NSOF AND ROTARY-WING PLATFORMS – INTEGRATED OR JOINT?

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Abstract: There is today a burgeoning discussion about how Romanian Naval Special Operations Forces (RNSOF) is supported in maritime operations by the conventional means of the Romanian Navy rotary-wing platforms. As part of this approach, we set out to analyze the regulatory framework for ensuring the support of naval aviation in the execution of NSOF missions. Thus, we will study the evolution of the cooperation of the ROU Navy Helicopter Group and NSOF from the perspective of regulations on cooperation, training, common standard operating procedures, references on standardization and safety in the execution of training and missions in the maritime environment. This research addresses an aspect of special operations that has yet to be explained adequately. To achieve this goal, we will describe how these operations are conducted in NATO countries, which have integrated maritime aviation in support of naval forces for special operations in the maritime environment. According to the specified causes to achieve our objectives, we will search for solutions to compensate or reduce the gap between necessity and reality. Through comparative analysis and documentation on the strategies used by foreign military forces, with similar roles and missions, we will provide solutions that will cover an area that can vary from adapting procedures to establishing the need to develop certain regulations. Our study is addressed to persons involved or interested in the military field and special naval operations and aims to highlight the importance of developing the NSOF capacity to cooperate with integrated maritime aviation and adjusted to the requirements of the execution of special maritime operations. Taking these recommendations into account will increase the effectiveness of NSOF maritime operations with the support of rotary-wing platforms while ensuring the transition to a robust/ real joint NSOF capability in response to existing threats in the Black Sea.

Keywords: Naval Forces for Special Operations; Naval Helicopter Group; Maritime Operations; Joint, Integrated; SOATU.

Introduction

Although the end of the Cold War and the collapse of the Soviet Union reduced the threat of war with state actors, the world is still far from peace. Terrorism, insurgencies and other insidious¹ conflicts fueled by violently extreme non-state actors have become a major security challenge that conventional security forces-lacking enough precision have struggled to effectively address.

Romanian Navy Special Operations Forces (RNSOF)-small, agile, and already lethally efficient in the land, air, and maritime missions-had a quick development starting with 2006 aimed to fill this critical niche. But with Russia, a key player in the Black Sea, becoming increasingly confrontational, the conflict's next ridgeline is likely to be significantly different.

However, RNSOF may find that the skillset it uses to dominate today's battlefields may be considerably less applicable tomorrow. With the explosive growth of technology changing the nowadays world, RNSOF must posture itself so that it can quickly adapt to emerging threats in this unique environment – the Black Sea². Black Sea's role, as a transit route of major oil and gas exports or field for NATO's international exercises, is expected to increase, like the risks associated with these activities, such as maritime security or the constant pressure from the Russian Federation.

¹ Lucian Valeriu Scipanov, Florin Nistor, "Considerations on the military actions conducted in the north of the black sea", Buletinul Universității Naționale de Apărare "Carol I", Vol. II, Nr. 2/2015.

² Emil Vespremeanu, Geografia Mării Negre, Editura Universitara, București, 2005, Cap I – 5.

The air units of most NATO countries have helicopters that are highly modified, technologically sophisticated, and offer significant advantages in threat avoidance, survivability, extended ranges, and environmental capacity. Since 2007³, RNSOF has been working jointly with the Navy's Puma helicopters in maritime training and maritime special operations. Although the Navy's Puma helicopter's main destination is antisubmarine warfare, this great Romanian maritime capability has proven to be very useful in SOF insertion/extraction procedures like fast-rope and rig-rope, but also in executing maritime special forces operations.

Operation Atalanta, where helicopters were a key point of the mission's succes, is a milestone for RNSOF. In 2012, the first official mission that embedded RNSOF and Navy's rotary-wing platforms on board of Romanian frigates was the participation in Operation Atalanta – counter-piracy military operation conducted by the European Union. The cooperation between these two capabilities was very successful, especially when the RNSOF successfully boarded⁴ and seized a Somali skiff with pirates. The team was assisted by a Navy Puma helicopter which provided situational awareness and sniper overwatch.

Atalanta was the first successful SOF maritime mission that involved the RNSOF and Romanian Navy's Puma helicopters, which created the future grounds for joint missions between them.

NATO SOF Integrated Rotary-Wing platforms

In 2012, when I was deployed in the theatre of operations (TO) Afghanistan as a Combined Task Unit Commander during ISAF SOF Mission, which was a NATO-led military mission, I had the privilege to work with multiple units that had helicopter units integrated into their specific task force.

