The Best Map Of Moscow

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For years, CIA produced the best unclassified general reference map of Moscow. Initially created in the post-World War II years primarily for US Embassy personnel in the Soviet capital, dissemination of the map steadily expanded and it became a key reference guide for personnel of other friendly embassies in Moscow, as well as for many US visitors. On several occasions, even Soviet militiamen processing automobile accident reports involving US Embassy personnel found the maps useful for accurately locating the accident sites. This is the story of how the CIA developed this map to fill a basic intelligence gap.

How It Began

The need for a reliable Moscow map was first identified by a State Department request to CIA's Directorate of Intelligence (the DDI, now designated the DI). During the war and for some years thereafter, there was no street map available to the Embassy. The lack was a nuisance and a time-wasting impediment to Embassy personnel activities. When the Soviet Government finally agreed to allow diplomatic personnel to drive, the need for a useful street map became even more critical.

This lack affected others beside Embassy personnel. Soviet inhabitants, including long-term natives and the thousands of new residents who were rapidly increasing Moscow's postwar population, were experiencing the same inconveniences. To find their way around the city, they had to depend on word-of-mouth guidance from friends and acquaintances.

Eventually, the Soviet Government began issuing its first maps of the city for public dissemination. These maps, however, were extremely schematic and--except for a few tourist landmarks such as the Kremlin, museums, and GUM (the state department store)--were lacking in accuracy and detail.

Westerners, accustomed to having reasonably good-quality maps of their home cities, had two different explanations for such poor schematic maps. One was that the maps merely reflected the extreme postwar Soviet shortages of technical personnel and production resources. The second, clearly the more accurate, is that the Soviet security establishment carefully designed these crude maps to prevent foreign intelligence organizations from collecting any useful information.

A Tall Order

Satisfying this State Department requirement for a detailed street map of a major capital city, whose population numbered more than 6 million inhabitants in 1959 and which was continuing to expand rapidly, was a formidable task. Its magnitude far exceeded CIA's normal map reference and production procedures. Therefore, a special team approach was devised that involved close collaboration by all three divisions of the Geographic Research Area of the DDI. The Map Library reference collection was searched for all rele-

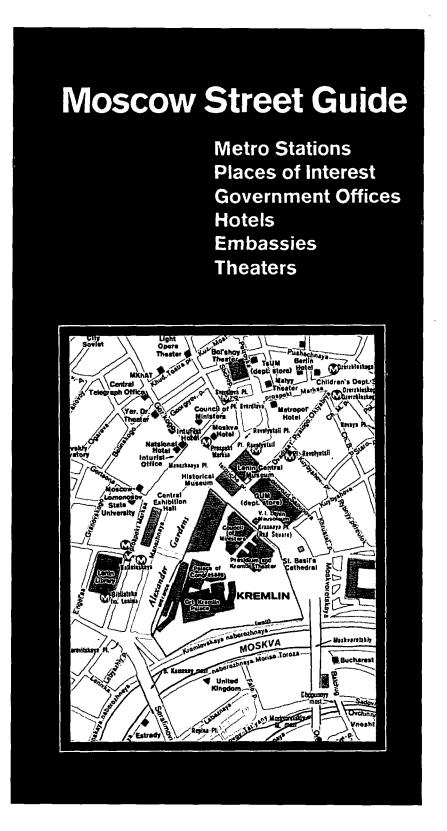
Joseph A. Baclawski served in the Directorate of Intelligence.

vant Russian, Soviet, and captured German Army maps of Moscow. These resource materials were then assessed jointly by the USSR Branches of the Cartography and Geography Divisions, and a production program was developed that required full-time assignments of several cartographic and geographic research specialists, working as a closely knit team.

The cartographic team members applied their technical skills to compile and draft precisely the locations and alignments of literally thousands of Moscow's streets. (Their work eventually became the numerous color separation plates needed by CIA's reproduction facility to print the final map product.) The Russian language and area expertise of the geographers was used to comb Russian textual materials, to translate relevant information on the extent of wartime damage and postwar reconstruction, and to transliterate each Russian street name from the Cyrillic to the Latin alphabet.

A New Map

This concentrated collaborative research and technical effort resulted in the publication of the first useful postwar map of the central Moscow area in 1953. Subsequent editions covered a larger city area and incorporated numerous refinements. For example, the back of the map provided an alphabetical list of street names and information such as the location of embassies, principal government buildings, subway stations, and other landmark features. To help users locate these features, each item on this list was keyed to a geometric grid that was overprinted on the face of the maps. The printed



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simplified format required for the CIA map.

maps were disseminated as flat sheets and folded to facilitate insertion in a pocket. The maps carried no attribution to the CIA so that they could be disseminated under the State Department's aegis.

Most printed copies of the maps were shipped to the Embassy, and its personnel were asked to provide comments, suggestions, and corrections. Resulting feedback indicated that the map was meeting its intended orientation and reference purposes.

