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Soviet Arms Shipments to Cuba in 1978 and Trends in 1979

An Intelligence Assessment

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ER 79-10501J

September 1979

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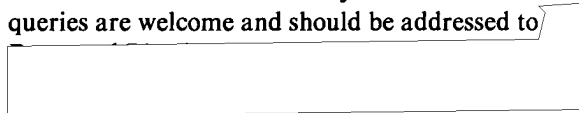


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An Intelligence Assessment

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queries are welcome and should be addressed to



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The paper has been coordinated with the Office of
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Officer for the USSR.



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**Soviet Arms Shipments
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Overview

The overall technical sophistication of identified Soviet military deliveries to Cuba increased substantially in 1978; the volume of deliveries rose for the fourth consecutive year and reached the highest level in more than a decade. This pattern of improved quality and high levels of arms shipments has continued in the first eight months of 1979. The strong upward trend in arms shipments began in early 1976. While a portion of the newer ground equipment has been assigned to the Soviet brigade in Cuba, the bulk of the arms flow in recent years reflects the USSR's ongoing effort to modernize Cuba's armed forces, and to provide replacements for military equipment supplied by Havana to Third World countries, especially Angola and Ethiopia.



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Shipments in 1978 were highlighted by Havana's initial receipt of MIG-23 jet fighter aircraft in the spring. Another first during the past year was the delivery of 20 AN-26 short-range cargo/troop transports. Delivery continued on major hardware items previously seen in Cuba, including T-62 tanks and ZSU-23/4 self-propelled anti-aircraft guns. Deliveries thus far in 1979 have included an F-class submarine (the first submarine in Cuba's Navy) and two Turya-class hydrofoil patrol boats.



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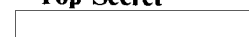
The Soviet modernization effort has substantially enhanced Cuba's capability to conduct a more mobile mechanized warfare, including limited air assault operations. This contrasts sharply with Cuba's historic role of maintaining largely a "garrison force." The inflow of newer equipment provides Havana with a large and more sophisticated arms inventory at home while strengthening its ability to undertake offensive military operations in the Third World.



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Discussion

The USSR has supplied almost all the military equipment Cuba has acquired since the early 1960s.¹ The total value of Soviet arms shipments to Cuba from 1961 through yearend 1978 equals \$1.55 billion,² including about \$150 million in 1978. On a volume basis, annual arms deliveries to Cuba in the six years following the 1962 missile crisis fluctuated widely, ranging from a low of 6,200 metric tons in 1968 to a high of 41,100 tons in 1967 (see figure 1).

In the six-year period following the 1968 low, Soviet arms deliveries to Cuba remained between 10,000 and 12,600 tons. Beginning in 1975, deliveries grew steadily and by 1978 reached 22,400 tons—the highest level in a decade. Arms deliveries in the first eight months of 1979 suggest that deliveries for the full year will roughly equal the high 1978 level.



¹ This analysis includes a full discussion of all identified arms transfers to Cuba, whether by sea or air. However, the numerical tabulation of annual arms shipments is based almost solely on military equipment carried on Soviet merchant ships carrying exclusively military cargoes. These seaborne deliveries, which in most years accounted for over 95 percent of the identified military equipment to Cuba, provide the most definitive year-to-year comparisons of Soviet arms deliveries to Cuba. Deliveries of naval combatants that sail or are towed to Cuba, as well as transport aircraft flown to Cuba for transfer to the armed forces, are excluded from the quantitative analysis.

² All values are expressed in Soviet trade prices and include only weapon systems and support materiel delivered to Cuba, virtually all of which was destined for the Cuban armed forces. It does not include the costs of developing and maintaining Soviet facilities and personnel in Cuba or Soviet technical advisory assistance to the Cuban armed forces. If the USSR's arms shipments to Cuba during the 18-year period were valued at US costs of production (costs of producing comparable weapon systems and support items in the United States) instead of Soviet trade prices, the estimate would increase to \$2.1 billion, with \$225 million for 1978 alone.

