

What professionals think about military exercises

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Exercises are a key part for how military forces prepare for war or other operations. The FOI Russia and Eurasia programme has since 2010 researched Russian military exercises. That effort prompted other research, for example about NATO exercises. Another effort has been to develop methods to better understand what peacetime military exercises of a force say about its prospective performance in war, its warfighting potential. As a part of that theoretical work, it was important to get the practitioners' perspective on exercises. Military matters are after all ultimately practical. This memo shows what three retired senior officers think about exercises.

AS A PART of the Swedish Defence Research Agency's (FOI) ongoing analysis of foreign peacetime military exercises (hereafter only exercises), three retired Swedish senior officers, all generals,¹ with a combined service experience of almost 120 years, were invited to offer professional insight and enrich FOI's theoretical and analytical work on these exercises. The generals' reflections drew from their experience in the Swedish Armed Forces, spanning from the Cold War era to the present. This specific context may restrict the generalisability of the insights discussed here to other military forces at different times. Their contribution was nevertheless a useful reality check.

The discussion evolved around three sets of questions. First: Why does a military organisation decide to carry out exercises? Second: What determines the goals, scale, and scope of exercises? How does one know when the exercise's goals have been reached? Third: How are a state's peacetime exercise objectives connected to its potential wartime force performance? This brief outlines the discussion's main points about the purpose and

context of military exercises and how they relate to war, as well as how they can inform capability assessments.

THE CONTEXT OF EXERCISES

For military operations, the context is war,² a direct use of military power. For exercises, the context is the creation and maintenance of military power in peacetime. Each operation in war is case-specific in terms of mission, time, space, and forces. Exercises, a subset of the wider notion of military training, mirror these factors, but are different from war. Exercises are collective military training in a simulated hostile environment at all levels of a force.³ Our discussion dealt mainly with major exercises, the biggest that a force carries out within a certain period.

The conceptual context for exercises is the creation and maintenance of military power. Exercises also have a practical context. Plans and organisations constitute a wider framework for exercises. Structures, criteria, and procedures for creating military forces often span many years of iterative cycles of recruiting, equipping,

1 The discussion took place at FOI, in Stockholm, Sweden, on 18 January 2024. The discussants were retirees Major General Roland Ekenberg, who served in the Swedish Armed Forces for 41 years, Major General Bengt Andersson (38 years), Rear Admiral Jonas Wikström (39 years), and FOI colleagues Dr Robert Dalsjö, research director, and analyst Mr Ismail Khan (notetaker). Both Dr Dalsjö and the present author have served as reserve officers in the Swedish Armed Forces for more than 30 years. The discussion included many illustrative examples, which are abridged here for brevity.

2 Other types of military operations, such as peacekeeping, counterinsurgency, and counterterrorism, were not discussed.

3 In contrast, drills are also a form of collective military training, but without a simulated hostile environment.

training, and exercises. One example is NATO demands for what a certain type of unit should be able to do.⁴ Systems for building military forces operate for years to produce results. Flaws in such systems, intrinsic or extrinsic, affect the final product, i.e. trained forces.

DIFFERENCES BETWEEN EXERCISES AND WAR

Exercises never fully simulate war (that would itself be war) for the training audience (the participating forces for whom the exercise is organised). War and exercises are similar in that both entail elaborate planning and practical actions adequate for each level. Just like war, exercises have a wider political context. A state's political leadership tasks the military with the types of wars it should be able to fight and with which forces.⁵ Units and formations must then be capable of carrying out certain missions and train to do so, separately and jointly.

PURPOSES OF EXERCISES

The purpose of an exercise can be to build, improve, measure, reshape, develop, or maintain military capability; it can be a show of force (then often with live-firing events); a test of readiness (addressing the time factor in preparing for or carrying out operations); or to certify that a unit has met a certain standard (such as for readiness within NATO's deterrence efforts). Exercises are arguably a better natural venue for testing new organisational structures than doing so directly in combat. Exercises are also a domestic signal within a force in terms of displaying capabilities and boosting morale. There is a dual-use aspect to some exercises. Navy ships on exercises can carry out maritime surveillance or reconnaissance tasks at the same time.

