

1989 - 1995 – Supporting the Conventional Forces in Europe (CFE) Treaty

By Robert Bridges

With the success of the INF Treaty, the leadership in both Washington and Moscow actively sought to renew efforts to improve security and lower the threshold for conflict in Europe by relooking at conventional force reductions. Since the early 1970s the Warsaw Pact and NATO had held meetings identified as the Mutually Balanced Force Reduction (MBFR) negotiations in Vienna, Austria, on limiting and reducing conventional forces in Europe. The negotiations concentrated on manpower limits rather than conventional weapons. At that time, mistrust between the two sides and the inability to obtain sufficient evidence to assess compliance with confidence for any agreed reductions led to a stalemate. By the early 1980s, these talks were moribund. With new leadership in Moscow, the acceptance of on-site inspections as workable additions to compliance determinations by both sides, data exchanges, and improved National Technical Means, the chances for successful reductions of conventional forces in Europe appeared much brighter. Formal negotiations on what would become the Treaty Between the Twenty Two Sovereign Nations on the Reduction of Their Conventional Armed Forces in Europe began in March 1989.

The Treaty, which focused on reductions of conventional weapon systems, was signed in Paris on 19 November 1990 by 22 nations—16 NATO members and seven Warsaw Pact states. Like the INF Treaty, the CFE Treaty required data exchanges and baseline inspections and inspections of dismantlement and destruction of weapons. Unlike the INF Treaty, the CFE Treaty provided for challenge inspections to provide further confidence to each participant that Treaty provisions and requirements were being met. But, perhaps more importantly from a compliance standpoint, the CFE Treaty unlike the INF Treaty led to reductions of weapons rather than the complete elimination of any weapon system, making verification of Treaty provisions a more difficult task. The CFE Treaty entered into force on July 17, 1992.

The CFE Treaty is a complex document introducing new lexicons hitherto not encountered in previous arms control agreements, for example treaty limited equipment (TLE), the Atlantic Ocean to the Urals (ATTU) zone, objects of verification (OOVs), and look-alikes. In addition, the ATTU zone, which was the total geographic expanse covered by the Treaty, was subdivided into additional zones, each with different permitted aggregate levels of limited conventional combat weapons. The combat weapons to be reduced to equal numbers for each party (NATO and Warsaw Pact) included battle tanks, armored combat vehicles, artillery 100mm caliber and larger, specified types of combat aircraft, and attack helicopters. Forty months after the CFE Treaty entry into force, NATO and the Warsaw Pact, each in aggregate, would be limited to 20,000 battle tanks, 30,000 armored combat vehicles, 20,000 artillery pieces, 6,800 combat aircraft, and 2,000 attack helicopters. Within the battle tank, armored combat vehicle, and artillery categories, there were further subcategories limiting numbers of weapons within active units and storage.

The sheer size, geographic scope, and complexity of the CFE Treaty were unprecedented. For OIA, whereas the INF Treaty had involved less than 2,000 missiles, launchers, and supporting vehicles located at over 100 separate facilities with elimination of all missiles, launchers, and missile support vehicles, the CFE Treaty just for the USSR, would potentially involve up to 70,000 combat vehicles and artillery weapons located at many hundreds of sites, many of which contained numerous individual inspectable areas—objects of verification in Treaty-speak. Within OIA for the INF Treaty, the responsibility for supporting this effort was spread across elements of three analytic divisions. For the CFE Treaty within OIA, the responsibility fell principally on its Ground Forces Branch (GFB), its Air Branch, and to a lesser degree its arms production branch.

Preparing for the Verification of Data - By early 1990, it was becoming apparent that ongoing negotiations in Vienna, Austria, would likely lead to a treaty between NATO and the Warsaw Pact sometime within the coming year. In preparation for the data exchange and its review for accuracy by the US, the Intelligence Community led by CIA held meetings in August of that year with participants from all organizations with expertise on Warsaw Pact ground forces. The purpose for these meetings was to gain consensus on the Warsaw Pact's ground forces within the ATTU zone—a current order-of-battle, numbers of weapon systems per individual unit, locations, etc. All participants recognized that assessing the accuracy of the data exchange would have to be completed relatively quickly, so having an agreed upon database in place and accepted throughout the Intelligence Community was essential.

