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DECOMPOSING COMPLEXITY: MEASURES OF EFFECTIVENESS IN SECURITY FORCE ASSISTANCE

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Solo Flight

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MEASURES OF EFFECTIVENESS IN SECURITY FORCE ASSISTANCE**

By Major James LeGresley

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Decomposing Complexity: Measures of Effectiveness in Security Force Assistance

INTRODUCTION

The past few decades have seen the emergence of two modern demands on western military forces. 9/11 marked a shift in the provision of Security Force Assistance (SFA) from a traditional role of Special Operations Forces, to a large-scale mission for conventional forces in theatres such as Afghanistan, Iraq, as well as several African states.¹ The nurturing of indigenous forces is one of many lines of efforts in Stability Operations that has been cemented in mainstream military planning. This has evolved in conjunction with the era of performance measurement, where proliferation of data-based analytics is driving political and operational decision making in the western world.²

However, SFA is a complex endeavor that has eluded effective measurement techniques for decades, and has been ultimately assessed by a subjective feeling of success or failure.³ After all, how exactly does one go about assessing how much a foreign military unit has actually learned from their time spent with SFA providers? State militaries are complex social systems in which cause and effect is not linear, and is nearly impossible to trace.⁴ This feeds into the seemingly impossible task of establishing measures of effectiveness for SFA operations. However, anything is measurable.⁵ Even

¹ Scott G. Wuestner, *Building Partner Capacity/Security Force Assistance: A New Structural Paradigm* (Feb 2009), 7.

² Guy Redden, *Questioning Performance Measurement: Metrics, Organizations, and Power* (SAGE Publications Ltd, 2019), 1.

³ Rick Lynch and Phillip D. Janzen, "NATO Training Mission – Iraq: Looking to the Future," *Joint Force Quarterly*, no.40 (First Quarter 2006), 32.

⁴ NATO, *Innovations in Operations Assessment: Recent Developments in Measuring Results in Conflict Environments* (NATO Communications and Information Agency, 2013), 212.

⁵ Douglas W. Hubbard, *How to Measure Anything: Finding the Value of "Intangibles" in Business*. (John Wiley & Sons, Inc., 2007), 3.

for intangible and abstract effects, imprecise measurements provide at least more information about a system than was known before.⁶

Decomposition in measurement refers to the act of breaking something complex into its constituent parts that are easier to measure.⁷ This paper will aim to decompose the complexity of SFA into its constituent parts by first examining the key drivers of successful SFA, then merging those lessons with best practices in operational assessment to develop a potential MOE framework. The paper starts with a literature review of both MOE and SFA. It then highlights three components of effective SFA, which should ideally be focused on viability (attainable goals and sustainable practices); legitimacy (military professionalism); and political subordination (civil-military relations). It then suggests a framework in which MOE should be defined and assessed.

SFA in this context is focused primarily on the provision of overt military training, and this paper excludes other forms of aid such as financing, police training, etc. Though the proposed framework could be applied generally to SFA, it was written with theatres such as Afghanistan and Iraq in mind, where the Host Nation Security Forces (HNSF) is traditionally mired in political turmoil and lacking in technological sophistication.

⁶ Hubbard, *How to Measure Anything...*, 3.

⁷ *Ibid.*, 109.

MEASURES OF EFFECTIVENESS

Effectiveness is the degree to which outcomes match original goals.⁸ Therefore, outcomes needed to be measured in some way to assess progress against a baseline. NATO labels this process ‘operations assessment’, while civilian industry simply calls it ‘monitoring and evaluation’.⁹ Similarly, while the business community uses the terms ‘indicators’ and ‘metrics’ to define the quantitative and qualitative factors used in assessing effectiveness, NATO calls them ‘measures of effectiveness’ (MOE) and ‘measures of performance’ (MOP).¹⁰ Defined simply, MOPs help to answer whether things are being done right, and MOEs assess whether the right things are being done.¹¹ Several MOPs typically support individual MOEs, which holistically serve to link individual actions with milestones along lines of effort in an overall assessment that addresses whether or not the mission is being accomplished.¹²

There are numerous reasons to assign precious resources to measure effectiveness. Whereas measuring the direct effects of intangible operations is impossible by definition, MOE can help transform “the effect of a thing” into actionable information.¹³ From a practical military standpoint, it allows Commanders to assess progress, and determine whether a planning shift is required.¹⁴ Similarly, it helps to articulate transition conditions into follow-on phases or branch planning.¹⁵ It is critical

⁸ Sarah Jane, Meharg, “Measuring Effectiveness in Complex Operations: What is Good Enough,” Canadian Defence & Foreign Affairs Institute (2009), 1.

