

Unveiling GRU's Information Operations Troops



A STUDY COMBINING
PHALERISTICS & OSINT

OSINT & Phaleristics: Unveiling GRU's Information Operations Troops (VIO)

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Executive Summary

In July 2025, CheckFirst published an initial [report](#) relying on the analysis of military decorations to shed light on some of the most secretive units within the Russian intelligence services. Our first case study was based on a sample of more than 200 photographs of insignia attributed to the FSB's 16th Centre, whose core missions include cryptanalysis, SIGINT¹, and computer network operations. This research allowed us to reconstruct the history of the 16th Centre within the Soviet and later Russian security apparatus since the 1970s, to confirm that it is currently composed of at least ten departments, and to establish that it oversees a network of at least ten ground-based listening stations spread across Russia, whose precise geolocations we were able to identify.

Building on this initial study, and once again relying on the analysis of military decorations—known as phaleristics²—we are now publishing a report focused on the so-called “Information Operations Troops” (VIO) of Russia's military intelligence service, better known by the acronym [GRU](#)³. While the existence of these troops has been publicly acknowledged in open-source information since 2014, their precise missions and organizational structure have remained closely guarded secrets. Drawing on a corpus of 118 photographs of insignia, patches, and military pennants produced in honour of the GRU, we were able to gain an unprecedented view of the units that make up the VIO, partially reconstruct their chain of command, and identify most of their known facilities across Russian territory.

Based on the indicators visible on the decorations we analysed, and corroborated through open-source research, the GRU's Information Operations Troops (VIO) appear to encompass at least fifteen units today, spanning three historically rooted specializations: encryption and cryptanalysis, computer network operations, and psychological operations. Most of these units predate the creation of the VIO and originated within different branches of the GRU. However, they were subsequently brought together under a unified command structure which was most likely established in 2014 and reportedly overseen by GRU Military Unit 55111.

Some of the VIO units have long been known publicly, most notably Units 26165 and 74455, as public disclosures have respectively attributed to them the operations of the APT28 and Sandworm hacking groups. Others, however, have been scarcely documented—or not documented at all—nor previously linked to the VIO, such as Units 20766, 48707, or 20978.

¹ For the record, SIGINT refers to the collection, analysis, and exploitation of information from intercepted electronic signals for intelligence purposes. It is generally divided into two subcategories: Communications Intelligence (COMINT), which involves intercepting voice, text, or data communications, and Electronic Intelligence (ELINT), which focuses on non-communication signals such as radar emissions, typically to analyze the movements and capabilities of military equipment.

² For the record, phaleristics (or phaleristics) is the academic discipline concerned with the study of medals, orders, decorations, and related honors issued by states, organizations, and military bodies. It intersects with heraldry, numismatics, and military history, focusing on the design, symbolism, socio-political context of these items, as well as the systems through which they are awarded.

³ Acronym for the “Main Directorate of Intelligence of the General Staff of the Armed Forces of the Russian Federation” (GRU GSh VS RF). In Russian: Главное разведывательное управление Генерального штаба вооружённых сил Российской Федерации (ГРУ ГШ ВС РФ). In 2010, the service officially dropped the term “intelligence” from its name, becoming simply “GU,” but it continues to be referred to informally as the “GRU”.

While identifying the locations from which these units operate proved more challenging—particularly because, unlike the SIGINT units examined in our first report, they do not rely on distinctive hardware that can be readily identified in satellite imagery—we were nevertheless able to assess their likely locations by drawing on information from investigative journalism, leaked materials, and data collected from Russian social media platforms.

While significant blind spots remain regarding the activities of the VIO units, this second report once again demonstrates that combining phaleristics with OSINT constitutes a highly effective research approach for examining Russian intelligence services and extracting strategic insights into some of their most clandestine units. We hope that this work will contribute to a clearer understanding of the scope of their missions and capabilities, and, more importantly, help improve defences against their future operations—whether cyber-enabled or information-based.

Introduction

Unlike the FSB—one of whose core units was examined in our first [study](#)—the internal structure of the GRU remains a closely guarded secret. The most recent first-hand accounts of its internal composition largely stem from defectors who left the organization at the very end of the Soviet era or in the early 1990s, including [Viktor Suvorov](#) and [Stanislav Lunev](#)⁴. Since then, numerous researchers, journalists, and military analysts have sought to shed light on the reforms the GRU may have undergone—particularly in the aftermath of the shortcomings identified during the 2008 Russo-Georgian war—and to reconstruct its organizational chart, albeit with limited success.

There is broad agreement that the GRU, much like during the Soviet era, is structured around “[Directorates](#)”⁵, which are either geographically oriented or mission-specific. These directorates coordinate the GRU’s wide-ranging capabilities, which encompass both the collection of foreign intelligence through human and technical means, as well as operational tasks conducted by its special forces (“spetsnaz”). In recent years, these forces have been implicated in [sabotage operations](#) and targeted [assassinations](#) carried out abroad, many of which have been extensively documented.

Nevertheless, despite the volume of publicly available reporting on GRU’s activities, these sources have so far failed to provide a clear picture of its internal structure and at times even contradict one another regarding the exact number, designation, and responsibilities of certain directorates or departments⁶. This paradox prompted us to turn our attention to GRU-related military insignia, operating under the hypothesis that—much like the insignia associated with the FSB’s 16th Centre analysed in our first report—they could offer valuable clues into the history, organization, missions, and geographic footprint of Russian military intelligence.

Our methodology consists of collecting photographs of military insignia from resale platforms, online forums dedicated to Russian military history enthusiasts, and the online catalogs of companies that manufacture these decorations. We then analyse the information visible on the insignia, which typically include the unit number, founding date, full designation, and often use recurring symbols to represent mission sets, and more or less explicit references to the unit’s history or location⁷.

⁴ In this report, we only provide external links to reliable sources or to online archives when we consider that the original content may disappear or be altered.

⁵ Russian military and intelligence organisations use a set of organizational terms whose meanings are intentionally flexible and do not map cleanly onto Western equivalents. “Directorate” (in Russian, “управление”) generally refers to a high-level command or administrative body responsible for planning, coordination, and oversight rather than direct operations. “Centre” (in Russian, “центр”) denotes a specialised functional structure—such as analytical, technical, training, or coordination units—and “group” or “detachment” (in Russian, “отряд”) designates an operational unit tasked with field activities, typically smaller and more tactical in nature.

⁶ See section 2.2 below.

⁷ For a full description of our methodology, see [our first report](#).

These decorations were then systematically sorted, with the first clues uncovered—such as alternative names—guiding more targeted searches to identify additional items. Newly discovered decorations were continuously added to the database, allowing us to confirm or challenge our initial hypotheses until a clearer picture of the structure under study emerged. In this new report, we expand our scope to include GRU pennants and patches which, while generally considered easier to counterfeit than metal insignia, appear to be more widespread in certain departments, likely due to lower production costs.

In all cases, the indicators visible on the decorations presented in this report required careful corroboration. To do so, we relied on a wide range of sources, including reporting by media outlets, NGOs, and governments that have documented GRU activities, as well as Russian public records, job postings, local forums, and social media content—particularly from the Russian platforms VKontakte and Odnoklassniki. To protect the authors of these posts and avoid drawing undue attention from Russian security services—who could seek to disrupt or compromise these valuable sources—we do not systematically provide direct references to these forums or publications.

It is important to stress that identifying a unit through military decorations does not necessarily imply that it still exists today in the same form, under the same designation, or with the same missions. Units may have been reorganized, merged, renumbered, or dissolved over time, particularly in the context of the major structural reforms undertaken by the GRU since the late 2000. Accordingly, this report does not seek to provide a definitive or static snapshot of the GRU, but rather to document discernible organizational lineages and functional trajectories.