Initial dissemination and use in Moscow were circumspect and were restricted to Embassy personnel because of the proclivity of Soviet security personnel to arrest people displaying maps in public and chargiing them with as engaging charge espionage against Soviet military and other national security installations. Gradually, however, the presence and availability of the map appeared to be accepted by Soviet security. The Embassy made copies available to diplomatic personnel of friendly countries, and finally to US visitors and tourists to Moscow, without incident.

Improvements and Guidelines

Over the years, updated editions of the map were prepared as the city area expanded and additional source materials became available. Some of the information came from Embassy personnel debriefings and reports. Soviet sources such as planning journals and newspapers provided descriptions and sketches of newly completed housing and transportation facilities. The most significant inputs came after US intelligence overhead photography of the city became available. The photography permitted far better and more reliable information on the details of the Moscow urban areas. Its applicability to an unclassified Moscow map, however, had to be balanced with the need to protect both the existence and the capabilities of US overhead intelligence sources.

Guidance on how to achieve a balance between use and source protection was provided personally by the head of the DDI, on behalf of the Director of Central Intelligence. The basic guideline was to use the photography to validate and incorporate details obtained from other sources and to omit Soviet-issued information that was premature or false. Another key guideline was to include only information that could have been obtained visually by Embassy personnel in the city areas where they were permitted access. These guidelines required careful review of every new detail on the map, but the payoff in additional map detail and accuracy was substantial.

To speed the labor-intensive updating and production processes, the Cartography Branch Chief devised a unique method of extracting pertinent detail from a contemporary classified Army Map Service map of Moscow and putting it into the

Ad Hoc Assistance

Later editions of the map were further improved by three short-term assignments in Moscow of DDI personnel who were directly involved in updating the map. Embassy officers had neither the time nor the technical expertise to check and record new map details and to resolve conflicting information to any extensive degree. These problems were overcome by establishing an ad hoc arrangement involving both CIA and Defense personnel.

This arrangement was directly supported by the defense attaché in Moscow—both by written requests for the short-term DDI assignments and by assigning Defense personnel and vehicles to participate in the systematic field checks. This cooperative arrangement proved highly successful in generating much useful detail. It also is worth noting that the systematic field checks of hundreds of streets in all parts of the city temporarily diverted much of the time and attention of Moscow KGB personnel from their normal surveillance targets.

A More Detailed Map

The map underwent a major format change in 1974, when a pocket atlas version was developed and issued in order to better meet Embassy personnel requirements. The single-sheet map² continued to be produced, but it was also cut into 60 small rectangular segments and assembled into a spiral-bound pocketbook. The inner

part of the city was covered by 10 additional map segments at a larger scale. To facilitate reference, the segments were preceded by two index maps and a subway system map.

The maps provided a wealth of detail on the street names and alignments and the building (house) numbering system. They also located individual subway and railroad stations and identified the entrance and exit ramps on the Moscow Ring Road, the automobile beltway that encircled the city. All features on the maps were listed individually on a 66-page index of street and locality names, embassies, government buildings, theaters, hotels, restaurants, and other places of interest, including cemeteries where famous Russians and Soviets are buried.

The first edition of the pocketbook had 140 pages. The 1980 version, which included the location of gas stations, auto-repair stations, and active churches, was 203 pages. The larger scale map of Central Moscow was expanded to 60 separate segments. The 1987 edition had 214 pages.

Over the years, contemporary Soviet schematic maps of Moscow gradually incorporated more accurate and useful detail. The increasing influx of foreign tourists, especially during the

Moscow Olympics in 1980, accelerated this trend. But the CIA-produced *Moscow Street Guide* remained by far the best map of the city.

Recognition and Benefits

In its 1974 and 1980 national mapdesign competitions, the US professional mapping association, the American Congress on Surveying and Mapping, awarded the contemporary versions of the CIA map a certificate of merit "for outstanding achievement in cartographic design in the city plan category. In 1989, the Soviet Government finally issued 250,000 copies of a detailed paperback edition of a Moscow map, Moskva: Atlas Turista. The effectiveness and influence of the CIA map product can be gauged from the fact that the Soviet product is closely modeled on the CIA format.

The creation of the Moscow map had the following long-term benefits:

- It facilitated establishment of security policy guidelines for using satellite photography in unclassified intelligence products.
- It helped in the development of a unique DDI expertise on Moscow that significantly supported various

- types of intelligence collection techniques, both by human sources on the ground and by technical means from a distance.
- This expertise helped the Intelligence Community identify previously unknown Moscow installations and facilities.

One final comment is in order. In the normal course of events, CIA is not and should not be unilaterally producing detailed city maps. The production of its Moscow map, however, was a logical and necessary response to a unique basic intelligence gap on a priority intelligence target at a particularly critical time.

NOTES

- 1. The choice of this channel was governed largely by the fact that the State Department had transferred to CIA the map collection and production assets that State inherited from the dissolution of the OSS. This transfer provided that these mapping assets would continue to be available to service State's needs for foreign area maps.
- 2. Advance copies of the single-sheet map were made available to the Secret Service to support its security planning for President Nixon's visit to Moscow in June-July 1974.