostunov, Russkii front, pp. 328-333. This also is evident from the ubiquitous manner in which the Russian question intruded into the discussions of Britain's Imperial War Cabinet in late 1916-early 1917. See, for example, the Millner Papers, Docs. AE 52-53, 208-210; and War Cabinet Minutes (CAB, 23/1) for meetings 2, 12, 22, 26, 29, 30, 31, 32, 33, 36, 38, 37, 40, 43, and 47, (11 December, 1916 - 29 January, 1917), in the Public Record Office, London.

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 especially, diaries on East Prussian operations in
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