This report therefore presents the results of our investigation into military decorations linked to the VIO⁸. It is based on the analysis of 118 unique photographs of insignia, pennants, and patches that can be attributed to these units with a high degree of confidence. We begin by outlining the history of the GRU's VIO, before examining in detail the units belonging to its three main departments, respectively responsible for psychological operations, encryption and cryptanalysis, and computer network operations.

⁸ In Russian, Войска информационных операций ("ВИО").

Information Operations Troops

History

The “Information Operations Troops” have been a recurring subject in the literature on Russian military forces since at least 2014. For good reason: in May 2014—only a few months after the annexation of Crimea—the Russian state news agency TASS [announced](#) their creation within the Russian Armed Forces. According to the report, their role was to protect military information and communication systems against “cyberterrorism”. TASS cited a source within the Russian Ministry of Defense, which explicitly justified the establishment of these units by referring to Edward Snowden’s revelations about U.S. surveillance capabilities.

While the outbreak of the conflict between Russia and Ukraine may have accelerated the operationalisation of the VIO, the underlying concept predates 2014. The need to equip the Russian armed forces with so-called “information” capabilities had already [emerged](#) in the aftermath of the 2008 Russo-Georgian war. As early as 2010, Russian military doctrine [described](#) the growing importance of the “informational component” in contemporary conflicts. The following year, the Russian Ministry of Defense published its “Conceptual Views Regarding the Activities of the Armed Forces of the Russian Federation in the Information Space”, which [defined](#) “information security” not only as protection against cyber attacks, but also against the “propaganda” Russia was said to be subjected to.

Although this definition of “information warfare” may appear broad, it is not new. Russian doctrine has historically promoted a [holistic](#) view of the digital domain, encompassing both the technical means used to transmit information and the content conveyed through those means. As a result, the Russian military [doctrine](#) does not frame these activities primarily in terms of “cyber”, as is common in Western countries, but instead favors the concepts of “information space” and “information confrontation” (IPb)⁹. This framework encompasses both “information-technical” effects¹⁰ (ITV)—that is, computer network operations—and “information-psychological” effects¹¹ (IPV), referring to operations in the cognitive domain.

This conceptualization of the threat environment is critical, as it implies that Russia’s VIO possess capabilities designed both to defend against—and to conduct—cyber and information operations. Since 2014, fragments of information have surfaced regarding the structure of the VIO, which reportedly [include](#) so-called “research companies” for conscripts and dedicated units embedded across most branches of the Russian Armed Forces. These notably include elements associated with the [8th Directorate](#) of the Russian General Staff, which is responsible for protecting state secrets within the military. However, as mentioned above, the specific

⁹ In Russian, “информационное противоборство”.

¹⁰ In Russian, “информационно-техническое воздействие”.

¹¹ In Russian, “информационно-психологическое воздействие”.

manifestation of the VIO within Russian military intelligence has only begun to be documented since the late 2010s and remains, to this day, highly fragmented.

Structure

VIO have been the subject of considerable speculation in recent years, fuelled in particular by repeated disclosures concerning Russian government-linked [attempts at digital interference](#) in foreign elections, as well as large-scale cyber operations aimed at [collecting](#) sensitive information or [sabotaging](#) critical infrastructure systems. Russian Army psychological operations units even have a dedicated [Wikipedia page](#)—now available only in Ukrainian and Hebrew—while the [Russian-language version](#) was historically a battleground between pro-Ukrainian and pro-Russian users. The latter repeatedly attempted to mislead readers by covertly altering the military unit numbers mentioned in the article¹².

A number of sources now claim that the VIO are organised under a mission-specific Directorate numbered “[12](#)” or “[12 bis](#)”. Despite extensive research, we are unable to confirm this designation, as it does not appear on any of the decorations available to us. Other sources—including unverified [leaks](#)—suggest that the VIO fall under a centralised command led by GRU Unit 55111¹³, reportedly known as the “Information Operations Troops Command” (KVIO)¹⁴. This unit, whose former commander is said to have joined the [Scientific Council](#) of Russia’s Security Council in 2021, has been publicly accused of conducting information manipulation campaigns. To date, however, no insignia belonging to Unit 55111 have been identified.

Despite the absence of explicit references to a Directorate number on the decorations we analysed, our investigation indicates that the VIO are most likely integrated into an ad hoc Directorate bringing together three core areas of expertise under a unified command:

- psychological operations;
- encryption and cryptanalysis;
- computer network operations.

Below, we outline the currently known structure of the VIO based on our findings and corroborated with open-source information. For each confirmed unit, we present the corresponding insignia and describe the command relationships that could be established through phaleristic analysis. Units identified as “main centres”—those assessed as leading entities within each department—are marked with a star.

¹² Unfortunately, to the best of our knowledge, no archival material documenting these changes is publicly available, but some sources have inadvertently incorporated these erroneous unit numbers into their reporting: <https://osnaz-cikle.livejournal.com/286148.html> (“2340” instead of “2140,” “03034” instead of “03134,” etc.). See section 3.2.

¹³ As a reminder, all entities belonging to Russian security and intelligence services are commonly identified in public records not by name but by five-digit numerical designations to obscure the origin, size, and mandate of the units.

¹⁴ In Russian, “Командирование войск информационных операций”.

Structure of Russia's GRU "Information Operations Troops" (VIO)

