1OCT1954 **BEHIND THE TMES** Issue #10

Jacob Boyce

NATO/USSR NECK AND NECK IN ARMS ON LAND, AIR, AND SEA

In these uncertain times, as the iron grip of Soviet expansion looms over Europe, the free nations of NATO must take bold strides to ensure the security of our way of life. The Cold War is not merely a war of ideology; it is a race of arms and innovation. It is a battle fought not only on land, sea, and air but also in the factories, laboratories, and design rooms of the great powers. For those tasked with planning and preparing, the specifics of our military hardware must be understood in detail, not merely for deployment but also for adaptability and innovation. This article will explore the characteristics of NATO and Soviet armaments developed between 1949 and 1955, with an eye toward how they might influence tactical planning and development in the years to come.

Let us begin with the most immediate battlefield of any European conflict: the land. NATO's strategy in these critical years has focused on the development of superior tanks and artillery capable of countering Soviet massed armor formations. Chief among these is the M47 Patton tank, introduced in 1951. It is a formidable machine, weighing 48 tons and armed with a 90mm gun capable of firing high-velocity armor-piercing rounds. Its top speed of 30 miles per hour and operational range of 80 miles provide mobility, while its frontal armor, nearly four inches thick, offers substantial protection against Soviet ordnance. The Patton's cost, however, is significant, at $200,000 per unit. For those designing battlefield scenarios, this trade-off between firepower, speed, and cost is a critical consideration.

In contrast, the Soviet Union has prioritized sheer numbers and simplicity of design in its tank development. The T-54, first deployed in 1949, embodies this philosophy. While its 100mm gun boasts slightly greater firepower than the Patton's main gun, the T-54 is lighter at 36 tons and faster at 31 miles per hour. Its range, however, is limited to 60 miles, and its armor, while sloped for better deflection, is less robust overall. Crucially, the T-54 is cheaper to produce, estimated at roughly $150,000 per unit. Soviet doctrine relies on overwhelming numbers, and this lower cost allows them to deploy tanks at a scale NATO cannot easily match. For those simulating Cold War scenarios, balancing these traits is vital to capturing the strategic realities of the era.

Artillery also plays a critical role in the land theater. NATO's 155mm M114 howitzer, introduced in 1949, is a reliable and versatile weapon, offering a range of 9 miles and a rate of fire of four rounds per minute. Its shell options include high-explosive and smoke rounds, giving it flexibility in both offensive and defensive roles. Meanwhile,

USS Nautilus, Revolutionizes Naval warfare capabilities

the Soviets have continued to refine their Katyusha rocket systems. These weapons, while less accurate than conventional artillery, excel in saturation fire, delivering devastating barrages that can overwhelm unprepared positions. The BM-13 model remains their most widespread, with a range of 5 miles and the capability to launch 16 rockets in under 10 seconds. The contrast between precision and saturation is a key tactical decision for those creating realistic engagements.

In the skies, the jet age has fully arrived. The NATO F-86 Sabre, operational since 1949, is a marvel of Western engineering. With a top speed of 687 miles per hour and a ceiling of 49,000 feet, it is unmatched in dogfighting capability. Its six .50 caliber machine guns provide sufficient firepower to down enemy aircraft, though its payload capacity is limited to 2,000 pounds of bombs or rockets, emphasizing its role as a fighter rather than a ground-attack aircraft. The cost of the Sabre, estimated at $178,000, reflects its cutting-edge technology.

The Soviet MiG-15, first deployed in 1949, is its closest competitor. While slightly slower at 670 miles per hour, it can climb more quickly and operates effectively at similar altitudes. Armed with a 37mm cannon and two 23mm cannons, it delivers devastating firepower, especially against slower, less maneuverable aircraft. Its payload capacity, like the Sabre's, is limited, but its design prioritizes interception and air superiority over multi-role flexibility. For those crafting scenarios, the clash between these two jets is emblematic of the larger struggle between quality and quantity, as the Soviets rely on simpler designs for mass production.

The seas offer no respite from this arms race. The commissioning of the USS Nautilus in 1955 marked a turning point in naval warfare, as nuclear power granted submarines unprecedented endurance and speed. Capable of remaining submerged for weeks, the Nautilus can outmaneuver and outlast any diesel-electric submarine in existence. Armed with torpedoes capable of sinking any Soviet ship, it is a game-changer for NATO's strategic position. However, its construction cost of $37 million makes it a high-value target and limits its numbers.

The Soviet Union has responded with the development of the Whiskey- and Zulu-class submarines, introduced in 1949 and 1953, respectively. These vessels, while conventional in their propulsion systems, are equipped with torpedoes and designed for coastal defense and disruption of NATO supply lines. Their low cost and ability to operate in large numbers make them a persistent threat, particularly in choke points like the North Sea and the Baltic.

Surface fleets have also seen significant advancements. NATO's Forrest Sherman-class destroyers, launched in 1953, combine speed, durability, and firepower. Their 5-inch guns, capable of delivering 15 rounds per minute, and advanced anti-aircraft systems make them formidable escorts for carrier groups. On the Soviet side, Sverdlov-class cruisers represent the pinnacle of their surface fleet. Armed with 6-inch guns and substantial anti-air defenses, these ships are designed to project Soviet power and counter NATO naval superiority.

These developments in land, air, and sea hardware are not mere technical details; they are the instruments of deterrence and, if necessary, defense. For students of strategy, the interplay of speed, range, firepower, cost, and adaptability offers a rich field of study. For those working to simulate these dynamics in games or training exercises, capturing these traits accurately is essential to understanding the choices faced by military planners in this critical era.

As Americans, we cannot afford to ignore the urgency of this arms race. The Soviets have shown their willingness to expand their influence through force and intimidation, and it falls to us and our allies to ensure that the balance of power remains in favor of freedom. The hardware we develop today will not only defend our nations but also serve as a deterrent to aggression. In this way, every tank, plane, and ship becomes a symbol of our resolve and a testament to the ingenuity and determination of the free world.

Insiders warn the Soviet T-54/55 tank is a terrifying leap forward, outpacing NATO armor. Its 100mm gun can pierce any Western tank, and its sloped armor shrugs off high-velocity rounds. Reports suggest it's cheap to mass-produce, enabling overwhelming numbers. Rumors swirl that entire divisions of these tanks are poised to sweep across Europe, leaving NATO forces scrambling to develop countermeasures.