

Cities in Which Life Has

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Sociologists got access to Russia's "closed" cities several years ago. How did they find things there?

Russia's "closed" cities can only be visited with special permission. They are under as tight security as strategic nuclear missile bases. The facilities and the products they churn out as well as the people who live there are heavily guarded. Until recently those cities were not only closed but also classified. The uninitiated were not even supposed to know about their existence. The names of the "nuclear cities" were kept secret. The veil of secrecy was lifted following the end of the Cold War.

Russia's nuclear production complex consists of ten cities which are connected organizationally and technologically. All of them are located in remote regions of the former USSR. They are far from its western borders, primarily in the Urals and Siberia.

Arzamas-16 (Sarov) and Chelyabinsk-70 (Snezhinsk), which have complete production cycles from research to production of nuclear warheads, are the most strategically important closed cities. The Institute of Experimental Physics, the country's main nuclear research institute, is located in Arzamas-16, while the Research Institute of Technical Physics—in Chelyabinsk-70.

There is an underground mining-chemical works in Krasnoyarsk-26 where plutonium and rare-earth elements are produced and nuclear waste stored. Krasnoyarsk-45 and Sverdlovsk-44 are engaged in uranium enrichment, Tomsk-7—plutonium production and uranium enrichment, and Chelyabinsk-65—in processing radioactive waste. Other nuclear cities produce serial nuclear warheads.

Currently, the key problem faced by these cities is not production but storage and destruction of weapons as well as preventing the drain of nuclear material and the specialists who developed the nuclear weapons.

Russia's closed cities always used to be in a privileged position. Decent wages and good food supply and housing conditions compensated for their residents' lack of individual freedom. Scientists and designers were drawn by the interesting work, modern laboratories and stable financing of research.

The situation is different now. The number of military orders shrank dramatically following the end of the Cold War. Conversion to civilian output did not materialize. The closed cities' residents have encountered problems typical of the coun-



Russias' nuclear cities

Classified name	Official name	Population (thou people)
Zlatoust-36	Trekhgornyy	31
Chelyabinsk-70	Snezhinsk	48
Sverdlovsk-45	Lesnoi	55
Penza-19	Zarechnyy	64
Krasnoyarsk-45	Zelenogorsk	66
Arzamas-16	Sarov	82
Chelyabinsk-65	Ozersk	89
Sverdlovsk-44	Novouralsk	92
Krasnoyarsk-26	Zheleznogorsk	94
Tomsk-7	Seversk	111
Total:		732

try as a whole—a significant drop in real income and wage arrears, while consumer goods supply deteriorated. There is less interesting work. Neither the military nor civilian industry, whose output is nosediving, need as many highly qualified specialists as before. A potential migration is burgeoning in the closed cities, especially of the top specialists who were hit the hardest by the

changes which have swept the country.

The safety of the nuclear weapons stored at depots can only be maintained if there is strict control by specialists. Nuclear disarmament and dismantling of nuclear warheads is a time-consuming process which has to be carried out by those who created the armaments. Qualified specialists are also needed to ensure the safety of numerous nuclear reactors and power plants. It is not to be overlooked that the knowledge and skills of the Russian nuclear cities' residents could also be used for production of nuclear weapons by interested countries which are developing their nuclear industries.

The population of the closed cities settled there relatively recently. The majority of specialists come from other regions where they have relatives and other connections making it easier for them to leave closed cities. However, from 1990 through 1995 the population of Russia's ten nuclear cities continued to grow large-

Ground to a Halt

ly due to migration. People were attracted by better provision of housing than elsewhere in Russia.

The population of Russia's nuclear cities "is getting older" quickly as young specialists leave them for other places. Men account for 78 percent of the closed cities' population. Men over 45 accounted for 64 percent of the male population in 1995 compared to 43 percent in 1992, while men over 60 made up 19 percent in 1995 in contrast to 8 percent in 1992. The number of middle-aged women grew even more quickly than that of men.