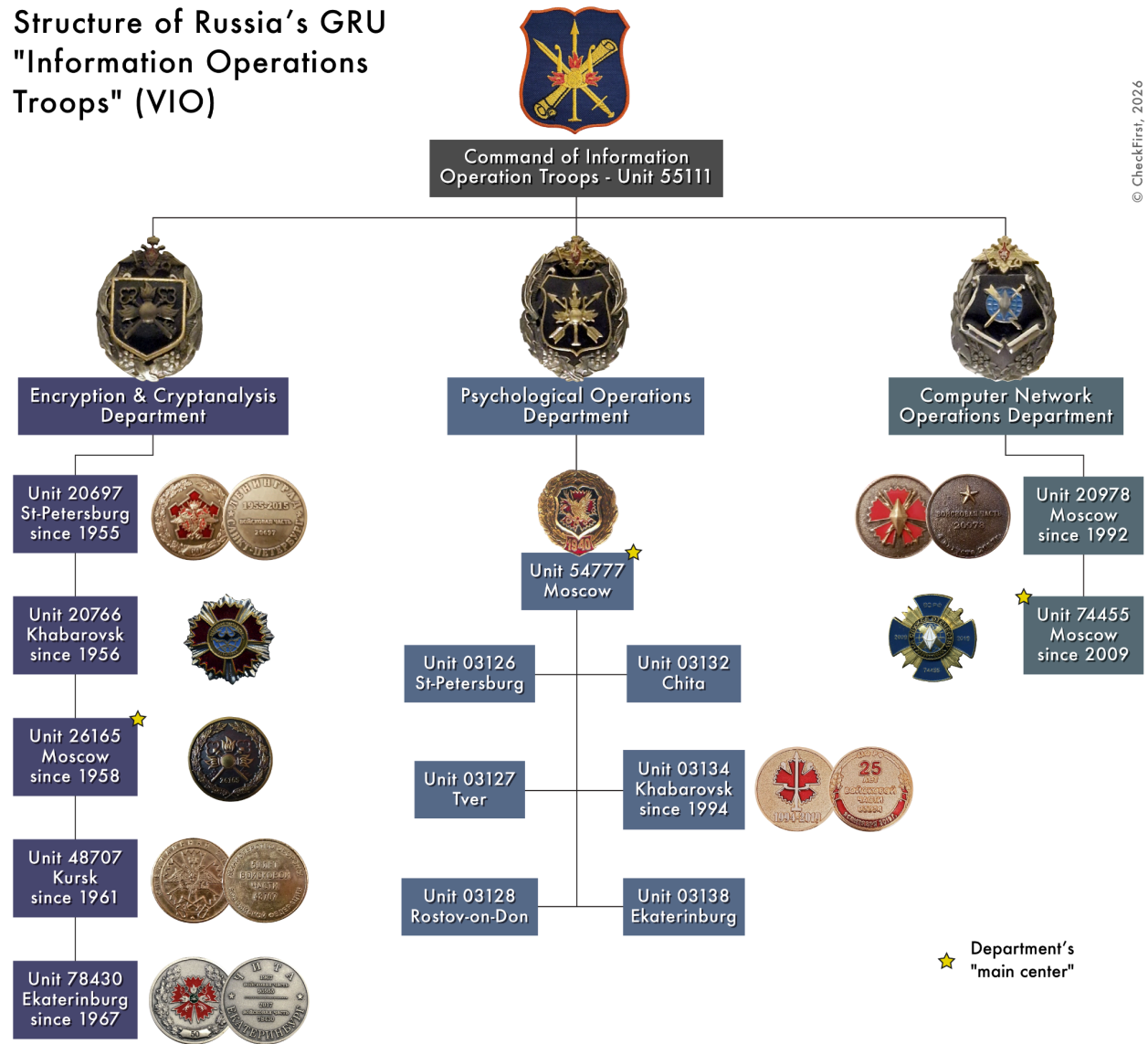


Fig. 1 - Structure of Russia's GRU "Information Operations Troops" (VIO)

Main Symbols

The existence of the VIO and their three constituent departments was confirmed for the first time following the publication in early 2025, of a pennant produced in their honour and shared in a discussion [thread](#) on psychological operations units on a specialized Russian-language forum. At first glance, the pennant appears to display little more than a central emblem positioned above three smaller emblems, each with distinct features, and the inscription “10 years” below—suggesting that it was produced to mark the first decade of the entity’s existence. Several elements, however, indicate that this anniversary does indeed correspond to the VIO.

The first clue was the string “VIO GU GSh”¹⁵, which precisely matches the Russian acronym for the “Information Operations Troops” (VIO) of the “Main Directorate” (GU) of the “General Staff” (GSh)—the [official designation](#) of Russia’s military intelligence service since the [2010 reform](#). The link between the pennant and the GRU is further corroborated by the presence, at the centre of the main emblem and on two of the smaller ones, of a three-flame grenade. This is a [symbol](#) exclusively associated with the GRU, adopted in the early 2000s in reference to the [elite troops](#) of the Imperial Russian Army.



Fig. 2 - Information Operations Troops and Departments pennants

¹⁵ In Russian “ВШО ГУ ГШ”.

Finally, we observed that the three smaller emblems feature symbols we had encountered repeatedly while collecting and analysing decorations linked to the GRU: in particular the Greek letter “psi”, crossed keys, and a diamond. We therefore hypothesised that, although no specific date is indicated, the pennant was produced in 2024 to commemorate the 10th anniversary of the VIO—most likely established in 2014—and that some of the units we had already identified were in fact part of the VIO’s internal departments.

Starting from this initial decoration, we were able to identify additional insignia, pennants, and patches bearing the same central symbol. All of these decorations indicate that the VIO emblem is a composite of the symbols associated with the three departments that make up the Directorate. Behind the three-flame grenade, one can clearly discern: the Greek letter “psi”, commonly associated with psychological operations—referring to the Department of Psychological Operations (see Section 3); a sealed scroll, historically linked to the protection of secrets—referring to the Department of Encryption and Cryptanalysis (see Section 4); and a sword, denoting offensive action—referring to the Department of Computer Network Operations (see Section 5).

In the three sections that follow, we describe the units that could be linked, through phaleristic analysis, to each of the VIO’s three departments. For each, we present the main decorations identified and examine their symbolism, history, presumed missions, and the locations from which they are believed to operate.

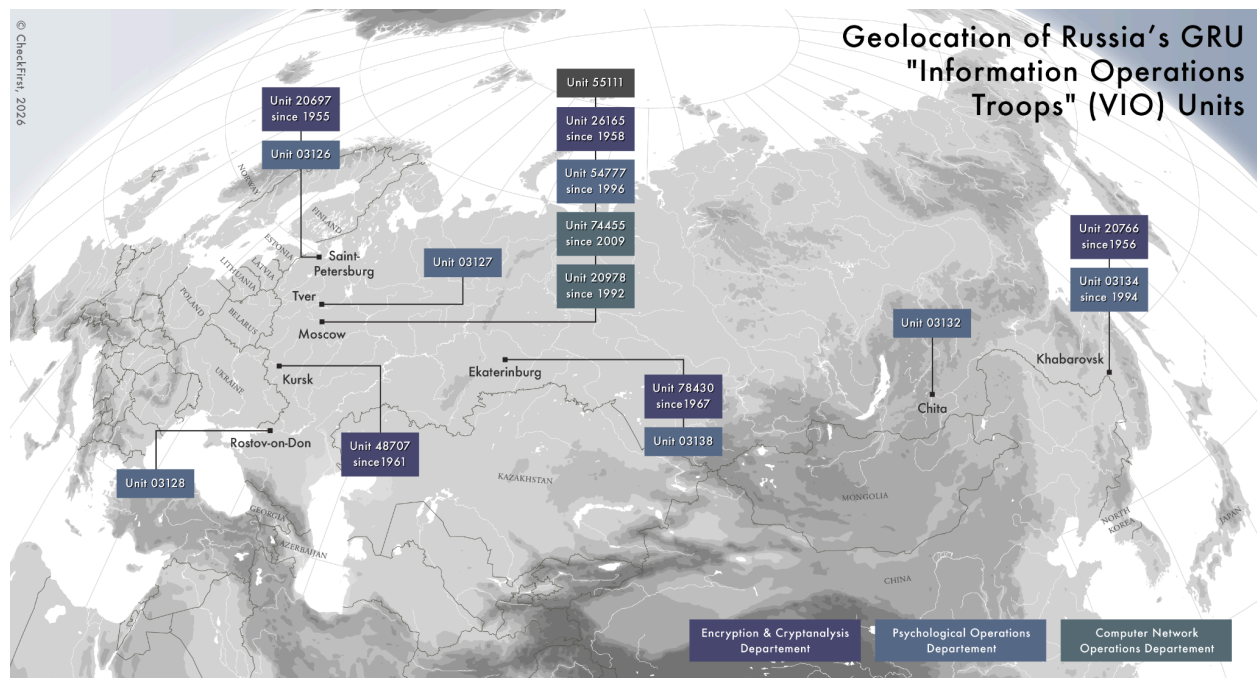


Fig. 3 - Geolocation of Russia's GRU "Information Operations Troops" (VIO) units

Psychological Operations Department

The first VIO department is the Department of Psychological Operations. Its emblem, visible in the centre beneath the main VIO emblem (see Figure 2), consists of the Greek letter “psi” surmounted by the GRU’s three-flame grenade and set against three interlaced arrows. The central stem of the letter “psi”, historically associated with psychological operations (not only in [Russia](#)) ends in the shape of an [arrowhead](#), a symbol that in the Russian military denotes determination and readiness for combat.

