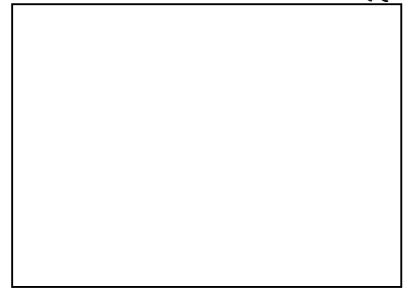




Director of
Central
Intelligence

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Soviet Military Production, 1974-85

Interagency Intelligence Memorandum
Key Judgments

~~Secret~~

NI IIM 86-10002
March 1986

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DISSEMINATION CONTROL ABBREVIATIONS

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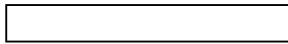
NI IIM 86-10002

SOVIET MILITARY
PRODUCTION, 1974-85

KEY JUDGMENTS

The full text of this Memorandum is being published separately. Information available as of January 1986 was used in the preparation of the Memorandum, which was approved for publication on 21 March 1986.

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SCOPE NOTE

This Memorandum establishes an interagency data base on the yearly production of Soviet strategic and general purpose weapon systems and equipment for the period 1974-85. The weapon systems represented here are virtually all of the most significant items of equipment, measured in terms of both the extensiveness of their deployment and the political and military implications they possess, and with a bias toward inclusion of weapons still in production. There is overwhelming interagency agreement on both general and specific estimates. There are, however, systems for which the Central Intelligence Agency and the Defense Intelligence Agency differ in their estimates of production;



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KEY JUDGMENTS

The Soviet defense industries exhibit stability and momentum over long periods of time that have resulted in levels of weapon production that are extraordinary by any standard. The Soviets during the period 1974-85 produced:

- Some 2,150 intercontinental ballistic missiles (ICBMs) and about 1,350 submarine-launched ballistic missiles (SLBMs).
- About 700 (INR), 750 (CIA), or 1,100 (DIA) intermediate-range ballistic missiles (IRBMs).
- About 1,000 manned and unmanned military or joint-use spacecraft, and 1,350 space launch vehicles.
- Some 10,700 (DIA) or 11,200 (CIA) cruise missiles.
- About 144,000 crew-served surface-to-air missiles (SAMs).
- Some 9,700 short-range ballistic missiles (SRBMs).
- Almost 27,000 aircraft, including 12,300 fighters and 11,000 helicopters.
- Over 380 new ships, including 114 submarines and 88 major surface combatants.
- About 30,000 modern tanks, 37,000 other modern armored vehicles, and 30,000 (CIA) or 32,000 (DIA) of the most important artillery and multiple rocket launcher systems.
- About 13,000 stand-alone radars.
- About 2.5 million trucks for military use, including almost 600,000 heavy trucks.

During the past decade the Soviets began to emphasize multimission weapons that required state-of-the-art technologies. Earlier design practices that favored using off-the-shelf, standardized parts and subsystems gave way to ones that required greater technical innovation. The share of these more advanced, complex weapons has increased as a proportion of the total since the mid-1970s, suggesting that the Soviets want more such weapons and are willing to pay the higher prices associated with them. The Soviets certainly want to minimize costs wherever possible, but we do not believe there is an overriding design

[redacted]

imperative to hold costs down. While Soviet designers seek to minimize weapon system costs, their fundamental concern is to meet military and national security requirements. [redacted]

In general, Soviet weapon production rates are two to five (or more) times greater than US rates. From 1974 through 1984, the Soviets produced roughly 3.5 times as many ICBMs and SLBMs as the United States and over seven times as many nuclear-powered ballistic missile submarines (SSBNs). While the USSR produced some 700 to 1,000 IRBMs and about 340 strategic long- and intermediate-range bombers, the United States produced 116 Pershing II medium-range ballistic missiles and only six such bombers. In the tactical field the Soviets produced about 5.5 times as many crew-served, land-based SAMs as the United States, in excess of twice the number of cruise missiles, two times as many fighters, and over three times as many helicopters. They produced twice as many submarines other than SSBNs and over 20 percent more major surface combatants. They produced 3.5 times as many tanks and over five times as many major artillery pieces.¹ [redacted]

