Analysis: Lend Lease to Russia

By John M. Barr

Slow Start

On 22 June 1941 Hitler launched more than 4 million men, 3,500 armored vehicles, and 4,000 aircraft across the Soviet border in the largest military operation in history. By the end of that year Germany captured more than 500,000 square miles of the Soviet Union’s richest territory, including about 75 million inhabitants (a little more than a third of the pre-invasion population), and 30 percent of its productive capacity. On top of that, by the end of the year the USSR had lost in combat some 3.1 million men along with about 20,000 tanks, 18,000 planes and more than 60,000 artillery pieces.

Yet nearly four years later the Soviet military colossus stood triumphant over a broken Nazi state. One of the ongoing debates ever since has concerned to what extent Allied (especially US) “Lend Lease” aid contributed to Moscow’s ability to survive the German onslaught and ultimately prevail.

The US had already made provision for using its vast industrial potential to help its allies with the passage of the Lend Lease Act on 11 March 1941. In that bill, congress authorized the president to manufacture “any defense article for the government of any country whose defense the President deems vital to the defense of the United States.”

On 24 June 1941, President Roosevelt held a press conference in which he announced Washington would give all possible help to the Soviet Union. That idea was at first not well received within this country. An opinion poll conducted in July, for example, found 54 percent of the respondents were opposed to aiding the USSR. Roosevelt persisted, however, and initial arrangements were made to get arms to the Soviet Union. That aid soon began to flow, but only in small quantities. The first convoy of six ships arrived in Archangel on 31 August.

By the end of 1941 the Allies had delivered to Moscow about 850 tanks and 873 combat aircraft. A formal arrangement made with Moscow was inked in October, whereby Stalin agreed to purchase, on credit, $1 billion ($15 billion in today’s money) in arms to be repaid, interest free, over the course of 10 years. Much larger amounts were to start to flow after Stalin’s Foreign Minister Vyacheslav Molotov arrived in Washington in May 1942. That visit culminated in a full mutual aid agreement between the two countries on 11 June, whereby the US pledged to extend to the USSR the benefits of the Lend Lease program.

Routes

During those negotiations the Allies determined there were three routes by which military aid to Russia could be delivered. The Arctic convoys to Murmansk and Archangel were by far the most dangerous and received the most media and historiographic attention, but more than 50 percent of the supplies went by ship via the Pacific. American cargo ships, flying the flag of the Soviet Union steamed to Vladivostok and unloaded supplies to be transported along the Trans-Siberian Railroad to Soviet assembly plants in the Urals or directly to the front line. Despite German protests, Tokyo honored its non-aggression pact with the Soviets and allowed the shipments to continue unhindered throughout the war.

Also part of the Pacific passage was the Alaska-Siberian aircraft route (known by the acronym ALSIB), which was used primarily for the direct transfer of aircraft to Russia.
Planes would start their journey in Great Falls, Montana, and make a series of hops to Nome, Alaska. From there Soviet crew would pilot the planes and fly them through six more stops to the final delivery airfield at Novosibirsk. Terrain and climate presented obstacles to the use of that route. During winter, American mechanics would duck in and out of heated tents just to be able to work in 20 minute stretches in the sub-zero temperatures. Nevertheless, by the end of the war nearly 8,000 planes were flown directly to Russia via the ALSIB. In 1941 the Allies also opened a corridor through Iran into Russia. That route was made possible by the completion in 1939 of the Trans-Iranian Railroad, which linked the Persian Gulf with points all over Iran including the Russian border. With the refusal of Shah Reza Pahlavi to expel all Germans from his country in 1941, the British and Soviets engaged in a joint operation to overthrow him and seize control of the railroad. Thereafter Allied convoys from the US would sail around the Cape of Good Hope and unload their cargoes at Ussuriisk. At most the Germans were able to track only about four percent of the total Allied shipping losses in the war during those attacks.


