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PLA's New-Quality Forces: The Information Operations Group at the 2025 Military Parade

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On September 3, 2025, China held the 17th military parade since the founding of the People's Republic of China, which featured a multi-dimensional display of 45 formations, including marching formations, equipment drive-bys, and aerial flyovers.[1] Following Xi Jinping's directive to accelerate the development of the People's Liberation Army (PLA) into a world-class military, the PLA has established a new force structure of "four services and four arms" and a modern warfare concept of "information dominance, system support, elite force operations, and winning through jointness."[2]

Since the PLA replaced the Strategic Support Force in April 2024 with three strategic arms—the Aerospace Force (ASF), Cyberspace Force (CSF), and Information Support Force (ISF)—the Chinese government had provided only high-level descriptions of these units and their missions. The military parade provided observers and analysts with an opportunity to further examine their roles. The three strategic arms not only paraded independently in front of Tiananmen Square for the first time, but their equipment was also organized into three formations within a single Information Operations Group (IOG). This joint organization is a reflection of the PLA's combat model in which these arms are functionally complementary in the information operations kill chain and are essential to integrating the operations of all PLA services.

Information Operations Group

Weapons in the parade were organized in combat-oriented joint formations. The IOG was presented as an integrated combat unit composed of electronic warfare, cyberspace, and information support capabilities from the ASF, CSF, ISF, and PLA Army. The IOG is capable of conducting both independent operations and providing joint support across all services. It is also an example of the PLA's new-quality combat capability [新质战斗力], which, according to a *PLA Daily* report, brings together multi-domain awareness, real-time command and control, precision strikes, full-spectrum protection, and agile sustainment.[3] The composition of the IOG shows the PLA's determination to build cross-domain system-of-systems advantages.

Information warfare relies less on traditional hardware and more on advanced technology and software systems. While the IOG presented 13 types of equipment designated as "new quality" [xinzhi/新质] in the parade, specific details of individual equipment were not provided. Instead, the collection was presented as "the latest equipment representing the evolution of modern warfare, showcasing the capabilities needed to win contemporary conflicts."[4] The group's equipment was mostly integrated with various vehicle platforms. Based on visible communication and jamming antennas and arrays, the equipment likely serves as key mobile nodes in the PLA's multi-service, networked, informationized operations architecture. Although officials did not disclose the specific designations on display, the parade commentary noted the multi-functional, integrated nature of the new equipment, stressing its dual purpose of serving in both support and offensive/defensive roles.

Three Formations of the Information Operations Group

The IOG in the parade was organized into three formations, which appeared in sequence: Cyberspace Operations [网络空间作战方队], Electronic Warfare [电子对抗方队], and Information Support [信息支援方队]. Each highlighted their unique contributions to the PLA's informationized combat effectiveness. The Cyberspace Operations and Electronic Warfare Formations, which appeared first, emphasized their capabilities as cutting-edge forces fighting in "new operations domains," such as aerospace, deep sea, cyber, and electromagnetic, while also underscoring their functions in supporting multi-domain joint operations.[5] The Information Support Formation that followed focused on its role as the main force for building a unified network information system to support joint operations.

The Cyberspace Operations Formation was primarily formed by personnel and equipment from the CSF. In a post-parade report, the *PLA Daily* characterized the CSF as a strategic arm, a new type of military power, and a high-tech force comprised of soldiers with advanced academic qualifications.[6] The CSF can support command and control as well as reconnaissance and situational awareness through networked technologies. It can also serve as the main new-quality combat force in the "invisible battlefield of cyberspace" to establish a "network border defense" and launch rapid reaction and possibly counterattacks against intrusions.[7] The four types of equipment displayed in the Cyberspace Operations Formation were all fitted with distinct antennas. Notably, the light, high-mobility tactical vehicles in the first row were each equipped with a large multi-rotor drone, suggesting an ability to integrate information warfare and cyber warfare capabilities into frontline tactical units.[8]

Figure 1: Four Vehicles from the Cyberspace Operations Formation[9]

The Electronic Warfare Formation was formed from units from an ASF Base and the Northern Theater Command Army. [10] The *PLA Daily* introduced the ASF as a "new-domain, new-quality force for the peaceful use of space."[11] For example, its navigation satellites, in cooperation with the PLA Army's electromagnetic spectrum dominance, likely provide the PLA's joint fires with a system-of-systems confrontation capability ranging from space to terrestrial battlefields. Compared to the 2019 parade, where the equivalent Second Information Operations Formation was composed of an Army electronic warfare brigade focused mainly on jamming systems, this year's Electronic Warfare Formation placed greater emphasis on seizing the initiative through offensive precision reconnaissance and suppressive control.[12] The five types of equipment displayed (see Figure 2) are critical components of electronic warfare systems, and their capabilities were reported to have evolved from a "detect, locate, and jam" model in 2019 to a more comprehensive "detect, attack, and defend" triad.[13] Described as a "sharp sword" in the electromagnetic spectrum, this force can not only conduct reconnaissance and defense but also strike preemptively to gain battlefield superiority by "shattering networks and breaking kill chains [破网断链]."[14]