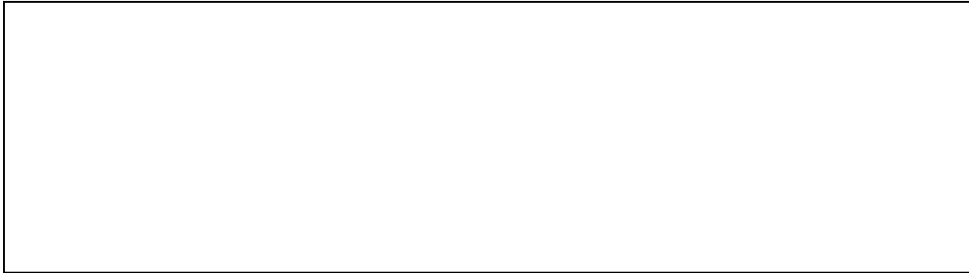
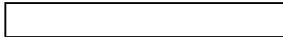
Our estimates in this Memorandum cover production of 233 military systems (including 12 ship-conversion programs), ammunition, and three categories of trucks. (See [redacted] figures 1-11.) CIA and DIA reached year-by-year agreed-upon estimates of production for the 12-year period for almost 90 percent of these,

[redacted]

Our collective confidence in these estimates ranges from high—that is, we are confident we are within 10 percent of the actual production figure—for the larger systems that are fixed or take long periods to construct and are easily visible, to low confidence—we could be off by 40 percent or more from the actual number—for very small, highly mobile radar systems. [redacted]


[redacted]

¹ The estimated Soviet data used for these comparisons run through 1984 in order to be compatible with the US data available at the time of drafting. As such they do not, for example, include continued US production of the B-1 bomber, the Pershing II MRBM, the Trident SSBN, or the M-1 tank. Nevertheless, this comparison would deviate only to a small degree from a comparison that included the year 1985 because both US and Soviet production rates showed some increase during the year. [redacted]



There have been some important reductions in Soviet production rates during the period, as indicated in figures 1-11. There were:

- A general decline in the annual production of ICBMs, SRBMs, and stand-alone radars.
- A sharp decline in helicopter production after 1976; some decline in SLBM production since the late 1970s; some decline since about 1980-81 in yearly production of fighter aircraft, major surface combatants, submarines, light armored vehicles, and artillery; and differences of view on the amount of recent decline in tank production.

In contrast, there has been steady growth in the yearly production rates of bombers and heavy trucks and generally slow, but steady, growth in the annual production rates for spacecraft and space launch vehicles. Similarly, Soviet SAM production, with some fluctuation, generally increased during the period. There was also a steady increase in yearly SS-20 production rates into the early 1980s, with differences of view as to the trend in more recent production. 

Several factors probably are largely responsible for the downward trends in the data:

- The Soviets decided to introduce more complex, sophisticated, and capable weapon systems into production. More complex systems embody substantial improvements in performance and can often replace older systems on a less than one-for-one basis. Thus the Soviets may have deliberately reduced their quantitative requirements for fielding the newer systems.
- With respect to these more sophisticated systems fielded recently by the Soviets, the most prominent advances have been in the areas of electronic systems and solid propulsion for missiles. In these areas, the Soviets have experienced growing difficulties and delays in development which have postponed or interfered with intended serial production. At one time or another we have observed these difficulties in such programs as those for the SS-X-24 and SS-25 ICBMs, the SA-10 and SA-X-12 SAMs, the SU-27 Flanker aircraft, and the T-64B tank. One result of

[]

these difficulties and delays has been lower production. Programs that should have entered production sooner and begun deployment in this period will not reach their full momentum until later in the 1980s.