In recent years, several publications have shed light on the institutional trajectory of Russian psychological operations units. In 2020, the Free Russia Foundation published a [report](#) based on previously unpublished documents as well as testimony from Aleksandr Viktorovich Golyev, a former Soviet “psyops and propaganda specialist.” These materials show that during the Soviet era, psychological operations were housed within the “Special Propaganda Directorate”¹⁶ (or 7th Directorate) of the Red Army’s Main Political Directorate (GlavPUR)¹⁷, rather than within military intelligence. Following the collapse of the Soviet Union and the subsequent “[depoliticization](#)” of the armed forces, these units were reportedly transferred to the GRU as early as [November 1991](#).

Our investigation identified decorations very likely produced in honour of the aforementioned Department of Psychological Operations, which highlight additional symbols and mottos pointing to its historical lineage. First, the department repeatedly cites 1940 as its founding year on several decorations. This date corresponds to the establishment of the “Special Propaganda Directorate” on [26 July 1940](#). Its continued use today suggests that the current “psy” officers—as they are commonly referred to in Russia—see themselves as the direct heirs of that organisation, much as members of the FSB’s 16th Centre portrayed themselves as successors to the KGB’s 16th Directorate in our [first report](#).

¹⁶ In Russian, “Управление спецпропаганды”.

¹⁷ In Russian, “Главное управление политической пропаганды Красной Армии” (ГУПП КА).



Fig. 4 - Psychological Operations Department insignia

The Department has also revived symbols historically associated with Soviet "spetspropaganda", including a loudspeaker positioned behind a bow firing not an arrow but a lightning bolt. This visual layering most likely symbolises the Department's efforts to project messages forcefully toward selected audiences. The motif appears on an insignia dating from 1990 (top left of Figure 4)—that is, prior to the integration of these capabilities into the GRU—and later on VIO department insignia, notably from 2015 (top centre of Figure 4).

The lightning bolt itself is widely used across many armed forces to represent electronic communications, and more offensively, the interception, disruption, or manipulation of such communications. As shown in our [first report](#), the lightning bolt is a widespread symbol within Russian "radio-electronic intelligence" units. Finally, some insignia display one of the Department's mottos: "I came, I saw, I convinced"¹⁸. This is a deliberate adaptation of the phrase

¹⁸ In Russian, "Пришел, увидел, убедил".

"veni, vidi, vici" ("I came, I saw, I conquered") attributed to Julius Caesar—a variation of which also appears on an insignia of Unit 54777 (see Section 3.1).

Beyond these generic insignia, our investigation uncovered decorations linked to several units within this Department, including the main unit 54777 as well as those of various "Psychological Operations Groups". Taken together, these findings suggest that the VIO's Department of Psychological Operations oversees a sizeable and structured apparatus designed to conduct psychological operations not only against foreign target audiences, but also toward Russia's domestic audience.

UNIT 54777

We begin this overview of VIO units with Military Unit 54777. The first public reporting mentioning the unit dates back to a [Washington Post](#) article published in December 2018, which attributed to it an information operation targeting U.S. senators in 2015. At the time, the senators received an email petition allegedly written by the "Patriots of Ukraine", urging them to send American specialists to Ukraine to fight corruption and replace senior Ukrainian officers accused of "sell[ing] armaments to the terrorists". Western intelligence sources cited by the newspaper directly linked this operation to Unit 54777, which was described as the "centre of the Russian military's psychological-warfare capability".

According to several sources, the number 54777 is not arbitrary. It had already been [associated](#) with the "Special Propaganda Directorate of the Chief Political Command of the Soviet Army" in the 1970s and 1980s. The designation was later reassigned, in [1994](#), to the "91st Editorial Department" (foreign languages) of the former Special Propaganda Directorate, which—as noted earlier—had been transferred to the GRU in 1991. In 1996, following the First Chechen War, the GRU leadership reportedly decided to expand its psychological operations capabilities by creating a Centre based on the 14th Directorate and Unit 54777, which retained this unit number. The unit's [public name](#) at the time was the "Centre for Foreign Military Information & Communication"¹⁹ (TsZVIK), but it also operated under the [codename](#) "72nd Special Service Centre", a designation commonly reserved for units responsible for processing and decoding data collected by intelligence units.

Between the late 1990s and 2014, Unit 54777 reportedly comprised at least 80 to around [100](#) military specialists, as well as several dozen civilian personnel. It was subdivided into [departments](#) responsible for planning and conducting operations, editing and publishing, "tele-radio" dissemination, and coordination with mass media. The unit was reportedly housed on the second floor of the GRU headquarters in Moscow, known as the "[Aquarium](#)", and had its own multilingual printing facilities, as well as video and computer equipment. These capabilities were reportedly [leveraged](#) during the two Chechen wars, as well as in Central Asia, the former Yugoslavia, Transnistria, and the Caucasus, before being deployed against Ukraine and during the Russian intervention in Syria in the mid-2010s. As discussed below, the unit most likely

¹⁹ In Russian, "Центр зарубежной военной информации и коммуникации" (ЦЗВИК). According to some sources, the unit bearing this name is a standalone unit designated as unit 45055. We were unable to confirm this designation.

underwent changes when it was integrated into the VIO, but appears to have retained its historical mandate.

According to information declassified by the Estonian [foreign intelligence service](#) in 2021, Unit 54777's primary mission is to assess the politico-military situation, morale, and psychology of foreign militaries and populations, and then to prepare and conduct operations aimed at shaping adversary perceptions, manipulating public opinion, and influencing decision-makers. In addition to the capabilities described above, the unit reportedly relies on front organisations such as the Institute of the [Russian Diaspora](#), [Pravfond](#)²⁰, and the [InfoRos](#) news agency. The latter has publicly been accused of creating nearly 2,000 websites since 2000 to disseminate COVID-19 disinformation and to undermine the pro-European aspirations of former Soviet Republics.

Since its integration into the GRU VIO, Unit 54777 has reportedly worked in [close coordination](#) with the cyber units of the other two departments²¹, supporting them in the preparation of influence material intended to accompany or amplify the impact of cyber operations. It reportedly helped establish hacktivist cover identities such as “CyberCaliphate”—which posed as a group supporting the Islamic State—used to compromise the Twitter account of U.S. Central Command and later to sabotage the French television channel TV5Monde in 2015. The unit was subsequently the subject of a [public attribution](#) by the U.S. government in April 2021, directly linking it to “Russia’s Information Operations Troops”, and several of its leaders and long-standing front organisations were placed under [sanctions](#) by the European Union in 2023.



Fig. 5 - Unit 54777 insignia and pennants

²⁰ Its full name is "Fund for Support and Protection of the Rights of Compatriots Living Abroad".

²¹ See sections 4.1 et 5.1.

Our investigation has identified more than a dozen distinct insignia, patches, and pennants that can be linked with high confidence to Unit 54777. Together, they help clarify key aspects of the unit's history, symbolism, and position within the VIO chain of command. First, while none of the decorations in our corpus explicitly display the number 54777 or the name "72nd Special Service Centre", many pennants feature the designation "Centre for Foreign Military Information & Communication" (TsZVIK), associated with at least two different emblems. The first is already familiar: the Greek letter "psi" terminating in an arrow. Our research shows that this symbol was in fact created specifically for the TsZVIK on 11 November 2005 by a decree of the Russian Minister of Defense.

