TITLE: Coping with Crisis: Enterprise Adaptation in the Russian Defense Sector

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THE NATIONAL COUNCIL FOR SOVIET AND EAST EUROPEAN RESEARCH

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Synopsis

Having considered the various economic and political challenges confronting Russian defense enterprises in a preceding study,1 in this paper I turn to the ways in which defense managers have responded and adapted. There are clear patterns evident in the responses of defense managers to their common challenges. Most managers have sought to maintain the organizational integrity and size of their enterprises. Beyond this, their responses can be broken down into four categories.

1. Investment Strategies. The common problem of limited investment resources forced most enterprises to look to the state for renewed support. Defense and civil enterprise managers for a time ignored liquidity problems by trading with one another on credit. When the size of this inter-enterprise debt quickly grew to the size of the existing ruble supply, the government was forced to step in and bail the enterprises out. Although some enterprises sought innovative means of developing financing -- through issuing of shares or trading resources on military exchanges -- the number of such cases still seems to be limited.

2. Cooperative Strategies. Intra-sectoral and Intra-regional. Some enterprises have developed cooperative agreements with other organizations in their own sector in order to secure reliable suppliers or partners. In some cases these efforts appear to be grass roots efforts to restore the stability of the old ministerial coordinating and planning structure. Other enterprises looked to local governments for help in locating partners in their region. This type of cooperation could represent the beginnings of a market at the local level.

3. Entrepreneurial Strategies. Some of the more enterprising defense managers have started privatizing the most valuable parts of their plants to engage in profitable non-defense work. Although this process is often questionable in legality and leaves the state holding the most inefficient parts of the old enterprises, it is a potentially promising route to an efficient reorganization and privatization of some of the defense industries.

4. Political Strategies. Defense managers have shown themselves to be increasingly adept at using their local government and interest groups to articulate their political demands to the Federation government. In contrast to the Gorbachev period, when defense managers did not unite in their resistance to the central government, managers today appear to recognize the benefits of political organization. Having created interest group "leagues" or "unions," these managers have formed alliances with larger, more influential industrial groups like the Civic Union.

These phenomena have distinctly different implications for the future of the Russian defense industrial base and the prospects for successful economic reform. In the former case, the defense enterprises that survive the current crisis are likely to be the lucky few that are considered by the Russian government to be essential, or those with particularly innovative managers who can make their plants economically viable. Yet there are grounds for optimism for economic reform because in many cases the defense sector's loss is the civil economy's gain. In particular, the shift of innovative managers and workers from defense to private commercial work through nomenklatura privatization is a potentially huge conversion wind-fall.
Having considered the various economic, social, and political problems of Russian defense enterprises in a preceding study,¹ in this paper I assess the institutional responses and adaptation of defense enterprises to these conditions. I conclude by considering the implications of these phenomena for the future of the Russian defense industrial base and, perhaps more importantly, for the success of political and economic reforms in Russia.

Given their autonomy from any coordinating framework with the state or each other, the responses and adaptation of defense enterprises to these new conditions are somewhat differentiated across the range of enterprises and design bureaus. Yet there are clear patterns emerging in the strategies adopted by the individual enterprises as they cope with similar problems. Most important, virtually all of the enterprises and design bureaus find themselves struggling to maintain their organizational integrity in conditions of a dearth of investment resources described above. As they encountered sharp cuts in defense orders, most defense enterprises reduced the tempo of their operations but opted not to reduce their staffs.² The further responses of defense enterprises can be divided into four different categories: investment, cooperative, entrepreneurial, and political strategies.

Investment Strategies

Not surprisingly, once defense enterprises and design bureaus found themselves autonomous but lacking resources to keep their doors open, they turned back to the Federation government for support. As deputy premier Georgiy Khizha describes it, the Federation
government was then presented with perhaps the worst of all worlds in its relationship with industry: enterprises had become independent from the state in terms of responsibility, but still demanded resource support from the government.³

Not all of the enterprise requests were strictly for government hand-outs. Scattered enterprises made innovative conversion proposals that the Gaydar government supported on a case-by-case basis.⁴ Although the rest of defense enterprises were not successful in pressuring the government for the first half of 1992, ultimately they were able to play on government fears of mass unemployment and resulting political turmoil to obtain a series of industry-wide subsidies to pay employee salaries and maintain critical facilities.⁵

When confronted with a lack of government resource support during the first half of 1992, defense enterprises joined civil enterprises in an apparently spontaneous explosion of trading on credit. In order to continue producing, most enterprises continued previous supply arrangements or established new ones by means of the industrial equivalent of an I.O.U. By the early summer of 1992, the Ministry of the Economy was estimating that the total debt between enterprises had ballooned to over 3 trillion rubles. At the same time, however, industrial production was declining to a level that was 25 percent less than the corresponding period in 1991,⁶ thereby eliminating any hope that enterprises would be able to generate the revenues needed to pay their debts. Not surprisingly, defense and commercial enterprises clamored for the government to bail them out. Although the Yeltsin-Gaydar cabinet initially strongly opposed these calls, it caved in due to two factors: a somewhat independent State Bank chairman -- Viktor Geraschenko -- who was willing to help the
industrialists by extending state credits, and a growing realization that the industrial sector would collapse without some state intervention.