- The advanced weapons fielded during the period also have required greater resources and effort and, hence, have been more costly. In the CIA view, though we have no concrete evidence, the burden of these higher costs in some cases may have contributed to a Soviet decision not to sustain production at historical rates. []

The Soviets have responded to these technical challenges by modernizing their defense manufacturing base. We have observed a variety of new materials and manufacturing processes being incorporated in the aircraft, missile, shipbuilding, ground arms, and electronics industries. Moreover, a number of programs have recently completed, or soon will complete, their test phases and will enter serial production. Recent growth in defense industry floorspace indicates that production capacity has been increased in anticipation of these and other new military programs:

- Expansion has been observed at Pavlograd in anticipation of production of the SS-X-24 ICBM as well as of a follow-on system, and at Zlatoust in anticipation of production of an SS-N-20 SLBM follow-on.
- Substantial expansion at facilities in Kuybyshev and Moscow and activity at the Tyuratam test range indicate production of new classes of space launch vehicles will increase during the rest of the decade.
- Major expansion of Kazan' is intended to support production of the TU-160 Blackjack bomber.
- Considerable expansion at Nikolayev suggests that new classes of surface combatants will be produced later in the decade; the new large aircraft carrier, now under construction, will be completed later in the decade.
- Recent expansion at Omsk suggests that tank production will increase in the future.

These dramatic increases in production floorspace in the strategic missile, spacecraft, aircraft, shipbuilding, and tank industries all indicate that the Soviets will continue to produce substantial numbers of weapons and other major military equipment over the rest of the decade and into the 1990s. []

Soviet Military Production 1974-85

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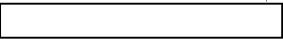


Figure 1
Soviet Strategic Missile Production

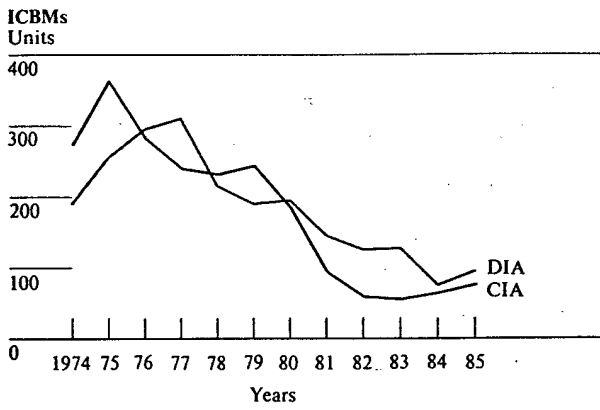
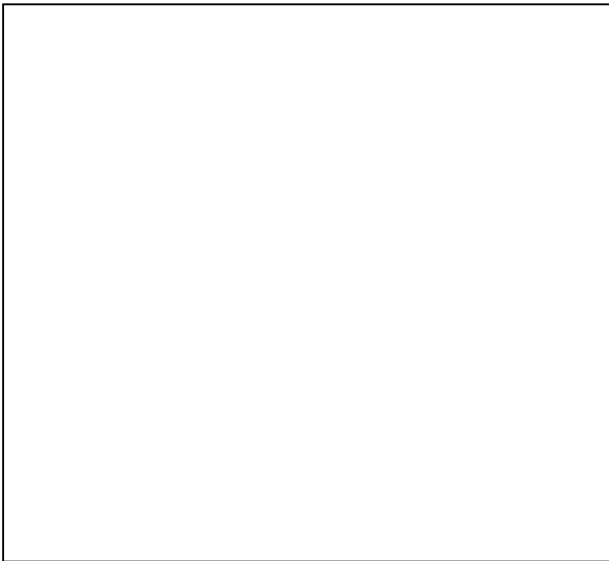
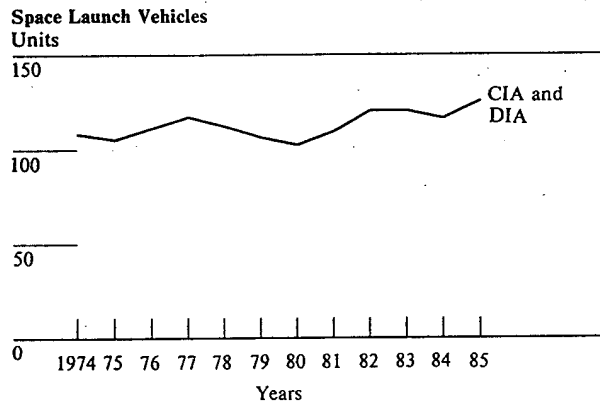
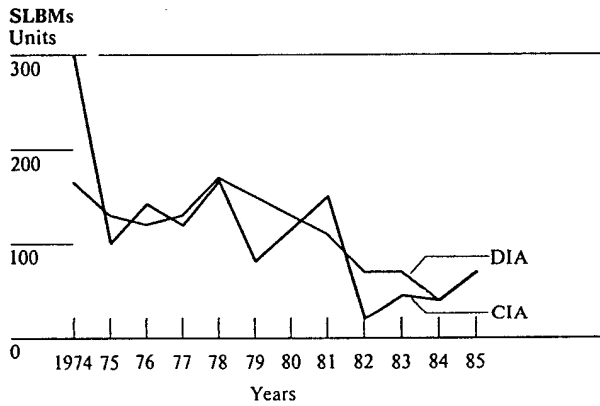
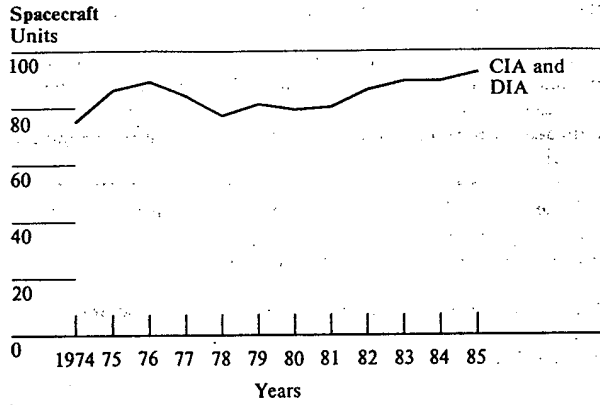
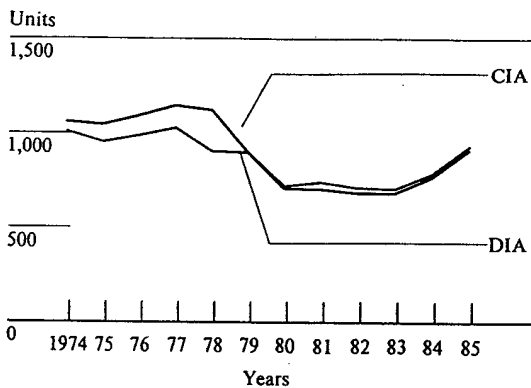