**Arctic Convoy Battles**

By far the most dramatic and most dangerous route for shipping supplies to Russia was via the Arctic convoys to Murmansk and Archangel. Those convoys delivered about 25 percent of all the supplies sent by the US to the Soviet Union from the US. The mainly American aid can be broken down into three categories: weapons, support items and raw materials. In terms of major weapons systems, the US delivered 11,400 aircraft, 7,165 tanks, 5,500 40mm anti-aircraft guns, 1,000 quad-mounted 50 caliber anti-aircraft guns, 2,500 81mm mortars and 137,000 .45 caliber sub-machineguns. Those numbers made up about eight percent of Russia’s total production of such items as aircraft, machineguns. Those numbers made up about eight percent of Russia’s total production of such items as aircraft, machineguns.
A Lend Lease supply convoy photographed as it crossed the Iranian-Soviet border in 1944.

Soviet Experience With Western Weapons

As the Soviet industrial complex absorbed and made use of Western raw materials, the country's military tried to make maximum use of the finished weapons sent. Though the Red Army mixed Western and Soviet tanks in the same brigades in 1941 and 1942, by 1943 entire formations were being outfitted solely with Sherman tanks. The Soviets regarded the Sherman as reliable and the British Valentine as an excellent scout tank. Matilda and Stuart tanks were viewed as under-gunned, however, and the US Lee/Grant was generally disliked. It was in the air the Soviets made the most direct use of Lend Lease weapons. The P-39 was probably the favorite American plane used by them, and they assigned it almost exclusively to air superiority units. A number of Soviet aces flew the plane in combat against the Germans. For example, Pavel Kukhno, who became commander of the Soviet Air Force in 1969, flew P-39s during the war. He shot down 13 German planes and shared credit for an additional 28. Ivan Bochkov was credited with seven individual and 35 shared kills in his P-39, and he was posthumously awarded the Hero of the Soviet Union medal when, in April 1943, he used his P-39 to hold off five Me-109s, thereby enabling his wingman to escape in a damaged plane.

It wasn't just US combat aircraft that saw action on the Russian front. Pilot Olga Lisikova was assigned one of the C-47s delivered under the Lend Lease program, which she piloted to success in a number of combat missions, including eight that would later earn her the Hero of the Soviet Union medal when, in April 1943, she used her C-47 to fly her crew to freedom while evading the German war damage. Similarly, the US provided about 270,000 tons of US crude oil and refined petroleum products, which was equal to all of Germany's truck production during the war, and it exceeded the Soviets' own production by at least 150,000 vehicles.

Other support items also helped the Red Army maintain mobility. For example, 50 million square feet of all-weather landing mats were sent to help construct temporary airfields near the front. The American provision of 1,100 locomotives, some 11,000 freight cars, and 3,600 miles of track helped the USSR boost its rail capacity and repair German war damage. Similarly, the 49,000 Jeeps and 34,000 motorcycles that were sent also gave tactical mobility to officers and messengers. Lend Lease also helped the Red Army to clothe and feed itself. By the end of the Lend Lease program, nearly 300,000 pairs of rubber-soled ski boots, 400,000 pairs of woolen underwear, and 1 million pairs of woolen overwear had been delivered, all items useful to help Soviet formations stay in the field in winter. American factories also sent 106 million yards of cloth, 62 million yards of worsted cloth, and 14 million pounds of bolts. Moscow's receipt of 225,000 cans of shoe polish, 50,000 hair clips, and 257 million buttons no doubt also helped its soldiers look sharp in their victory parades.

The US also provided 4.4 million tons of foodstuffs, or about 10 percent of the 40 million tons of food consumed by the Soviet armed forces during the war. Those rations included both sugar and the famous cans of Spam. The largely unheralded field of raw materials is another area where the US made a significant contribution to Moscow's war effort. As Marshal Georgi Zhukov stated after the war: "We did not have enough munitions, and how would we have been able to turn out all of those tanks without the rolled steel sent to us by the Americans? The US sent about 278,000 tons of rolled steel, enough to manufacture about 15,000 T-34s, a third of the total production of that tank. The US also provided an additional 1.8 million tons of steel in other forms. Other raw materials important for Russia's wartime production were also sent. The US supplied Russia with about 300,000 tons of its aluminum, a raw material vital for tank engines and aircraft frames, as well as 400,000 tons of copper for use in electronics and engines. Soviet production was also

Effects

After several decades during which Moscow insisted Lend Lease was insignificant, and primarily a method by which America had merely sought to profit from the blood of Soviet soldiers, a revisionist view emerged. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph. The new interpretation asserts Lend Lease was crucial to Moscow's survival and its ultimate triumph.