Defense enterprises have employed a number of other strategies to obtain investment, with varied levels of success. On the positive side, many enterprises have taken advantage of the newly developed network of military exchanges in which enterprises can trade their resources or products. For example, a Tula aviation enterprise can sell off its excess steel or barter it for supplies that it needs. Although this is one of the developing bright spots for the conversion of the defense sector and the marketization of the Russian economy generally, the volume of trade through the exchanges still appears to be small. Less successful have been defense enterprise efforts to secure foreign investment. Foreign investors continue either to stand on the sidelines or are only willing to put money into a limited number of non-defense sectors. Other innovative but not necessarily successful strategies include one pursued by the management of the Mikoyan United Design Bureau which sought to issue private shares of stock, but was unclear whether it would be legal under current Russian law.

Cooperative Strategies: Intra-sectoral and Intra-regional

In order to obtain supplies, finance, or new customers, defense managers have looked to cooperation with other enterprises in their industrial sector or geographic region. In the sectoral cases, many managers have joined to create "concerns," "joint-stock associations," or "joint stock companies" composed of a number of independent enterprises. The aim of these efforts is often to create a structure for direct, non-market transactions with other
enterprises. The logic is that supply relationships will be more reliable if the supplier and enterprise-consumer are integrated in a larger association. 9

During 1992 over 100 production organizations in the aviation sector adopted this strategy and linked up to form a single joint-stock association. 10 This behavior appears to be a grass-roots effort to restore some of the organization of the old industrial ministries structure. Although it is a logical response for troubled enterprises, this strategy does not seem to get at the long-term structural problems of inefficiency and excess capacity in the defense sector.

At the regional level, enterprises and design bureaus have worked with the help of local governments to find partners in production or supply arrangements. In the Irkutsk Oblast, for example, a number of enterprises amalgamated in order to cooperate in shaping a coordinated economic policy. 11 Regional cooperation is a potentially promising development in cases like Nizhniy Novgorod, where it appears that elements of a market economy are developing at the local level. On the negative side, this process of regionalization further reduces the Federation government’s ability to influence economic behavior around the country.

Entrepreneurial Strategies: Spontaneous Privatization and Brain Drain

The most enterprising defense managers have taken the initiative in a number of radical strategies such as self-privatization and opting out of defense altogether. While it appears that the government and Supreme Soviet have not yet agreed upon the extent to which the defense sector should be privatized, in fact a process of spontaneous privatization
is already under way. Many defense managers have used pre-existing legislation to their advantage by taking steps that *de facto* give them control over their enterprises. In these cases enterprising defense managers create an independent commercial "cooperative" or "small enterprise" within their enterprise or design bureau, often using their best labor and equipment.\(^{12}\) Thus, workers for the "small enterprise" or "cooperative" will often continue to be paid by their original enterprise and use its facilities but are engaged in, and profit from, unrelated commercial work. The projects that these organizations take on seem generally not to be defense related but are oriented toward a variety of civil demands.\(^ {13}\) Although the legality of this process is often questionable, it has been proceeding independently with some success since the Gorbachev period.

The implications of this strategy are positive for reform in Russia generally but decidedly negative for the defense sector. On the positive side, this process seems to be a conversion success story as some of the most enterprising managers, workers, and technologies from the defense sector are moving to the civil economy. This process may also in effect be streamlining the industrial behemoths into more effective, smaller operations. More problematic, however, are the implications of these developments for the industrial capacities that are left out. After the competitive parts of various enterprises and design bureaus are stripped out in order to form cooperatives or small enterprises, the remaining personnel and plant will probably be even more dependent upon government support. This process is also stripping the defense sector of its best people. Defense designers and manufacturers pursuing commercial ventures will in all likelihood lose many of the skills and techniques that they
used for purely defense work. Overall, therefore, the defense industrial sector is confronting yet another crisis in the loss of the core of its institutional memory.