Figure 2
Soviet Spacecraft and Space Launch Vehicle Production



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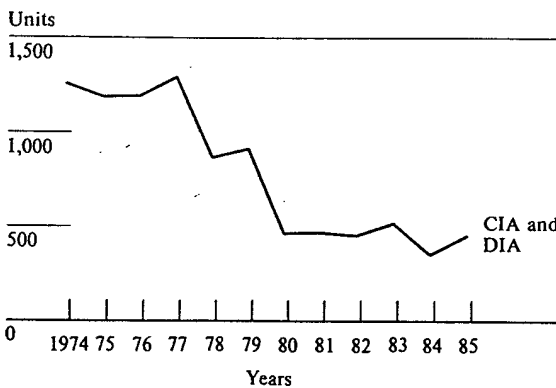
Figure 3
Soviet Cruise Missile Production



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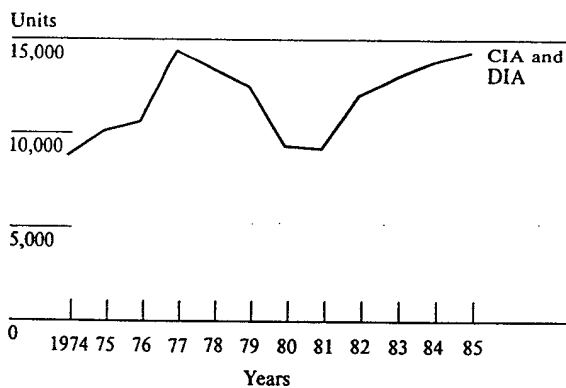
Figure 5
Soviet Short-Range Ballistic Missile Production



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Figure 4
Soviet Surface-to-Air Missile Production



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Note: Includes only ground-based, crew-served SAMs.