Success or failure in war means to prevail or perish. Success or failure hinges on the goals set for the exercises and the criteria that guide force creation. If a force's culture encourages independent thinking and risk-taking, exercises provide an opportunity to learn from mistakes in a context more forgiving than war. If so, a good exercise outcome may be that things go wrong, which ideally prompts insights on what to do (and not to do) in

the future. If the culture instead emphasises control and good appearances to various constituents, such as superior officers or political leaders, an exercise is a way to signal that all is in order, irrespective of what exercise participants actually learn.

SOME GENERAL OBSERVATIONS ABOUT EXERCISES

To mirror capability at a certain level, an exercise should involve both command and control (C2)⁶ and commensurate forces at the same time. To illustrate, a brigade exercise reflects brigade-level capability if all parts of the brigade participate and are staffed and equipped fully. Omitting subunits means fewer interacting parts in an exercise, and reduces the opportunity for the training audience to train and experience friction, especially for C2 and logistics. Conversely, the larger the exercise, the greater the complexity and the training effect.

In peacetime, there are requirements on what a unit should have in terms of trained personnel and equipment and be able to do, for example, carrying out an activity in a stipulated time or space. Such requirements are part of the force-creation process mentioned above and often materialise in specific criteria for units to meet in exercises. Experience indicated that it is easier to set measurable criteria for units than for C2.

Practical experience points to an inflection point, where the increasing complexity of adding more forces to an exercise does not generate a commensurately increasing training effect for C2. Higher costs and effects on the surrounding society increase the pressure on the military establishment organising the exercise, which has limits to what it can handle. In addition, the perfect must not undermine the good. A full-brigade exercise is complex and costly to organise and thus infrequent. The commander has to assess what is good enough and choose which parts of the brigade should participate in which exercises to ensure that all of the brigade's subunits exercise sufficiently over time, both individually and together, as a whole. To use an analogy, separate rehearsals for the string, brass, woodwind, and percussion will make great sections, but not necessarily a great symphony-orchestra concert.

4 See NATO's exercise policy (https://www.coemed.org/files/Branches/DH/0458-4_20230103_NU_NATO_EDUCATION_TRAINING_EXERCISES_AND_EVALUATION_POLICY.pdf) and the Allied Joint Doctrine for Operations (https://www.coemed.org/files/stanags/01_AJP/AJP-3_EDC_V1_E_2490.pdf), which, on pp. 1–3 to 1–8, alludes to various demands and criteria.

5 The tenor of the discussion was that the unique societal role of the armed forces is the ability to fight wars to defend their own territory and ensure national survival. Other military forces' possible peacetime roles have implications for exercises. If the military focuses on upholding alliance commitments, exercises may be more about interoperability than defending its own territory. If the role is ceremonial, exercises are parades. If the role is to ensure regime stability, exercises display normality. Several of these roles can apply to a single country. The author thanks Dr Dalsjö for these reflections, received 31 May 2023.

6 Alternative labels include C4ISR: Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance. Here, C2 is used for simplicity.

Just getting forces into a major exercise requires a sizeable prior practical effort in terms of planning, equipping, and training. All training steps leading up to a larger exercise also entail identifying and addressing the myriad of factors, big and small, that can go wrong in a military force when there is no war; in essence, the result of a force's peacetime domestic friction.⁷ If not properly addressed in peacetime, it may make warfighting unnecessarily difficult for a force. Exercises enable a force to identify and address such friction. The intensity and frequency of this constant task relate to the extent of personnel rotations through the force. Arguably, if their motivation remains constant, the longer soldiers serve, the greater become the skills, experience, and *savoir-faire* that help reduce friction.