The second emblem is more distinctive: an owl in flight clutching a snake in its talons. The owl is a long-standing symbol of intelligence (not only in Russia) where it represents wisdom, the ability to see and hear in the dark, and the capacity to act discreetly. In Russian military symbolism, the owl is typically associated with special forces when it is shown holding a sword. The snake, for its part, commonly symbolizes the enemy, but is also sometimes associated with sleeper cells, internal subversion, or foreign influence. In this context, it likely refers to the unit's "counter-propaganda" mission against what is perceived as attempts to subvert Russian military personnel or the domestic population.

Another insignia bears the motto "I came, I saw, I convinced", written this time in Latin²², beneath an acronym corresponding to the "Centre for Foreign Military Information & Communication of the General Staff of the Armed Forces of the Russian Federation"²³. This formulation, which omits any explicit reference to the GRU (only one component of the Russian General Staff), also appears on the first pennant shown in the top left of Figure 5. While this omission might seem unusual, it does not appear intended to obscure the unit's affiliation with military intelligence, as the red carnation at the centre of the emblem unambiguously signals its connection to the GRU.

In our view, the most revealing decoration dates from 2021 and is visible at the bottom right of Figure 5. One side features the emblem of the VIO Psychological Operations Department and states that the decoration was produced to mark the 25th anniversary of a unit, with the dates "1996–2021". On the reverse side, beneath the loudspeaker symbol, appears the motto "anticipating information threats"²⁴ above the inscription "main centre"²⁵. We assess with high confidence that this insignia is linked to Unit 54777: the Centre was established in 1996 and is likely the only unit within its department to currently hold "main centre" status. This designation was first publicly disclosed by the [U.S. government](#) in 2021, which referred to the unit as the "72nd Main Intelligence Information Centre" (GRITs)²⁶.

Taken together, these elements suggest that Unit 54777 was renamed and elevated to the status of a "main centre" following its incorporation into the GRU VIO, in or sometime after 2014.

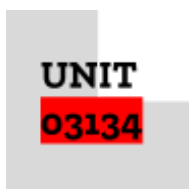
²² "Veni, vidi, convinci".

²³ In Russian, "Центр зарубежной военной информации и коммуникации Генерального штаба вооруженных сил Российской Федерации" (ЦЗВИК ГШ ВС РФ).

²⁴ In Russian, "упреждая информационные угрозы".

²⁵ In Russian, "Главный центр".

²⁶ In Russian, "72-й Главный разведывательно-информационный центр" (ГРИЦ).



The other units of the VIO Psychological Operations Department whose existence we can confirm through decorations are referred to as “Psychological Operations Groups”²⁷ (oPsO). These units have long been known in publicly available sources: since [2018](#), several disclosures have pointed to the existence of a network of at least six GRU psychological operations units deployed across Russia’s regions. These oPsO units, whose military unit numbers all begin with 031XX, are each believed to have a specific functional or regional focus:

- **Unit 03126**, also known as the “2148th Separate Psychological Operations Unit”, is reportedly based in Sertolovo, on the outskirts of Saint-Petersburg. According to an anonymous collective called “Nightingale”, the unit primarily targets NATO countries, notably by attempting to convince foreign public opinion that Ukraine has become “Nazi” and by stoking separatist tensions in the Baltic states;

- **Unit 03127**, also known as the “2156th Separate Psychological Operations Unit”, is reportedly based in Tver, around 180 km northwest of Moscow. It is believed to be the [successor](#) of the “Spetspropaganda Editorial Office”²⁸ of the “Group of Soviet Forces in Germany”²⁹, created in 1968 and relocated to Tver in 1994;

- **Unit 03128**, also known as the “2140th Separate Psychological Operations Unit”, is reportedly located in Bataysk, roughly 10 km south of Rostov-on-Don. It is known to have taken part in the [Chechen wars](#) and now appears to focus primarily on targeting [Ukraine](#);

- **Unit 03132**, also known as the “2047th Separate Psychological Operations Unit”, is reportedly based in [Chita](#), in Russia’s Far East. Little information is available about this unit, but given its location, it is likely specialized in targeting parts of Asia;

- **Unit 03134**, also known as the “2040th Separate Psychological Operations Unit”, is reportedly based in Khabarovsk. It is believed to target at least East Asia, notably by [encouraging](#) opposition to U.S. military presence in the region and by defending Russia’s claims over the Kuril Islands, some of which are still disputed with Japan;

- **Unit 03138**, also known as the “2059th Separate Psychological Operations Unit”, is reportedly based in Ekaterinburg. It is believed to focus on the former Soviet republics of Central Asia, notably with the aim of [discrediting](#) pro-democracy politicians and NGOs.

To carry out their missions, these Psychological Operations Groups reportedly possess a wide range of equipment, including multilingual [printing capabilities](#), [studios](#) for producing [video content](#), as well as mobile assets designed to accompany Russian troops on the battlefield. These units are said to operate armoured vehicles fitted with [loudspeakers](#), artillery systems

²⁷ In Russian, “отряд психологических операций” (oПcO). In the literature, they sometimes also appear under the name “Separate Psychological Operations Groups” (in Russian, “отдельный отряд психологических операций”).

²⁸ In Russian, “Редакция спецпропаганды”.

²⁹ In Russian, “Группа советских войск в Германии”.

capable of dispersing hundreds of leaflets at range, and [electronic warfare](#) equipment (radio stations and drones) used to identify adversary electronic systems and to send messages—such as SMS—to nearby civilian populations or soldiers.

Since 1994, these units have reportedly been deployed in numerous conflicts involving Russia directly, as well as in operations where the Russian government acted covertly: in the [Caucasus](#) (Chechnya, Abkhazia, South Ossetia, Armenia), the [Balkans](#) (Serbia, Montenegro), Eastern Europe (Transnistria, Ukraine), Central Asia (Tajikistan), and the [Middle East](#) (Syria). Unconfirmed sources have also accused these units of being used during domestic protests inside Russia, notably against a mining project in Bashkortostan and following the removal of former Khabarovsk Krai governor [Sergei Furgal](#) in the summer of 2020. While such internal activities might appear to fall outside the GRU's formal mandate, investigations in recent years have shown that the GRU has been deeply [involved](#) in information manipulation targeting Russian citizens.

Numerous [sources](#) indicate that these regional units are subordinate to Russia's [military districts](#) and are organised as "Centres for Foreign Military Information & Communication" (TsZVIK)—the same designation historically associated with Unit 54777. This assessment is supported by [photographs](#), notably taken inside the premises of Unit 03127, which indicate that it bore this name at the time of its creation in 1994. The [Wikipedia](#) page dedicated to psychological operations units within the Russian Armed Forces, mentioned above, also displays patches attributed to the TsZVIK of Russia's Southern, Central, and Eastern military districts. However, although these patches feature the "psi" symbol and the GRU carnation behind the [official emblems](#) of the Russian military districts, they do not make reference to a specific unit number, and their precise origin remains unknown.



Fig. 6 - Patches attributed to GRU's TsZVIK located in Russian military Southern, Centre and Eastern districts, and likely digital emblem of Unit 03127

The same Wikipedia page also displays a more specific digital emblem, which spells out the acronym of the "Centre for Foreign Military Information & Communication" above the "psi" letter and the GRU carnation (last image on the right in Figure 6). However, instead of the emblem of a Russian military district, the central logo corresponds to the official coat of arms of the city of Tver. Below it, one can make out the Latin motto "fortiter in re, suaviter in modo", meaning

“resolute in execution, gentle in manner”. Taken together, these clues suggest that this may be the official insignia of Military Unit 03127, which, to our knowledge, is the only such unit located in the city of Tver. That said, this digital emblem could not be corroborated by photographs of metal insignia, pennants, or patches collected by us.