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Figure 6
Soviet Aircraft Production

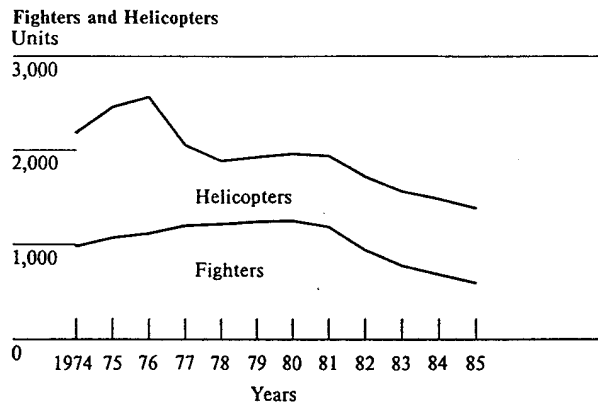
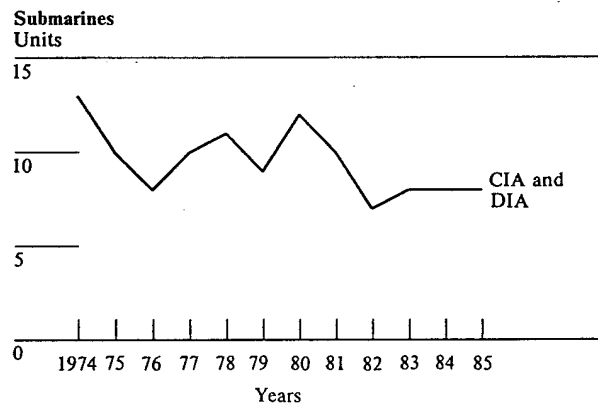
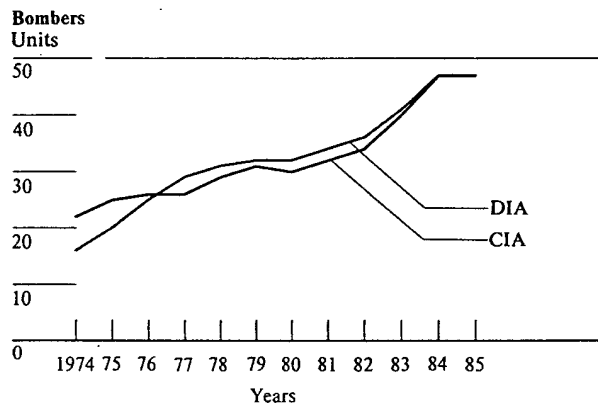
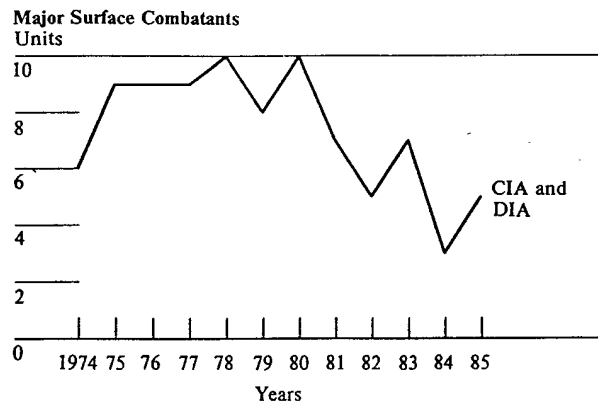