Historically, the Intelligence Community's basic approach to monitoring ground force units and weapons was to use the military's penchant to organize and equip like units—such as a motorized rifle regiment or tank regiment similarly throughout its ground force structure. The Soviet ground forces, for example, were much too large and geographically dispersed for the Intelligence Community to develop with confidence individual estimates for each garrison holding what would become known as TLE without adopting some sort of overall pattern of deployment. Since the early 1980s, GFB had worked jointly with a sister office within CIA in developing a database¹, which would form the foundation for verification of the Warsaw Pact's data exchange. It was this database that would enable quick comparison of US estimates and the Warsaw Pact data. Indeed, a Soviet informal exchange of gross numbers of TLE within the ATTU zone for its ground forces in early autumn 1990 was found to be in line with numbers held in this database that had been reached in these August meetings—some 80,000 weapons.

Moscow, however, had also recognized that a CFE agreement was close at hand and, as was later learned, was taking steps to minimize its impact on its ground forces in the ATTU zone. During 1989 and 1990 and increasingly during the late summer and early fall of 1990, OIA and others in the imagery community using National Technical

¹ This database called the Land Armaments and Manpower Model (LAMM) was developed by CIA's Office of Soviet Analysis and was an essential and important tool that provided a common reference for all who worked Warsaw Pact ground forces. GFB provided direct support to this model during the 1980s through studies of Warsaw Pact conventional forces.

Means, had identified new, large groupings of battle tanks, infantry fighting vehicles, and artillery at existing and newly established storage bases east of the Ural Mountains, outside the ATTU zone. At the time of these sightings, no one within the Intelligence Community could adequately explain the origin of these weapon systems, other than that many, if not most, originated from the ATTU zone. Typically, Soviet ground force garrisons consist of large numbers of covered buildings/garages which are used for storage of weapon systems, especially those pieces of equipment that are motorized/mechanized. Therefore, no one could say with confidence whether and from where these newly discovered weapon systems originated. Nevertheless, each storage base east of the ATTU was closely monitored and estimates of weapons maintained.

November 1990 - The Data Exchange - On 19 November 1990, the CFE Treaty was signed by representatives of the twenty two nations in Paris, France. Extensive data exchanges displaying the ground force military organization and subordinations from Ministry of Defense to individual battalion/regiment with identification of types and numbers of Treaty Limited Equipment (TLE) in aggregate, by declared site, and by object of verification (OOV).² The Intelligence Community upon receiving the data exchange immediately began its review, primarily relying on estimates previously agreed to in the August meetings. This review initially led to an Intelligence Community assessment that the Soviet Union had underreported its TLE in the ATTU zone by many tens of thousands of items. If this judgment proved to be correct, then the likelihood of the CFE Treaty being approved by NATO governments would be unlikely.³

Although OIA's GFB had participated in the August Intelligence Community meetings and considered the Agency database a reliable and useful tool for analysis of Warsaw Pact ground forces, its analysts had observed changes and unusual activity within Soviet ground forces in the ATTU zone since the August meetings and had identified continued increases of combat weapons in Soviet storage bases east of the Urals. This evidence raised suspicions in the accuracy of the database, suggesting that the Soviet data exchange may be more accurate than the initial assessment indicated. In effect, the database did not/could not keep pace with the rapidity of the changes.⁴

² An easy way to understand an OOV would be to consider Disney World as a declared site with an individual park such as the Magic Kingdom as an OOV. Therefore, a declared site might contain one or multiple OOVs. Each OOV contained TLE.