An experience to remember was when a Seal Team was assisted in an Evidence-Based Operation (EvBO) by the famous 160th Helicopter Squadron – Night Walkers, also called 160th Special Operations Aviation Regiment (Airborne) – SOAR(A). United States Army Special Operations Command describe the unit's mission, environment of operations and types of aviation used as "the 160th Special Operations Aviation Regiment's mission is to organize, equip, train, resource and employ Army special operations aviation forces worldwide in support of contingency missions and combatant commanders. Known as Night Stalkers, these Soldiers are recognized for their proficiency in nighttime operations. They are highly trained and ready to accomplish the very toughest missions in all environments, anywhere in the world, day or night, with unparalleled precision. They employ highly modified Chinook, Black Hawk and assault and attack configurations of Little Bird helicopters."⁵

In that particular operation, I noticed that the pilots and gunners provided aviation support for general purpose forces and special operation forces. During that deployment, we also executed a combined mission aimed to strike multiple targets, with 160th providing insertion/extraction, fire support, and sniper overwatch. Then, comparing the observations with RNSOF operational procedures I realized that there are multiple similarities in terms of cooperation through the phases of planning and executing of operation. Thus, the 160th SOAR's Special Operation Air Task Unit (SOATU) was integrated into the mission task organization, being comfortable and productively for the mission planning, preparation and execution.

The story continued eight years later, when I have met the same unit in the Black Sea region in executing GOPLAT⁶ training iterations. On a GOPLAT mission, one need to have a

³ http://www.seaforces.org/marint/Romanian-Navy/IAR-330-Puma.html, accessed on 28.02.2021.

⁴ http://www.kr-media.ru/en/return-of-the-black-sea-knights/, accessed on 28.02.2021.

⁵ https://www.soc.mil/USASOAC/160th.html, accessed on 28.02.2021.

⁶ GOPLAT, https://acronyms.thefreedictionary.com/GOPLAT - Gas and Oil Platform, accessed on 27.02.2021.

"spherically"⁷ approach because there are hiding spots above you, beneath you, and on every side. GOPLATs can be secured from beneath, with SOF operators hooking and climbing up from rigid hull inflatable boats (RHIBs) and from above via helicopter fast-rope⁸ insertion. Throughout the training, 160th showed the same professionalism and flexibility for the main goal – to support RNSOF in successfully executing their mission in such a unique environment as the Black Sea region with its above average salty water and gusts of wind.

Taking into account all the attestations previously displayed, all this proves that specialized integrated helicopters have an important niche in extending the capabilities of special air warfare forces. The main challenge to Romania, in order to adopt such integrated high-end capabilities, would be the expensiveness in terms of buying and sustaining equipment, logistical support, and aircrew training in the SOF environment.

NATO SOF Joint Rotary-Wing platforms

According to NATO STANDARD AJP-3.5, Allied Joint Doctrine for SOF, "Special operations are, by nature, **joint**. North Atlantic Treaty Organization (NATO) special operations forces (SOF) are organized in a **joint** manner with **land**, **maritime**, and **air units** from the troop-contributing nations (TCN)s and other domain capabilities constituting a mission-specific special operations component."⁹

Special operations air forces' primary mission is to improve air movement through special air transport (AT) activities using fixed-wing, rotary-wing, or tilt-rotor platforms. Other particular air combat actions may include air-land integration (ALI), close air support (CAS), combat control team (CCT), aerial resupply, airdrop, air-to-air refueling (AAR), personnel recovery (PR), psychological operation (PsyOp), intelligence, surveillance and reconnaissance (ISR), and medical evacuation (MEDEVAC) / casualty evacuation (CASEVAC) for SOF personnel.

Furthermore, we will describe some circumstances of joint situations into the domestic AOO, between maritime SOF organizations and rotary-wing platforms, where the implicated entities are working successfully, outlining the the main features in relation with this analysis.

In order to understand why are maritime helicopters so important, one have to appraise their role in search&rescue (SAR) activities, and not only from ships.

For instance, both in the Netherlands and Belgium, maritime helicopters assist in the SAR tasks above the North Sea. Additionally, Belgium helicopters provide support for Belgium NSOF also in maritime operations. Norway, known in Europe as the "SAR Queen" is exploiting a SAR destinated helicopter in maritime SOF operations. The Marinejegerkommandoen (MJK) is the maritime special warfare unit of Norway. The experience they've achieved in multiple international operations has provided a strong reputation for Norwegian maritime SOF¹⁰ especially in maritime operations (GOPLAT operations, Visit Board Search&Seizure, etc.). Even though, a helicopter with Norwegian NSOF on board is able anytime to execute maritime operations in case of emergency, by working joint with aviation platforms, the response time in an emergency increases exponentially which affects the effectiveness of the NSOF in executing maritime operations.