**Political Strategies**

Defense enterprise managers have shown themselves to be increasingly adept in employing various political strategies to push their demands on the political system or to develop new cooperation with other groups. This contrasts starkly with enterprise behavior during the period of the Gorbachev conversion program, when enterprises did not unite to resist government orders, but rather contributed to the economic collapse by ignoring state orders and agreements with other enterprises. During the current period, the conditions for political cooperation among enterprises seem more favorable and managers appear to have learned the risks of going it alone. Thus, today defense enterprise managers are relying on two political strategies to pursue their interests: one that works through regional administrations and a second that relies on organized political interest groups -- "Unions" or "Leagues" -- at the federal level.

While the Federation government has sought to turn a deaf ear to the demands of the defense enterprises, managers have found a better reception with local and regional governments. A defense enterprise manager, as the provider and representative of tens of thousands of local workers, wields a fair amount of political clout in local and regional affairs. Local governments traditionally have depended upon tax revenues from defense production in their districts, especially in those regions with a large concentration of defense enterprises like Tula or Udmurtiya. Furthermore, regional governments will deal most directly with the
consequences of large scale unemployment and social unrest if local defense enterprises start shutting down or scaling back. Problems of the demilitarization of the economy are even more troublesome in Russia than in the U.S. and elsewhere because, as noted above, in the majority of cases enterprises provide most of the apartments and social services for their employees. If the enterprise releases its workers, these responsibilities will be dumped in the lap of local government.

This enterprise-local government linkage may be even more pronounced now given the development of representative political institutions. Even during the Soviet period, regional governments acted as advocates and representatives to the Center for the industries of their regions. Now that defense workers can vote for their local representatives, these administrations are probably even more responsive to local industrial demands.

There are many cases of local governments working to aid their local defense enterprises in finding work or pressing their agenda at the federation level. In St. Petersburg, for example, the city government of Anatoliy Sobchak has been very active in developing a regional conversion program as well as demanding additional resources from Moscow. The city government in Moscow, furthermore, has actually been funding and placing orders with local defense enterprises.

The second political strategy employed by the defense industrialists entails the creation of organized interest groups in the defense sector, and the formation of alliances between these "unions" and interest groups in the larger industrial sector. In order to press their agenda at the federation level directly with the Yeltsin government or through the Supreme Soviet, various defense industrialists have organized unions such as the Russian
League of Defense Industrialists\textsuperscript{18} and the All Russia Trade Union of Workers of the Defense Industry.\textsuperscript{19} These unions, as well as individual defense managers, have also allied with the various non-defense interest groups that have come to prominence since the Spring of 1992. Defense interests, for example, are reportedly well represented in Arkadiy Volskiy's Union of Industrialists and Entrepreneurs\textsuperscript{20} and the Civic Union. These groups have had some success during 1992 in pressing the government to release subsidies to industry, to appoint allies of the industrialists to cabinet positions, and to ease the pace of the reform process.

Despite the attention that these unions have garnered in the Russian and Western press, however, there are serious questions regarding the extent that these coalitions represent a large share of enterprises. Although each of the unions or leagues makes impressive claims of its size and influence, the membership of these groups often overlaps and it is never clear how much allegiance they can count on from autonomous enterprises. By the end of 1992, there were growing rumblings from various industrialists that the leaders of Civic Union and some of the other groups are just former party officials who are more interested in advancing their personal interests than representing industry.\textsuperscript{21} Furthermore, although meetings between the industrial unions and representatives of the government generate a lot of attention in the press, at the December 1992 Congress of People's Deputies the Civic Union showed itself to be more of a random trouble-maker than a group that could count on the votes of its members.

Moreover, many of the civil interest groups have not shown any inclination to press specifically defense industrial interests over general industrial concerns. While they
generally argue for the protection of the core of the defense sector from market forces, the concerns of these groups are focused on broader industrial issues. Most of the industrial leagues and unions appear to agree with the need to cut defense industrial expenditures sharply, if for no other reason than to spread limited resources to the rest of industry. In fact, it is not surprising that the civil industries -- the poor cousins to the defense sector throughout the Soviet period -- do not go out of their way to support the defense industries.

**Implications**

When considering the plight of the Russian defense sector today, it is important to differentiate between the implications for future Russian defense industrial policy and the prospects for economic reform and conversion. For the former, the outlook is not positive, but for the latter there are some grounds for optimism.

Despite the apparent stall in the Yeltsin government's reform program at the end of 1992, the plight of Russian defense enterprises in the near- to medium-term seems today to be no better than it was during the Gaydar period. The problems faced by Russian defense enterprises are largely structural in nature: given a failing economy and low levels of demand for new armaments, there are too many defense enterprises that are too large and that are poor economic performers in a market environment. Moreover, defense enterprises do not have very many political friends in Russia today. The Ministry of Defense and the government have a number of more important priorities while other industrialists may look at the previously privileged defense sector as a competitor for limited resources. Thus, it is
difficult to conceive of a coherent, streamlined defense industrial base emerging from the likely chaos of the next decade.