³ Because the CFE Treaty was based on reductions of equipment vice elimination and addressed conventional weapons, the US Defense Department had determined that violations that may lead to judgments of non-compliance--a threshold--had to be on the order of many division equivalents. A division equivalent, in the case of a Soviet motorized rifle division, would equate to some 800 pieces of TLE.

⁴ At this time, if the numbers of TLE newly identified in storage bases east of the Urals and that held in the Intelligence Community database for units in the ATTU zone were totaled, it exceeded the 80,000 or so aggregate number which in October 1990 had been in rough agreement with the then current US and Soviet supplied numbers for the ATTU zone. If these weapons had originated from the ATTU zone, this, itself, suggested that US estimates for TLE in the ATTU zone by 19 November 1990 were too high.

In early December 1990, GFB put together a short briefing showing how current evidence for several Soviet units in the ATTU zone supported its 19 November data exchange and was at variance with the Community database. This briefing was provided to the Agency's Arms Control and Intelligence Staff (ACIS), which was the focal point for Agency positions on the Treaty. As a result of this briefing, in early January 1991 ACIS requested that GFB review all Soviet ground forces within the ATTU zone to identify to what degree current evidence could support the Soviet data exchange. ACIS needed this review to be completed as soon as possible.

GFB, at that time, consisted of about 10 analysts and a branch chief. All participated in this effort, which necessitated that the branch work full time for about two weeks including the weekend to complete the review. To understand the scale of this effort, consider that Soviet ground forces at that time consisted of over 100 motorized rifle and tank divisions supported by various non-divisional brigades and larger formations in ten military districts within the Soviet Union's ATTU zone and in several East European nations, each of which contained TLE.

A division size unit typically consisted of more than one declared site and seven or more OOVs. So, the GFB analysts potentially had to examine literally thousands of different sites. To reduce this number to a more manageable amount, GFB chose to examine each formation for which the Agency's data base showed a significant variance with the Soviet data declaration. The analysts looked for any evidence of unusual activity and changes that taken together suggested that the Soviet data declaration was accurate. This review was completed by the end of January 1991 and suggested lower numbers of TLE at numerous Soviet declared sites/OOVs within the ATTU zone than was currently held in the Intelligence Community database.⁵ Types of evidence uncovered varied from clear correspondence with the Soviet data declaration; unusual, extensive, and unexplained vehicular activity within individual garrisons/OOVs; large numbers of TLE at rail transshipment sites; to permanent changes in historical patterns of equipment displays.

If this evidence, although often circumstantial, was taken as support for the Soviet data declaration, then the US estimate of Soviet TLE within the ATTU zone could be reduced by nearly 20,000. This would leave the variance between the US estimate and the Soviet data declaration at 10,000-15,000 pieces of TLE, well within the threshold for compliance established by the US Defense Department. After coordination of this evidence and judgments within the Agency and the Intelligence Community, the GFB analysis was accepted and enabled the US to support the Soviet data declaration.⁶

⁵ In order to reduce numbers of TLE within the ATTU zone, the Soviets took the unusual step of reducing the numbers of battle tanks, armored combat vehicles, and artillery typically found in its units. For example, what was identified as a tank battalion supporting a motorized rifle regiment now contained one tank company rather than three tank companies, effectively reducing the number of tanks typically found from 40 to 13.

⁶ GFB did identify about 3,000 pieces of TLE within the ATTU zone that were not declared by the Soviet Union. Moscow acknowledged that some items were not declared and began immediately to destroy/dismantle them. Many of these consisted of obsolete artillery weapons. National Technical Means was used to verify this destruction.

Although the data declaration discrepancy was potentially the most serious, several other items also had to be addressed that appeared to threaten the CFE Treaty approval by NATO. One, the Soviets in their data declaration did not include naval infantry units and coastal defense divisions, arguing that these forces were not part of its ground forces but rather were subordinate to its naval forces. The Intelligence Community was well aware of these units and had good estimates of the number of potential TLE found within them. The Soviet Union maintained a naval infantry brigade in each of its naval fleet areas, so within the ATTU zone, one was found in the Black, Baltic, and North Sea regions. The total estimate of TLE in the naval infantry brigades and coastal defense divisions was about 3,500. Resolution of this issue was handled via discussions and agreements between NATO and the Soviet Union.