OBSERVATIONS INTRINSIC TO EXERCISES

Exercises often consist of several planned events and incidents, where units train certain missions in parallel. These trained units are building blocks in a military operation, ideally after having participated in the same major exercise together. Major exercises are expensive and require planning efforts, often spanning years. As noted above, many units may not often have the opportunity to experience such exercises.

Exercises, perhaps on a more individual level, also serve to increase knowledge about other parts of a force and the social relations within it. On major exercises, officers and soldiers can learn about forces and people outside the context of their immediate unit context. One reflection about maintaining skills over time was that the status of a soldier, reservist, or professional mattered less than the time spent in a unit on exercises over a longer period of time.

Exercises rarely allow us to simulate all aspects of war realistically. Logistics to and within exercise areas may not be the same as supplying an advancing force at a high pace of offensive operations, especially over time. Movement control of forces across big territories using roads, ports, airports, and railroads demands careful planning and control in execution to avoid causing problems for the surrounding society. This requires planning and scripting key aspects of exercises, which limits the opportunity to simulate enemy actions and train C2 fully at the operational level. It is easier to simulate war and allow for free play in exercise areas, thus mainly for tactical-level units and below.

On the other hand, just organising an exercise requires plenty of effort in terms of planning and execution, which is a training effect in and of itself. For C2, the interaction with civilian authorities above the tactical level is a training experience. This process also entails tailoring and deploying forces for the exercise. That experience, including all the friction, may be a key benefit of exercises for C2 above the tactical level.

THE LINK BETWEEN EXERCISES AND CAPABILITY

The link between exercises and capability, or the ability to do something, is a fundamental point. The military is like other fields of human activity that involve acquiring skills, both individual and collective. To continue the orchestra analogy, a symphony orchestra does not materialise just by giving a few dozen random people instruments. They can make noise but hardly perform Mahler's Fifth. Giving uniforms, equipment, and weapons to some random people does not make them into a military unit. That group would have a potential to harm, mainly themselves and their immediate surroundings, but less so a trained adversary. Both the orchestra and the military unit should develop skills, first individually and then collectively, to enable performance. Both require planning, leadership, and practice to attain and maintain collective skills. An untrained orchestra gets bad reviews and few new concerts. A military unit without exercises probably cannot carry out its mission and loses its utility or perishes. Simply put, no exercise, no capability.

After an exercise, a unit represents capability. It has the potential ability to do something, carry out a certain mission, or function in an operation. The unit is exercised in peace, but untested in war. It is hard to know how it would perform. As the Russian saying says, only battle will tell.

ASSESSING CAPABILITY BASED ON EXERCISES

The above observations about exercises should be kept in mind when gauging the capability of both one's own and other forces. For inferring the capability of other forces, there are two kinds of observations about using exercises. The first is quantitative and measurable observations, such as the size and scope of the forces deployed in the field, at sea, or in the air, and in what timeframes. This data is visible and available. Qualitative observations require closer insights into the other force, for example, its approaches to C2, training levels, or unit cohesion.

⁷ Clausewitz notes that friction, "the influence of the infinity of petty circumstances" impeding a force's performance, distinguishes real war from war on paper. In war, friction is closely linked to another key factor – chance; von Clausewitz, Carl: *On war* (Penguin, Harmondsworth, 1968), p. 164–5. Chance has a smaller role in exercises.

Qualitative factors are mostly invisible and harder to gauge from outside an exercise than quantitative factors. Partial substitutes include studying the doctrines and manuals of the force in question, as well as contacts with personnel from that force during exchange or education programmes.

The temptation to use one's own experience and judgement to fill such information gaps creates the risk that mirror-imaging clouds the assessment. Conversely, judgement based on professional experience facilitates contextualising observations, determining reasonable expectations of an exercise, and spotting possible omissions that a non-military eye may miss. Any exercise-based assessment of the potential capability of both one's own and an enemy's forces should acknowledge and address these methodological challenges.