The situation in the labor market is also worsening. Not a single unemployed person was registered in the closed cities at the beginning of 1992, whereas by the end of 1995, as many as 18,000 jobless people were registered there (the nuclear cities have a total population of more than 700,000). Under the current economic crisis, those cities are turning into centers of "intellectual unemployment" which hits primarily young people with a higher education.

The closed cities are a deplorable example of "conversion, Russian style."

Enterprises are not switching over to civilian production and people are just being laid off. There is no well thought-out program of retraining, relocation of personnel and development of civilian production in Russia's closed cities. Hence the people's negative attitude to conversion. According to a public opinion poll conducted in 1995, a mere 12 percent of the respondents favored conversion, while 62 percent regarded it as a "strategic mistake."

The cities' closed status also hinders the development of private business. There is not a single joint venture in Russia's nuclear cities. In a bid to solve the unemployment problem, the nuclear cities will have to open sooner or later even if the classified status at major enterprises is preserved. In mid-1994, the average wages in Russia's closed cities were only 25 percent higher than the country's average. It is more difficult to find additional jobs on the side in a closed city. In 1995, only 18 percent of the polled specialists engaged in moonlighting—contract work for private companies and tutoring. Seventy-five percent of the moonlighters earn as much money for their second jobs as for their main ones or even more. It is clear that one cannot survive only by doing research. In mid-1995, the average per capita income of specialists' families approximated the official subsistence minimum. According to a public opinion poll, incomes of 15 percent of the respondents grew from 1991 to 1995, while those of 70 percent dwindled—and for 37 percent of them drastically.

How stable is the personnel of Russia's closed cities and their hazardous enterprises?

As many as 52 percent of the polled specialists said they did not want to change either their place of residence or job. Twenty-eight percent confessed they would like to work abroad, but half of them were ready to move to another Russian region or take another job in the city. Only 14 percent of the specialists were fixed

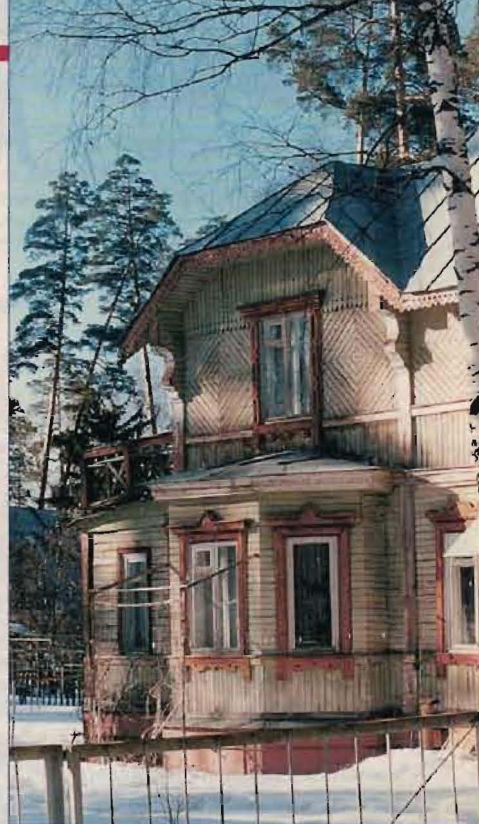
on going abroad, with 56 percent of them wishing to have a temporary job and only 11 percent—permanent residency.

The actual number of closed cities' residents who leave Russia is not large. They are predominantly highly qualified specialists (Candidates and Doctors of Science), men under 40.

What is to be done about the situation in the closed cities? There is obviously only one way out—to draw on the experience of the U.S. which has classified research institutions and enterprises but no closed cities.

◆ The author is a sociologist.

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Academician Andrei Sakharov's house in Arzamas-16, or Sarov, where the first Soviet A- and H-bombs were developed.



Nuclear warheads dummies on display in the unique local museum of Chelyabinsk-70 (Snezhinsk).