Different particularity that requires to be measured in operating joint is the preparation process. Maritime special operations range from inserting/ extracting NSOF teams into an area of operations (AOOs) to the conduct of opposed ship boarding. A lot of naval operations are

⁷ https://www.grouph3.com/index.php/training/maritime-operations/176-gas-oil-platform-goplat, accessed on 27.02.2021.

⁸ Fast rope – a technique that inserts Marines into small areas from a helicopter. The ropers slide down the rope and are not attached to it. Definion from: MCRP 3-01B.1, Helicopter Rope Suspension Techniques (HRST) Operations, Headquarters United States Marine Corps, Washington, D.C. 20380-1775, Publication Control Number: 144 000108 00, 2016, APPENDIX G GLOSSARY, HRST Terminology, accessed on 28.02.2021.

⁹ NATO STANDARD AJP-3.5, ALLIED JOINT DOCTRINE FOR SOF, 2019.

¹⁰ https://www.forsvaret.no/om-forsvaret/organisasjon/forsvarets spesialstyrker/marinejegerkommandoen-mjk, accessed on 28.02.2021.

very complicated and may demand nationally regular training and currency requirements. What's the catch? Well, in a hasty maritime SOF mission, some planning steps are missing. This can be a key point on which the success or failure of a mission may depend. The helicopter pilots have to adapt to the SOF mission requirements, understand and respond with speed and precise maritime air knowledge for the success of the mission. For example, air operations missions in a maritime environment¹¹ often involve hovering flight¹² thus, it is important that aircrew are watchful for the power loss that water spray can induce in turbine helicopters.

The ability to conduct precision hovering maneuvers in any number of locations/ situations adds mission flexibility to SOF because it allows the ground force to be inserted close to their objective. The skills and confidence to perform these maneuvers require wellestablished crew resource management (CRM), additional training, equipment, and a close working relationship with the supported land and maritime SOF.

Predicting the Next Fight: Preparing Romanian Naval Special Operations Forces for the 21st century!

The intrinsic particularity of maritime SOF is that they perform tasks in and from the maritime area. They can move, usually undercover, hard to detect, underwater, over water, and through the air to and from their objective, to accomplish their mission. The experience that Romanian NSOF gathered in the past decade working with multiple air assets provides a strong culture in executing maritime operations joint or integrated. While the strong relationship between the maritime and air SOF is easily recognized as a critical factor, some nations are looking forward to strongly redirect conventional air capabilities to support Special Operation Forces, particularly with helicopters. Romanian NSOF has a critical need for helicopter assets, whether as part of an assault force, for supporter missions, or to present a fast response capability through direct action.

In circumstances of the tactical and strategic value of rotary-wing assistance to special operations, the worldwide SOF community stretches to build up such capabilities with a distinct focus on the institution of dedicated Rotary Wing Special Operations Air Task Units (RW SOATUs). In accordance with the NATO Guidelines for NATO SOF Helicopter Operations, "*RW SOATUs may be deployed as stand-alone units, as part of a national special operations task group (SOTG), or if more than one SOATU is present, they may be grouped into a special operations air task group (SOATG). Occasionally, in an MA role for example, an SOATG will be the only SOF in theatre. It is more often the case that an SOATG will work alongside an SOTG within a larger Special Operation Command and Component (SOCC)."¹³*

A Special Operations Task Group's ability to operate its organic SOATU in an area of operations remains one of the rigorous standard demands for a SOF unit to qualify as a top force. Still, few SOF groups worldwide retain such a capability, let alone the ability forward to deploy such a SOATU in an expeditionary manner given that the major operational, logistics and maintenance chalanges of such an endeavor.

For instance, the German Army Special Operations Forces, also known as KSK (Kommando Spezialkräfte), since 2015 it is sustained by a squadron of 15 H145M Light Utility Helicopters (LUHs) produced by Airbus Helicopters. The KSK selected to buy the LUH SOF for internal defense and counter-terrorism missions at home. This type of helicopter can also support international operations, if necessary, like Afghanistan and Mali, where KSK operates. Taking into consideration today's demands for many varieties of operations, H145M LUH SOF can be used for a broad array of missions as follow: intelligence, surveillance, target acquisition, reconnaissance, attack, deep ops, fire support, attack and defense, escort, maritime counter-

¹¹ NATO MPP-2(H3), Volume I, Helicopter Operations from Ships other than Aircraft Carriers.

¹² SOF Helicopter operational guideline WD1.

¹³ Guidlines for NATO SOF Helicopter Operations, September 2016, accessed on 28.02.2021.

terrorism, air movement, combat recovery, and fire support. Furthermore, considering all the missions listed above, this type of helicopter is a powerful asset for the SOF units, and thus, one can confirm the necessity to have this kind of asset to become a Tier 1 unit.