Figure 7
Soviet Ship Production



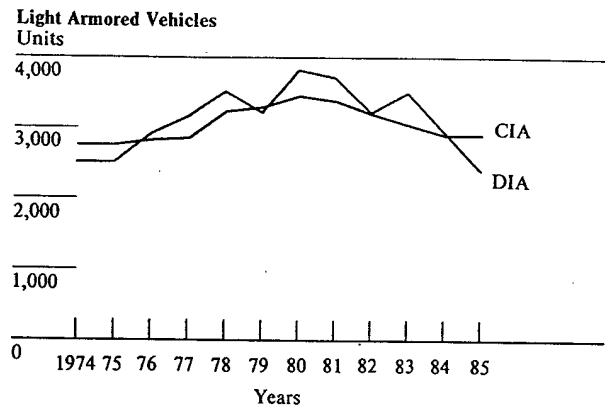
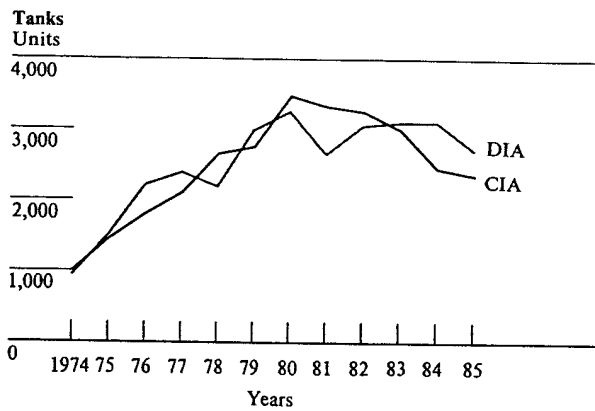
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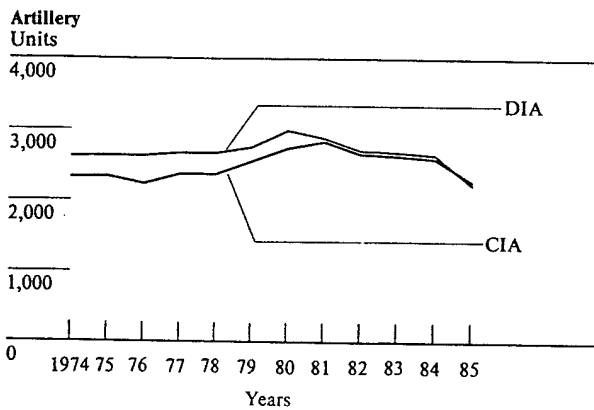
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Figure 8
Soviet Ground Arms Production



Note: Production of older Soviet tanks not included.

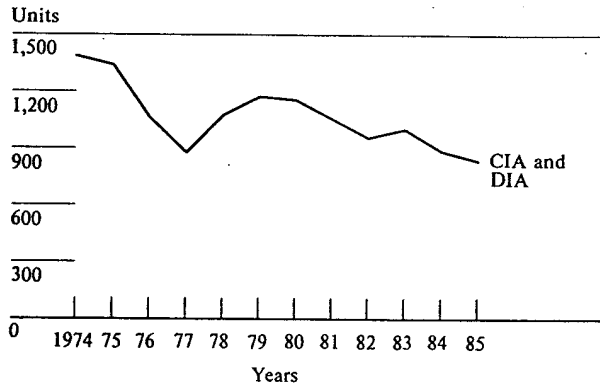


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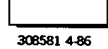
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Figure 9
Soviet Production of Stand-Alone Radars

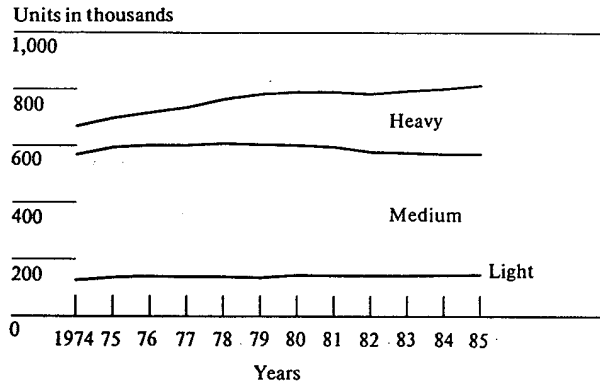


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Figure 11
Soviet Truck Production



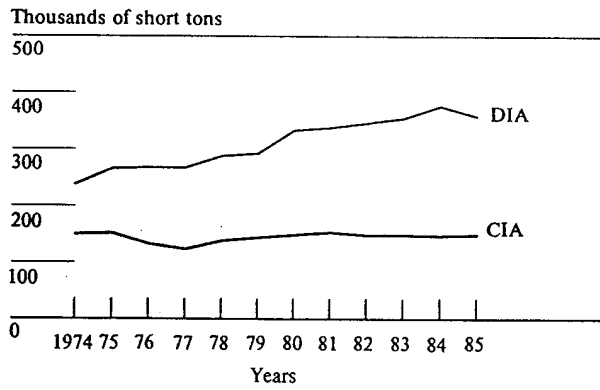
Note: Of total 1974-85 production, about 2.5 million trucks were delivered to the Soviet military.

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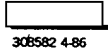


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Figure 10
Soviet Ammunition Production



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