At present, the only physical insignia which we were able to corroborate with photographs was produced in honour of Military Unit 03134. On one side, it features the Greek letter "psi" ending in an arrow in front of the red GRU carnation—once again corresponding to the emblem created by decree for the TsZVIK in 2005—alongside two dates, 1994 and 2019. On the reverse side, it explicitly states “25 years of Military Unit 03134” and bears the date 1 September 2019, confirming that the unit was formally established on 1 September 1994.



Fig. 7 - Unit 03134 insignia and Psychological Operations Group patch

This insignia has been photographed several times together with the small booklet that typically accompanies it during the award ceremony. Such booklets normally include the recipient's name, the occasion for which the decoration was produced—most often a unit jubilee or recognition of service—and the signature of the unit commander. While the recipient's name has not yet been filled in here, the booklet indicates that the unit commander in 2019 was Major “M.

A. Mozharov". Based on our research, this is likely Mikhail Aleksandrovich Mozharov³⁰, a major born in 1982 whose name appears in a [court document](#) mentioning his military unit and Russia's Eastern Military District, to which Unit 03134 belongs.

The link between these regional units and Unit 54777 is further supported by a patch produced in honour of an unspecified Psychological Operations Group, which bears the same symbol of an owl clutching a snake in its talons (bottom right of Figure 7). Taken together, these elements suggest that this network of six units—potentially forming part of the "Centres for Foreign Military Information & Communication"—was already placed under the command of Unit 54777 at the time of its creation in the 1990s, and that it remained under its authority after being incorporated into the VIO. Based on the decorations available to us, this chain of command still appears to have been in effect in 2019.

That said, the study of decoration photographs cannot answer every question. In 2022, new [leaks](#) claimed the existence of so-called "Information Confrontation Centres"³¹, whose unit numbers would all begin with 768XX, hosted within the headquarters of Russia's military districts but administered by the VIO. This architecture would reportedly be complemented by tactical psychological operations units, some of which had historically been linked to the GRU, such as Unit 35571, based in Kaliningrad. This unit reportedly displayed the "psi" letter and the GRU carnation on its insignia, but was [decommissioned](#) in 2008. At present, we are unable to confirm or refute the existence of these units or to establish their precise chain of command.

³⁰ In Russian, "Можаров Михаил Александрович".

³¹ In Russian, "Центр информационного противодействия".

Encryption & Cryptanalysis Department

There are relatively far more decorations linked to the second department we present, which is composed of units responsible for encryption and cryptanalysis, that is, the branch of cryptography dedicated to breaking adversary codes and cryptographic systems. Within the GRU, the VIO appear to have at least five units of this type distributed across several locations on Russian territory, all of which were formed more than 50 years ago. These units are also known as the “Special Service”, a designation that appears on a large number of decorations and is [used](#) by most Russian intelligence services to refer to the department responsible for protecting sensitive communications.

The units of this Department were identified through some fifty photographs of insignia and pennants. They share a common primary symbol: two crossed keys behind the GRU’s three-flame grenade, identical to the emblem visible at the bottom left of the VIO pennant (see Figure 2). More rarely, they also use other representations historically associated in Russia with cryptography, such as the Greek letter “sigma” behind a waveform, computer equipment, or a sphinx guarding a book. As we will see later, these defensive symbols very likely conceal far more offensive missions involving cryptanalysis and computer attacks.

In all cases, the elements collected on the “Special Service” units tend to demonstrate—much like the case of the FSB’s 16th Centre [documented in our first report](#)—that in Russia, units historically focused on encryption or cryptanalysis have redirected part of their activities toward conducting computer attacks abroad after the collapse of the USSR, potentially because they were the first to obtain advanced computing equipment to generate or break cryptographic systems.

While some [sources](#) suggest that “Special Service” units are housed within the 6th Directorate, which has historically been responsible for the GRU’s SIGINT capabilities, the photographs of decorations at our disposal—showing insignia produced as early as 2001—tend to refute this hypothesis. Below, we will present all the units within the Department of Encryption and Cryptanalysis that we have been able to identify with their full name, precise location, and date of formation. We do not, of course, rule out the possibility that the department includes additional units that have not yet been identified.

UNIT 26165

Military Unit 26165 is one of the best-documented GRU units in publicly available sources, and on its own it demonstrates that the missions of the “Special Service” cluster are not limited to cryptography alone. Indeed, it is believed to host the hackers responsible for the APT28³² intrusion set, which has been conducting cyber espionage and sabotage operations against governmental, military, civilian, and diplomatic targets worldwide since at least 2004. The names of some of its members were made [public](#) by the U.S. government following the targeting of the 2016 U.S. presidential elections, and the unit has been placed under [sanctions](#) by numerous countries and by the European Union.

According to a large number of publicly available sources, the unit was created during the Soviet era and was known both as the “[Decryption Service](#)” and by its full name, the “85th Main Special Service Centre³³”. The unit has reportedly always been located at [20](#) Komsomolsky Prospekt, a 19th-century military barracks that appears to have been deliberately targeted by Ukrainian [drones](#) in July 2023. Sources have long diverged on its chain of command: some indicate that 26165 historically belonged to the GRU’s [6th Directorate](#), while others claim that it was placed directly under the [authority](#) of the GRU leadership.

Despite the absence of symbols traditionally associated with cryptanalysis on its decorations—in particular the broken key that was omnipresent on the insignia of the FSB’s 16th Centre—numerous sources indicate that Unit 26165 was historically involved in decrypting intercepted tactical military [communications](#) in the USSR or abroad. To do so, the unit reportedly made use of the “[Bulat](#)” system developed in the 1970s by the Kvant research centre for the needs of the KGB’s 16th Directorate, in other words the predecessor of the FSB’s 16th Centre. Kvant is, by the way, still [accused](#) of developing technologies for the benefit of the technical units of Russian intelligence services.



Fig. 8 - Unit 26165 insignia and [building](#), coordinates: 55.729305, 37.584534

³² Also known as Fancy Bear, Sofacy Group, Sednit, or Strontium.

³³ In Russian, "85-й главный центр специальной службы".

The insignia that we associate with a high level of confidence with Unit 26165, based on various visible indicators such as the unit number, crossed keys, and date of formation, are relatively homogeneous and provide few details about its internal structure. Nevertheless, they show that the unit was formed as early as 1958 and that it does not appear to have been attached in its recent history to the GRU's 6th Directorate. The insignia commemorating the unit's 60th anniversary displayed the motto "there is always a solution"³⁴, a likely reference to offensive efforts aimed at decrypting protected communications.



GRU Unit 20697, known in Russia only as a [legal entity](#), has so far never been formally linked to the GRU, the VIO, or even the so-called "Special Service". The three insignia we were able to collect nevertheless provide clear signals of this organisational link. The photographs presented below show that the unit displays exactly the distinctive symbols of the Encryption and Cryptanalysis Department on an insignia produced in 2015, namely the two crossed keys placed in front of the GRU's three-flame grenade and red carnation. These symbols were not yet present in 2010, when another insignia was produced to mark the unit's 55th anniversary. The unit itself was established in 1955, even earlier than Unit 26165. The most recent insignia also explicitly mentions "Saint-Petersburg" and its former designation, "Leningrad".