Figure 2: Five Vehicles from the Electronic Warfare Formation[15]

The Information Support Formation, formed and led by the Information Support Force, was the last one in this group. The Information Support Force was identified by the *PLA Daily* as a critical element of the joint operations system that is integrated with all services and branches to ensure seamless information connectivity.[16] The PLA views information and communication as key to victory. On the informationized and intelligent modern battlefield, the PLA will rely on the ISF to build information links to support the joint combat architecture.[17] The Information Support Formation is responsible for constructing the network information systems that underpin joint operations, with a focus on enhancing networked combat capabilities and the ability to seize information dominance.[18] The four ISF systems displayed (see Figure 3) were identified as a battlefield network cloud vehicle, a digital intelligence-enabling vehicle, a space-ground networking vehicle, and an information fusion vehicle.[19] In the PLA's information-centric approach to warfare, the ISF will reportedly be tasked with building an all-weather, all-domain, and all-encompassing information support system.

Figure 3: Four Vehicles from the Information Support Formation[20]

Brief Review of Technologies in the Information Operations Group

The PLA's latest communications and electronic warfare equipment is more difficult to analyze compared to what was seen in 2015 and 2019. Due to the lack of official information, the PLA's advancement in information warfare can only be inferred from external hardware, the visible antennas in this case. Within the Information Support Formation, the digital intelligence-enabling vehicle (vehicles XZ321 – XZ324) is equipped with a vast array of antennas. Unofficial analysis of an overhead image in the parade, shown in Figure 4, suggests an estimated nine to ten antennas, including phased-array data link antennas, radio whip antennas, one radio loop antenna, one satellite antenna, and one tactical internet antenna.[21] Among these, the phased-array data link antennas, visible as the three flat panels on the vehicle, are the real giveaway. While their specifications are unknown, their employment suggests that the PLA has been transforming its joint communication among its main forces from traditional radio-based to data link-based.

According to articles in the *PLA Daily*, previously, the PLA's communication network depended mainly on microwave relay transceivers, which require strict antenna alignment due to their high directionality and are therefore limited to stationary use.[22] In contrast, phased array antennas enable communication on the move, as they achieve beamforming by adjusting the phase difference of the drive signals, thus removing the operational constraints of the PLA's mobile platforms.[23] Therefore, the digital intelligence-enabling vehicle is very likely a mobile data link base station that can provide network access to all operational platforms, integrating all combat capabilities on the battlefield.

Figure 4: An Overhead Imagery of Digital Intelligence-Enabling Vehicles[24]

The space-ground networking vehicle in the Information Support Formation seen in Figure 3 (vehicles XZ331 – XZ334) resembles the satellite communication vehicles described earlier, but its name implies that it might be capable of fusing space-based links with ground and radio networks for enhanced connectivity. Lastly, the information fusion vehicle (vehicles XZ341 – XZ344), also seen in Figure 3, has antennas similar to the digital intelligence-enabling vehicle and is also equipped with a quadcopter drone, presumably for communications relay. This indicates that in addition to its data processing capacity, it can also serve as a multi-functional, integrated air-ground information hub.[25]

With the equipment in the IOG, the PLA appears to be building an integrated and mobile combat information network to shorten the kill chain, possibly making near-real-time fire responses possible in the near future. The PLA's emphasis on digital and intelligent technologies, such as big data, cloud computing, and artificial intelligence, is reflected in the name of its IOG's equipment, particularly the digital intelligence-enabling vehicle [数智赋能车].[26] This focus shows the PLA's continuing drive to transform its military training and combat preparation through digital intelligence.[27] The integration of artificial intelligence and big data into frontline operational units indicates that the PLA is accelerating battlefield decision-making and developing autonomous strike capabilities to prepare its forces for future intelligentized warfare.

Conclusion

Although the organizational restructuring of China's new strategic arms is relatively recent, capability developments in the aerospace, cyberspace, and information support domains have been ongoing for decades. The modernization of numerous equipment types and improved education levels of personnel are aimed at enhancing the PLA's strategic support capabilities and

new-quality combat capabilities in strategic domains. China is advancing in high-tech development, leveraging a whole-of-nation approach to accelerate the development of "new-quality productive forces" and "new-quality combat forces," as it aims to win military competition, seize the initiative, and ensure dominance in future warfare through military technological innovation.[28] The highly informationized and intelligentized weapons and networked operational models in the parade indicate that China is adapting to new technologies and the evolving character of war, shaping the PLA into a modern force that aims to achieve dominance in future high-tech conflicts.

Endnotes

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