Another issue was the Soviet claim that a number of what NATO and the US Intelligence Community identified as armored combat vehicles had been modified and were now look-alikes. This especially applied to a weapon identified as the MT-LB. By Treaty language, this tracked, lightly armored vehicle, which was used extensively by the Soviets in its Leningrad Military District opposite Norway as an infantry carrier, could be modified internally into a look-alike without the means to transport infantry. If these were counted as armored combat vehicles, then the number of TLE within Soviet units in the ATTU would be increased by several thousand. It would take on-site inspection to confirm whether these had been modified.

On-Site Inspections - The CFE Treaty established four inspection periods—baseline validation, reduction, residual level validation, and residual period. The baseline validation began immediately after entry into force on 17 July 1992 and continued for the next 120 days. The reduction period began after this period and continued for three years. The residual level validation period covered 120 days after the completion of the reduction period. The residual period followed until the duration of the Treaty.

The number of inspections each participant must accept during the baseline period was based on a percentage of the total numbers of TLE and OOVs reported in the data exchange, thus the importance of gaining an accurate data declaration and agreeing on the total number of TLE and number of OOVs. Unlike the INF Treaty, during the baseline inspection period only a portion of all declared sites/OOVs would be inspected—the sheer number of inspectable sites made inspections within 120 days of all sites/OOVs reportedly containing TLE impossible. So sampling with on-site inspections and a greater dependence on National Technical Means to identify discrepancies and violations of Treaty provisions would be the approach.

For the US, the On Site Inspection Agency (OSIA) had the responsibility for execution of on-site inspections. Personnel from the Intelligence Community and other US government agencies assisted OSIA in performing this task. For OIA, this fell heavily on its Ground Forces, Air, and Weapons Production branches. Within GFB, over half its personnel received training as inspectors, qualifying them to assist OSIA, if needed. As with the INF Treaty, the site diagram was a critical component. OIA and other US imagery organizations were tasked to provide line diagrams of Warsaw Pact declared sites and OOVs. These were apportioned among them, but the sheer

magnitude of preparing thousands of line diagrams was daunting. The line drawings were used much as they were for the INF Treaty enabling the on-site inspectors to efficiently verify declared numbers of TLE within OOVs and to also confirm whether any other TLE was found within any structure within the OOV perimeter.

The CFE Treaty would remain in force until March 2015, when Russia indicated it would no longer participate.⁷ With the breakup of the Soviet Union and Warsaw Pact, conditions on the ground have changed. Throughout the latter 1990s until the Russian announcement, numerous meetings and agreements had been reached in an attempt to recognize this new reality. In any case, the CFE Treaty accomplished much of what had been desired, a reduction of conventional weapons within Europe reducing the chances for the outbreak of conventional war on the continent. The total number of conventional weapons (TLE) that have been destroyed by CFE member states is over 58,000.

OIA Contribution and Recognition - Either by coincidence or design, OIA's Ground Forces Branch found itself uniquely qualified to support CFE negotiations, data verification, and Treaty implementation. Beginning in the late 1970s and continuing through the 1980s, GFB had conducted basic research on various aspects of the Soviet and Warsaw Pact Ground Forces. Comprehensive research papers had been



published on such issues as Soviet nondivisional artillery, airborne forces, the ground forces training establishment, naval infantry forces, various order-of-battle studies including one on East Germany's ground forces, etc. It was these studies that enabled GFB and its analysts to be well versed and very knowledgeable on the Warsaw Pact ground forces and to participate equally with much better resourced organizations and offices within the Intelligence Community. Recognizing its unique contributions, CIA awarded GFB a Meritorious Unit Citation as a result of its efforts in helping to resolve the potentially Treaty ending data declaration discrepancy.