Fig. 9 - Unit 20697 insignia and [building](#), coordinates: 59.933277, 30.293226

The publicly [listed address](#) of Unit 20697 is 31 Galernaya Street, Saint-Petersburg, a detail that appears to be corroborated by information found on social media pages grouping former members of the unit. On [Wikimapia](#), the building corresponds to the "College of Foreign Affairs

³⁴ In Russian, "Решение есть всегда".

of the General Staff Academy” of the Russian Armed Forces. Several resumes indicate that, in the mid-2000s, system administrators worked for the “laboratory” of Unit 20697, notably on the “development of software [...] and the evaluation of multiprocessor computing systems [...] for the distributed computation of complex mathematical algorithms”, as well as on the “development and maintenance of a software system for decoding, demultiplexing, and descrambling binary data streams”. Some former members reportedly previously served in other “Special Service” units, including Unit 20766 (see section below), further suggesting close organizational ties.

We also found a [VK profile](#) of a likely former Unit 20697 conscript from 2010-2011 mentioning the unit as “48 ЦСЦ,” which suggests that it may also be referred to as the “48th Special Service Center”. Finally, our research uncovered social media posts [from families](#) in a likely attempt to contact their sons or brothers conscripted into Unit 20697. According to these accounts, they were not sent to central Saint-Petersburg, but rather to the town of Pesochnoye, or Pesochny³⁵. Both locations exist and are situated in the wider Saint-Petersburg area. We identified that the former hosts a firing and electromagnetic [testing range](#), while the latter is geographically closer to known Russian SIGINT units located in Sertolovo and Bugry. One of these two locations could therefore correspond to the actual address of Unit 20697’s operational activities, or to one of its training facilities.

³⁵ In Russian, “Персочное” or “Персочный”.

UNIT 20766

Like Unit 20697, GRU Unit 20766 was known in Russia only as a [legal entity](#), and has so far never been formally linked in open-source information to the GRU, the VIO, or the “Special Service”. The seven photographs of insignia and pennants available to us nevertheless clearly indicate both its affiliation and its location. In addition to the crossed keys, the unit, established in 1956, also displays the Greek letter “sigma” in front of an oscillation, as well as a key and what appears to be a sword behind a scroll on one of its insignia. As with many other units, it only began displaying the specific symbols of its parent VIO department on pennants after 2014.



Fig. 10 - Unit 20766 insignia, pennants and compound, coordinates: 48.483368, 135.056117

Pennants produced in its honour further indicate that Unit 20766 is based in Khabarovsk, a fact seemingly confirmed by the [address of its legal entity](#) at 13 Serysheva Street, which corresponds to a building located within the headquarters complex of Russia’s Eastern Military District. Unconfirmed sources claim that the unit is called “59 цспецсл,” suggesting that it may also be referred to as the “59th Special Service Centre”, following a naming convention similar to that of other units within the department.

UNIT 48707

Unit 48707, like the previous ones, is documented in publicly available sources only as a Russian [legal entity](#), and has never been formally linked to the GRU, the VIO, or the “Special Service”. We were able to identify photographs of at least two insignia produced to commemorate its 40th and 50th anniversaries, in 2001 and 2011 respectively. The older insignia indicates the unit’s date of formation (1961), but does not yet feature the symbols of the Encryption and Cryptanalysis Department, displaying instead only a bat in front of a globe draped with the Russian flag. As a reminder, the [bat](#) is one of the main historical symbols of Russian military intelligence and special forces, as it represents discretion, heightened perception, and the ability to see in the dark. It was gradually abandoned starting in 1998 in favour of the red carnation and the three-flame grenade, but it is still used today in a semi-official capacity. The second insignia, by contrast, highlights the crossed keys and the inscription “Special Service” in front of the GRU’s red carnation, which correspond to the current symbols of the VIO.



Fig. 11 - Unit 48707 insignia and [compound](#), coordinates: 51.749481, 36.199879

Open-source information on Unit 48707 indicates that it is likely located in the building of the Scientific Research Institute of the Russian Ministry of Defense in Kursk, which has housed the local branch of the GRU’s [18th Scientific Research Centre](#) since 1957³⁶. This centre specializes in [SIGINT](#) and has been publicly [accused](#) of developing technologies for the Russian military intelligence [cyber units](#). Such co-location of R&D units and “Special Service” elements could represent a clear advantage for rapidly testing and deploying new technologies in support of the VIO.

³⁶ The 18th Scientific Research Center carries the military unit number 11135, and its Kursk branch the number 25714.

UNIT 78430

Unit 78430, once again, is very sparsely documented in publicly available sources and has never been formally linked to the VIO. Its existence was nonetheless known to phaleristics enthusiasts as early as the late 2010s, who identified symbols on its insignia that tied the unit to the GRU and to likely encryption-related missions. The only insignia known to date, produced to commemorate the unit's 50th anniversary in 2017, indicates that Unit 78430 was previously based in the city of Chita, in Russia's Far East, and historically operated under the designation 95955. It remains impossible to determine whether 2017 corresponds to the date of the unit's relocation and renumbering, or whether these changes predate the production of the insignia. In any case, insignia suggest that the unit is the most recent within the "Special Service", having been established in 1967.



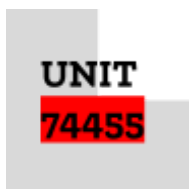
Fig. 12 - Unit 78430 insignia, pennants and [compound](#), coordinates: 56.768499, 60.576780

The insignia explicitly states that Unit 78430 is presently based in Ekaterinburg, a detail consistent with open-source information on its [legal entity](#), which lists its address as 26 Simferopolskaya Street. This attribution is further supported by the presence, at the centre of the three-flame grenade, of five crystals, one of the key elements of Ekaterinburg's city [coat of arms](#). Additional research suggests that the unit is more precisely located within the "32nd military town" of the capital of Russia's [Central Military District](#), which hosts a large number of military units. At this stage, however, we have not been able to identify the specific compound of the unit.

Computer Network Operations Department

The third and final VIO department, which we refer to as the “Computer Network Operations Department”, appears to be composed of units primarily responsible for conducting cyber attacks. Its main emblem, visible in the lower right corner of the VIO pennant (see Figure 2), consists of a diamond in front of a lightning bolt and a sword. The [diamond](#) is commonly associated with computerized data processing systems and can be found on insignia linked to other technical units within the Russian armed forces. The lightning bolt, as discussed in our first report, represents electronic communications and, more broadly, electronic warfare. The sword most likely refers to the offensive nature of the department’s activities.

At this stage, our investigations have identified two units belonging to this department. The first, designated Unit 74455, has been [extensively documented](#) in publicly available sources since the late 2010s, following [public attributions](#) linking it to the Sandworm intrusion set. The second unit, designated Unit 20978, was previously unknown. As we will show, however, the evolution of its symbols provides insights into the trajectory of this type of technical unit within the GRU after 2014. That said, we do not rule out the possibility that this department includes additional, as yet undocumented units, such as Unit 20728, which may be responsible for at least part of the APT28 intrusion set mentioned earlier.



Unit 74455 is, alongside Units 26165 and 54777, one of the most emblematic and widely discussed GRU units since the late 2010s. Its notoriety stems from the fact that it is believed to host the Sandworm hacking group³⁷, active since at least [2009](#), and responsible for large-scale cyber operations. These include the sabotage of the Ukrainian power grid during the winters of [2015](#) and [2016](#), attempts to interfere in the [presidential elections](#) in the United States and France in 2016 and 2017, the spread of the fake ransomware [NotPetya](#) in 2017, the disruption of the [Pyeongchang](#) Olympic Games in 2018, as well as multiple instances of [cyber sabotage](#) targeting [European](#) and Ukrainian entities since the start of Russia’s full-scale invasion of Ukraine in 2022.