The H145M Light Utility Helicopter (LUH)/ Photo: Airbus Helicopters

Furthermore, in Europe, states fighting with ongoing financial restraints thought of joining forces to merge resources for creating a Multinational Special Aviation Program (MSAP) carried out by a Training Center. The SOF organizations of Bulgaria, Croatia, Hungary, and Slovenia tailored their resources, strengths, and efforts to establish a Multinational Special Aviation Training Center in Zemunik air base near the coastal city of Zadar in Croatia, dedicated to instruct and to coach aircrews responsible for supporting SOF entities during their missions. Also, the Croatian MoD stated that future cooperation could include "joint training, education, equipment, modernization and the establishment of an integrated, multinational force."¹⁴ In the end, this Multinational Special Forces Groups, Croatia's 1st and 2nd Special Forces Groups, Hungary's MH 2 KRE Special Purpose Regiment, Slovenia's Special Operations Unit, and Bulgaria's 68th Special Forces Brigade in their missions overseas or more like in their futures endeavors.

Romanian NSOF-Navy's Puma helicopters cooperation prospects

To predict as close as possible to reality an effective response to a potential threat in the Black Sea, we will consider two major challenges in this future NSOF-Navy's Puma helicopters cooperation.

The first issue will be the legal and regulation aspect. These unique capabilities must find an instrument to effortlessly and effectively be supported the Romanian national legislation and law enforcement. This is a fine wire to tread on, but the rise in aggressive behavior¹⁵ around Black Sea borders calls for innovative, dare and sensible approaches. The integration of RNSOF

¹⁴ https://www.nato.int/cps/en/natohq/news_171964.htm, Multinational Special Operations Aviation training center opens in Croatia, accessed on 28.02.2021.

¹⁵ https://www.mei.edu/publications/allied-a2ad-black-sea, accessed on 27.02.2021.

working joint with Navy's rotary-wing platforms in interagency exercises and procedures is essential in creating an adequate response to a potential aggression. This call for adopting and integrating of NATO'countries regulations and practicies in national regulations and procedures, adapting the best practicies and specialisations of legal advisers that provide operational legal advice to SOF and Navy helicopters commanders.

Raising the awareness regarding the legal and procedural matters among the staff officers and commanders of SOF and Naval Helicopters Units related with SOF missions can increase the coherency and fluency of using jointly the capabilies afore mentioned. Also, the approach of developing effective legal adviser capabilities and commander awareness on legal issues regarding the operational law and procedures will increase the trust and effectiveness of the SOF and Naval Helicopters crew in performing the missions with regard of legal responsibility of their activities.

The second challenge that we foresee is allocating the proper funding for the purchase of dedicated navy helicopters in support of SOF combined with a pilot specialized training program. For example, a specialized program for a helicopter pilot is an amphibious special operation program. Special operations aircrew should be prepared in current in amphibious operations and should include mission-oriented rehearsals whit their specific task unit. In the Black Sea evironment a very important detail is the salty water. Aircrew is advised to minimize power changes after take-off from a saltwater environment due to the risk of compressor stalls that can be caused by engine ingestion of salt spray.

For instance, a possible hybrid threat on Romania's oil platforms, that implies unindentified and, under international law, non-attributable military forced, can be a very plausible threat for our country.

Conclusions

The key to an effective response is linked to time and training. To improve the time response in case of an emergency, Romanian NSOF needs to have dedicated integrated air support within NSOF. For the training iterations, we assess that without constant training between NSOF and Navy's Puma helicopters with the primary goal to increase the interoperability and exercise common procedures, it will be very hard to have an adequate response for a major crisis.

On the other hand, we need to adapt the range of capabilities that Romania assesses to respond to such threats. Romania's leaders have to aknowledge that, in these cases, there is a significant disproportion between the SOF specialised personnel, the legal advisers / legislation and the helicopters capabilities provided. Without balance and coordination, there won't be a major increase of national military response to the threats emerged.

Summing-up, helicopters' future as the principal airlift solution for the special operations community remains proved. Yet, substantial improvement is still required to optimize their achievement, especially as an answer to fast-emerging demands over a more complicated, challenged, and stuffed battlespace.

In conclusion, if we consider all of the summed-up arguments, the necessity of RNSOF to have dedicated SOATU is in high demande because of the variety of missions that such capability can be engaged to accomplish, RNSOF's area of operation, and not last, the evolving threats existing in the Black Sea. RNSOF capabilities are well suited for the challenges of today's fights but tomorrow's are likely to be much different.

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