Modernization and Offsets

While the USSR has for the most part provided for the gradual improvement in Cuba's military equipment inventory, the pace of modernization picked up in early 1976 and has accelerated since early 1978. As the modernization effort quickened, the Soviets began to offset deliveries of military equipment that Cuba was shipping to Angola. We believe such offsets for arms shipped by Cuba to Third World countries have continued throughout the period and were underscored most recently by replacement of the small but critically important amount of military equipment supplied by Cuba to the Nicaraguan Sandinistas prior to the downfall of Somoza in July 1979.

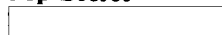
If Moscow had supported neither the modernization nor the offset program, the tonnage necessary to support the Cuban armed forces at the 1974-75 level of strength probably would have been about 12,500 tons annually, the upper end of the range of shipments between 1969 and 1974. Instead, arms shipments rose for four consecutive years through 1978 to an annual average rate of more the 19,000 tons.

Pattern of Arms Shipments

In 1978, a dozen Soviet ships delivered 22,400 tons of military equipment to Cuba. Thus far in 1979, six Soviet arms carriers have arrived in Cuba, bringing 10,900 tons of arms. All but one of these shipments was exclusively military. In the one exception, the Soviet ship—the Aleksandr Grin—arrived in December 1978 carrying mostly commercial cargo in its holds and military hardware on deck.



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In addition to these major seaborne deliveries, smaller amounts of military-related support equipment are carried in ships transporting commercial cargoes or in the cargo holds of Aeroflot IL-62 passenger aircraft, which operate daily between Moscow and Havana. The IL-62s may have been augmented by the arrival in July of the first long-range IL-76 jet cargo transport [Redacted] A second IL-76 flight to Cuba occurred in August. The aircraft flew on to Nicaragua, probably carrying humanitarian aid. Despite the overall air activity, the cargo capacity of aircraft currently operating to Cuba remains almost negligible when compared with seaborne arms deliveries; aircraft, however, can provide quick emergency delivery of critical weapons or parts. [Redacted]

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Marief (64 kilometers west of Havana) remains Cuba's primary port for the handling of military equipment. Over the past few years, however, Havana has been used with increasing frequency because its pierside facilities can more easily handle heavy equipment. For the first time in several years, one arms carrier offloaded most of its cargo at Isabela (about 240 kilometers east of Havana) and another offloaded arms at Nuevitas (about 470 kilometers east of Havana). [Redacted]

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Types of Equipment

We believe the bulk of military deliveries to Cuba in 1978 and thus far in 1979 consisted of small arms, ammunition, assorted military trucks, and jeeps. In addition to these standard shipments, Havana received initial deliveries of MIG-23 fighter aircraft, AN-26 troop/cargo transports, and an F-class submarine.

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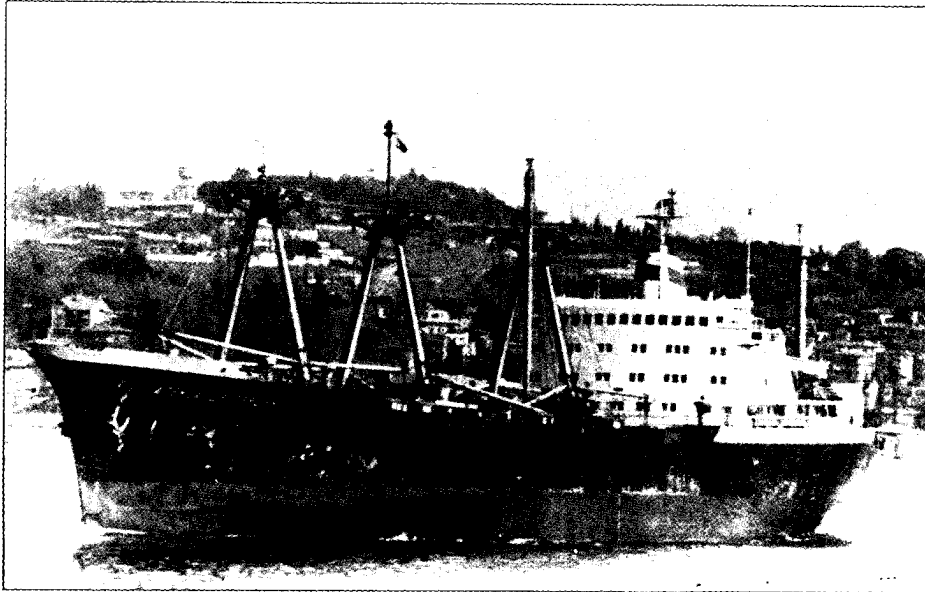
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The Aleksandr Gertsen transiting the Bosphorus en route to Cuba on 30 April 1978 with a hold cargo suspected of including MIG-23 aircraft.