Sandworm was publicly attributed to Unit 74455 for the first time by the U.S. government in [July 2018](#), in a declassified document that simultaneously revealed the names of 13 GRU officers from Units 26165 and 74455 involved in the attempt to interfere in the 2016 U.S. elections. Since then, numerous [public attributions](#) and [investigations](#) have highlighted the unit’s central role in Russia’s espionage and destabilization apparatus, and have revealed the identities of several additional officers. Sources generally agree that the unit’s full name is the “Main Centre for Special Technologies”³⁸ (GTsST), suggesting that it effectively oversees the Computer Network Operations Department.

³⁷ Also known as Voodoo Bear, APT44, Iridium, or Seashell Blizzard.

³⁸ In Russian, “Главный центр специальных технологий”.

In any case, Unit 74455 reportedly works in close cooperation with the “Special Service” units of the VIO (see Section 4), even though it is said to be located in a separate facility. Multiple sources report that it operates from “the [Tower](#)”, an unacknowledged GRU site located in the city of Khimki, northwest of Moscow.



Fig. 13 - Unit 74455 insignia, pennant and GRU "[Tower](#)" in Khimki, coordinates: 55.883778, 37.455413

Our investigations have made it possible to identify at least three different insignia and one pennant that can be linked with high confidence to GRU Unit 74455. Produced between 2010 and 2019, they confirm that the unit was indeed formed in 2009, implying that it may have begun conducting malicious activities in its very first year of existence. Unlike the other units described in this report, the iconography associated with 74455 did not evolve at the time of the creation of the VIO. As early as 2010, insignia bearing its symbols already displayed a diamond in front of a lightning bolt and crossed swords, all set against a globe, that is, exactly the same symbols now associated with the Computer Network Operations Department.

It therefore appears that the unit’s historical symbols were instead used as the basis for representing the Department at the time of its creation in 2014, further reinforcing the hypothesis of its central role within this structure. The unit’s decorations nonetheless provide little additional information about 74455, and do not even explicitly depict, on the examples available to us, its affiliation with the GRU. It is likely that the unit’s commanders made deliberate operational security choices to avoid drawing attention to the unit after its creation, given the clandestine nature of the cyber operations it conducts against foreign targets.



The second unit within the department, numbered 20978, was identified through 16 photographs of insignia and pennants dating from 1997 to 2017. Unlike Unit 74455, almost no information is available about this unit in publicly available sources, and it has never been formally linked to the VIO to date. What stood out most during our investigation was the evolution of the symbols used by the unit, which changed at least twice in less than 25 years. These successive rebrandings appear to closely reflect the trajectory of this technical unit within the structures of Russian military intelligence since its formation in 1992.

Between 2002 and 2007, the main emblem of Unit 20978 prominently featured a sheet of paper inscribed with “00011 00101 01001” in front of a globe. Translated into decimal, this binary sequence corresponds to “359”, which likely refers to the unit’s [full name](#), the “359th Information Processing Centre”³⁹(TsOI). This name is written out without any number around the globe. The composition is completed by the GRU’s red carnation and two crossed swords evoking offensive action, as well as the unit’s date of formation, 1992. This date and the TsOI acronym also allowed us to identify an even earlier insignia, very likely linked to the same unit, produced in 1997 and depicting a computer directly beneath the GRU bat.

By 2012, however, the main emblem had changed, now consisting of a superposition of a compass, a lightning bolt, and a quill. Beyond the lightning bolt, which appears repeatedly throughout this report, the quill suggests analytical and drafting work. The compass, for its part, is an obvious representation of orientation and technically assisted decision-making. Together, these symbols provide early and valuable clues as to the unit’s actual missions, suggesting that it may play a role in providing technical support to GRU operations, or perhaps in analysing information collected by its technical sensors.

In any case, the most recent decorations available to us, dating from 2017, show that the unit had by then fully aligned itself with the visual identity of the VIO. Accordingly, it now displays a much simpler emblem composed exclusively of the department’s diamond placed in front of two crossed lightning bolts. In comparison, Unit 74455 uses a lightning bolt crossed with a sword. Pennants from this period bearing the unit’s insignia still indicate “Information Processing Centre”, and appear to specify that the exact anniversary date of the unit’s creation is August 4.

³⁹ In Russian, “359-й Центр обработки информации” (ЦОИ).



Fig. 14 - Unit 20978 insignia, badge & pennant

The unit's location in Moscow and its missions appear to be corroborated by the resume of an electronic technologies engineer that we found on a Russian job-search platform. The individual presents himself as a former deputy commander of the unit, claiming to have worked there between 1976 and 2004, a total of 27 years. This suggests that the unit already existed during the Soviet era, albeit potentially under a different number. In any case, the former deputy commander describes the unit as an “analytical-information” unit, notably tasked with studying foreign “new information technologies” and conducting R&D work.

The engineer subsequently went on to work at a private research centre described as a contractor for technical projects on behalf of the GRU, notably related to automation and enabling the execution of “tactical-technical tasks”. In light of these elements, it is therefore highly likely that the unit has historically been engaged in research and development in support of the GRU's technical units, potentially including offensive technologies later used to conduct cyber espionage or even sabotage operations against foreign targets.

Conclusion

This second report on phaleristics once again demonstrates that the study of military decorations is a long-underestimated entry point, yet a remarkably effective one, for gathering information on the history and structure of clandestine units within the Russian intelligence services. It also shows that this OSINT research methodology is replicable: while the production of decorations is rooted in long-standing historical practices common to all Russian security and military services, it more broadly reflects a system of rewards that permeated Soviet society as a whole and continues to influence political actors in Russia today. We leave it to specialists of other regions of the world to test its replicability in other areas.

In any case, our investigations have contributed to the broader body of research on the so-called “Information Operations Troops”, which have been the subject of sustained scrutiny for more than a decade. We are now in a position to better understand what types of capabilities the GRU chose to integrate into these forces, where they originated from, and how they evolved through Russia’s multiple conflicts, both overt and clandestine, since 2014. Above all, this study helps to reveal the scale of the overall apparatus, which includes, beyond the handful of units widely documented in recent years, additional units that were previously undisclosed and are likely indispensable to the VIO operations.



Fig. 15 - Insignia of likely VIO hacking unit 20728

Despite these findings, we readily acknowledge once again that phaleristics alone cannot answer all outstanding questions, particularly those concerning the internal structure of these units, the number of officers they comprise, and the concrete, observable actions they may have carried out. By way of example, we were only able to identify a single and imprecise insignia linked to Unit 20728 (see Figure 15), to which the French government has [attributed](#) part of the APT28 activity, and which very likely forms part of the VIO. Decorations remain an incomplete source, potentially subject to falsification, and in all cases require corroboration through other sources.

We will of course continue our research into decorations linked to the VIO in the hope of addressing these questions, and will extend our investigations to other Russian security and intelligence services in the months ahead. At a time when Russia continues its war of aggression against Ukraine and intensifies its covert information and cyber operations against European countries, we consider it essential to refine and update our understanding of this apparatus, which is likely to continue expanding in the years to come.

Annexes

Review process

This document has been reviewed following the [ObSINT guidelines](#) by two reviewers who are qualified in the field of research. The process-assessment grid used by the reviewers is available on CheckFirst's website⁴⁰.

The reviewers for this document are :

- Researcher, CheckFirst
- Researcher, ObSINT

This document has scored 69.44 out of 100 after review.

⁴⁰ CheckFirst - Operation investigation assessment
https://docs.google.com/spreadsheets/d/1ka2rcMAmiUgDKIiTxXNS5cB0poax8C-GCC2GI1_sRmY/edit#gid=0