Instead, the defense industrial capabilities that survive the current shake-out will be those that benefit from resourceful managers who are inclined to stay in defense and are able to convince the Federation government that they are a national interest, who can exploit their political ties to local government, or who can streamline their enterprises in order to make them economically self-sufficient. The relatively small size and non-production orientation of defense design bureaus should make them easier to preserve than the larger enterprises. Yet even the defense capacities of these organizations may be lost as design bureaus follow the incentives to more profitable commercial work.

Looking beyond security questions to economic reform more broadly, there are some grounds for optimism. The "Brain Drain" of highly qualified managers and workers from the defense sector is a potentially huge conversion wind-fall for the civil economy. Despite the questionable legality of spontaneous privatization, furthermore, this phenomenon may be a route to success for the reform process by privatizing and reorganizing the huge industrial behemoths of the Soviet period.

Although the overall position of Russian defense enterprises today is fairly grim, defense enterprise managers in many cases have shown themselves to be more resourceful than one might have predicted even 12 months ago. At times they have skillfully exploited links to local governments or to interest group coalitions to press their political and economic agendas. While their success in terms of economic performance has been limited, they have scraped through the first year of crisis by running up debts and securing hand-outs from the
government. It is questionable, however, whether even a sympathetic government will be willing to continue to bail out the defense sector and industry at the expense of a larger economic recovery.
Notes


2. The Gagarin aviation enterprise in Komsomolsk-na-amure provides an illustrative example: Although the enterprise's 19,000 employees are capable of producing 10 Sukhoi 27 fighters per month, by October 1992, they were slowed to a production rate of 2 per month while the management was fighting to retain its work-force. See Interfax, in English, 1704 GMT, October 19, 1992, reprinted in Foreign Broadcast Information Service Daily Report -- Central Eurasia (FBIS-SOV) 92-204, p. 4.


7. Foreign investors to date are avoiding the defense sector, sticking to more likely growth industries such as communications, services, and mining. See "Interfax Business Report," Interfax in English, 1657 GMT, July 6, 1992 via Kyodo in FBIS-SOV 92-131, pp. 30-31.


   Definitional note: A Joint Stock Association may also be a reorganization of single enterprise by means of issuing shares for the full value of that organization. Since most of the shares are subsequently held by the state, this process does not make the enterprise fully private. Rather, the official legal status of a joint-stock association puts the organization in a middle ground between a state enterprise and a private firm.


12. On the creation of cooperatives and small enterprises, see Johnson and Kroll, *op cit*, pp. 296-299.

13. The experience of a Moscow defense research institute is illustrative. The Scientific Research Institute of Thermal Processes had been responsible for developing the Katyusha rocket system and had been developing a space-based laser when the program was canceled in 1991. The management of the institute created a private scientific research company from one of the institute’s departments and subsequently went to work on gas heat generators for home use. See Dmitriy Frolov, "Space Superweapon Did Not Go Through: This Did Not Grieve Its Creators Too Much. They Are Ready To Heat Their Homes," *Nezavisimaya Gazeta*, February 26, 1992 translated in *FBIS-SOV* 92-054, pp. 51-52.


15. See, for example, the efforts of various regional administration in energy politics during the Brezhnev and Gorbachev periods in Thane Gustafson, *Crisis Amid Plenty: The Politics of Soviet Energy Under Brezhnev and Gorbachev*, (Princeton: Princeton University Press, 1989).

16. In the St. Petersburg case, the local government and defense industrialists held a number of meetings with the Federation government during the first half of 1992. Although the local


18. The president of the League is Aleksey Shulunov, the general director of the NPO imeni P.S. Pleshakov. One of the organizers is Sergey Shulkin from the All Russia Trade Union of Workers of the Defense Industry. The League was founded in February 1992 and seeks Federal government intervention to stabilize the situation in the defense sector. See Lt. Colonel A. Vorob'ev, "'Oboronka' podaet 'SOS'" [The Defense Industry Is Sending an SOS], Krasnaya Zvezda, March 27, 1992, p. 2.

19. The Chairman of the Union's Central Committee is Sergey Shulkin. The Trade Union founded in November 1991 for the task of social protection of defense workers. It claims to have united nearly 80 percent of the workers of formerly Soviet military plants and research institutes. See TASS International Service in Russian, November 20, 1991 in FBIS-SOV 91-228, P. 56.

20. See the comments of Vice President Aleksandr Rutskoy in "Without Retouching," presented by Sergey Torchinskiy and Tatyana Krasnov, with Vice President A. Rutskoy, Moscow Russian Television Network, 1745 GMT, June 18, 1992 in FBIS-SOV 92-122, pp. 29-33.