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Figure 2

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Besides the MIG-23s, Cuba has also received additional numbers of fighters already in inventory (16 MIG-21-Ls and 4 MIG-17s) and initial deliveries of the MI-8 assault helicopter and the USSR's twin-turboprop AN-26 transport. With the delivery and assembly of the MI-8 assault helicopters in the spring of 1978, a Cuban Air Force unit, probably a squadron and the first of its kind in Cuba, was formed. The unit was moved to Cienfuegos Airfield and one of its missions probably includes training and tactics for combat operations in Angola. Twenty AN-26s have been delivered to date, with the first five arriving in the fall of 1978. The AN-26 significantly enhances Cuba's short-range cargo/troop airlift capacity: the aircraft has a radius of 810 nautical miles and can carry either 38 lightly armed troops or 4 tons of equipment or some combination of the two. The AN-26 will likely be used by the new land and assault force that paraded in Havana for the first time last January

Naval

The Cuban Navy has received several types of ships during the past 20 months: four additional Osa-II patrol boats; two Turya-class patrol boats, and one Foxtrot-class submarine. Three of the Osa-IIs were towed to Cuba in 1978 and one thus far in 1979, bringing the current inventory to six. The two Turyas arrived in Havana in February 1979 as deck cargo on the Soviet merchant ship Ola (see figure 3). Delivery of the Turyas marked the first time Cuba was the initial recipient of a Soviet weapons system as well as the first time the item has been exported by the USSR. The Foxtrot submarine, which was towed to Cuba flying a Cuban naval ensign, arrived in Cienfuegos on 7 February 1979.

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Outlook

Soviet efforts to modernize the Cuban military and to offset Havana's arms shipments to Third World countries will continue so long as the political goals and strategic needs of the two nations dovetail. Each of the armed services is likely to benefit from ongoing modernization. On a quantitative basis, the current cycle of increased arms deliveries may be at or close to a peak. Nevertheless, the Soviets have the capability to shift priorities and to raise quickly the level of deliveries to any particular arms recipient. [Redacted]

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Future Soviet deliveries for the Cuban Army are likely to consist primarily of additional quantities of the newer ground equipment Havana began receiving in 1976. Most of the future fighter aircraft deliveries are likely to be MIG-21 J, K, and L models already in the Cuban Air Force. Additional MIG-23s would be a logical complement to the small number now identified in Cuba. [Redacted]

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The USSR is aware of US concern about ground-attack aircraft in Cuba. The reference made by a Cuban official last fall about the possible delivery of the MIG-25 Foxbat was subsequently denied by a Soviet official, but the potential remains. [Redacted]

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The USSR appears intent on measured improvement of Cuba's small Navy during the next few years. The delivery of the F-class submarine, two Turya-class patrol boats and a sixth Osa-II thus far in 1979 have set a tone for such action. We expect Cuba to receive additional F-class submarines and possibly some Shershin-class motor torpedo boats, a logical complement to the Osa-IIs. At least one report indicates that Cuba will receive an unspecified number of Nanuchka-class guided-missile patrol boats. We also look for the USSR to enhance Cuba's very limited antisubmarine warfare capability, combining the delivery of ASW aircraft with the possible transfer of light frigates such as the new Koni-class, which includes launchers for MBU-2500 ASW rockets. [Redacted]

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