Experience suggests at least two practical limits to increasing exercise size and training complexity for C2 and logistics. One is the number of units available for exercises. Some may be on operations, or preparing or reconstituting after them. Some may need to recreate the cohesion lost to personnel turnover, or learn to use new equipment. The second is the limited size of the exercise areas. For example, few exercise areas can host a full brigade with its manoeuvre units operating at the maximum stipulated distances. Using a state's full military establishment, the theoretical apex of complexity and training effect is therefore not practical for peacetime exercises. It may be, however, a matter of survival in war.

THREE RESIDUAL REFLECTIONS

To address the interactive nature of war, exercises should be two-sided, i.e., with an opposing force (OPFOR) that training-audience forces can engage. The more equal

the two sides are in size and composition, and the less scripted the exercise is, the better the interaction and simulated friction of war, especially for commanders. If the OPFOR is smaller than the training-audience force, it should at least have capabilities that are sufficiently similar to adversary forces. Free play is mainly limited to fully controlled exercise areas and thus mainly to the tactical level.

To train tactics or operational art, a practical experience was that HQ staff could train in free-play mode in a scenario if there was adequate interaction with an OPFOR HQ. Exercise constraints, in contrast, limit the opportunity for forces in the field to do the same. A compromise is that HQs exercise staff routines to ensure adequate order for forces in the field, given exercise constraints, but sometimes take a timeout to discuss how they would have done without exercise constraints, that is, in war. It appears difficult to achieve the ideal of simultaneously training C2 and operational art with forces in the field.

After the discussion, an overall reflection was that practical considerations often impose priorities and limitations on exercise organisers. Training C2 seems to be a military instinct. Without a brain and a nervous system, it matters little how strong the military body's muscles are. Another explanation could be that a cycle or programme of exercises over time creates enough blocks to tailor a joint interservice force. Such tailoring is not required for every exercise. Frequent training of C2 organs at all levels underpins the ability to tailor forces to tasks, whether on major exercises or in war. This pre-exercise tailoring process noted above may have as much training value for C2 as command of the forces in the actual exercise. ■

FOI research about exercises:

Albin Aronsson and Björn Ottosson: *Western Military Exercise Activities 2014 – 2019: Adaptation, Development and Progress*, (Stockholm, Swedish Defence Research Agency, 2020), <https://www.foi.se/rest-api/report/FOI-R--4875--SE> (in Swedish).

Markus Ekström: *Russian operational-strategic level exercises in 2009 – 2010* (FOI, Stockholm, 2010), <https://foi.se/rest-api/report/FOI-R--3022--SE> (in Swedish).

Johan Norberg: *Training to Fight – Russia's Major Military Exercises 2011–2014* (Stockholm, Swedish Defence Research Agency, 2015), <https://www.foi.se/rest-api/report/FOI-R--4128--SE>.

Johan Norberg: *Training for War – Russia's Strategic-level Military Exercises 2009 – 2017* (Stockholm, Swedish Defence Research Agency, 2018), <https://www.foi.se/rest-api/report/FOI-R--4627--SE>.

Johan Norberg: "Vostok-2018: About the Russian military's brain, not its muscles," FOI Memo, Swedish Defence Research Agency, September 2018, <https://foi.se/rest-api/report/FOI%20MEMO%206470>.

Johan Norberg and Natalie Simpson: "Zapad-2021 and Russia's potential for warfighting," Foreign Policy Research Institute, 2021, <https://www.fpri.org/wp-content/uploads/2021/09/web-eucom-1-norberg-pdf>.

Johan Norberg: "Towards a Theory of Military Exercises – Implications for Warfighting Potential", *Proceedings and Journal of the Royal Swedish Academy of War Sciences*, December 2023, pp.53–71, <https://kkryva.selhot/2023/4/norberg-towards-a-theory-of-military-exercises.pdf>.