⁹ NATO, *Innovations in Operations Assessment...*, 125.

¹⁰ *Ibid.*, 125.

¹¹ United States of America, *Assessment and Measures of Effectiveness in Stability Ops: Tactics, Techniques, Procedures* (2012), 5.

¹² *Ibid.*, 10.

¹³ Redden, *Questioning Performance Measurement...*, 15.

¹⁴ United States of America, *Security Force Assistance, FM 3-07.1* (May 2009), 3-5.

¹⁵ *Ibid.*, 4-9.

for accountability and oversight, helping not only to prove progress, but also to better illustrate a requirement when seeking additional resources.¹⁶ It can also have benefits internal to the organization, focusing subordinate effort towards the things that have the most impact on the end state.¹⁷

Well-crafted MOE not only describe the current situation, but also stimulate discussion amongst the Commander and their staff.¹⁸ The most common features to describe effective MOE include their alignment with goals, their accurate and consistent measurement over time, and are preferably objective in nature.¹⁹ Although Albert Einstein was quoted saying that “not everything that counts can be counted”,²⁰ several best practices in MOE recommend reducing qualitative assessments down to a number for comparative purposes.²¹ Additionally, just as it is essential to measure the positive indicators towards a goal, it is critical to develop MOE to monitor and assess disruptors to the plan.²² Negative MOE should always be developed for the assessment plan.

The correlating risk for MOE is that a poor measurement plan has the potential to generate confusion in the organization and detract from its objectives, or worse – mislead success.²³ As an example from counterinsurgency (COIN) doctrine, it may be inappropriate to measure the number of new businesses opening as an indicator of increased security. Cause and effect correlation is not strong enough to support the MOE,

¹⁶ Meharg, “Measuring Effectiveness in Complex Operations” ..., 7.

¹⁷ Redden, *Questioning Performance Measurement...*, 19.

¹⁸ NATO, *Innovations in Operations Assessment...*, 45.

¹⁹ NATO, *NATO Operations Assessment Handbook*, v.3.0 (July 2015), 1-14.

²⁰ Ben Connable, *Embracing the Fog of War: Assessment and Metrics in Counterinsurgency* (RAND Corporation, 2012), 84.

²¹ Hubbard, *How to Measure Anything...*, 21.

²² Christopher Paul, *et al. Assessing and Evaluating Department of Defense Efforts to Inform, Influence, and Persuade*. RAND Corporation, 2015, 40.

²³ Redden, *Questioning Performance Measurement...*, 20.

and there may be contextual factors that skew the perception that the area is more secure, i.e. are they being opened by local criminal networks?²⁴ MOE should be minimized to emphasize quality causation rather than quantity for the sake of both the mission and the resources assigned to track and analyze it all.²⁵ Another danger is the ‘authority’ that numbers carry, and the cultural belief that accountancy carries with it objectivity.²⁶ Even objective measurements have error, and no measurement can be presumed to be exactly correct.²⁷ This is especially true when translating qualitative assessments into a numerical system. The pursuance of exact measurements may be resource-prohibitive, while rough measurements may serve the purpose of reducing uncertainty to an acceptable level.

In his book “How to Measure Anything”, Douglas Hubbard outlines several tools to measure just enough to assess effectiveness. First, he encourages the use of “Fermi Questions”, made famous by a physicist of the same name in the early 20th century. Instead of being overwhelmed by what you don’t know about a problem set, focus on the aspects that you do know. By answering several smaller and more quantifiable questions, you get a pretty good indication of the overall situation.²⁸ This paper employs the same methodology to derive a potential framework for MOE in SFA. In a similar sense, he encourages theorizing what changes would be observed if a system was perfectly cloned, but a singular change was made to one and not the other – the presumed and anticipated differences can inform MOE.²⁹ With regards to assessment, he emphasizes the diminishing value of measurement, cautioning that minimal resources can provide the

²⁴ Connable, *Embracing the Fog of War...*, 91.

²⁵ Paul, *et al. Assessing and Evaluating Department of Defense Efforts...*, 44.

²⁶ Redden, *Questioning Performance Measurement...*, 35.

²⁷ Hubbard, *How to Measure Anything...*, 119.

²⁸ *Ibid.*, 11.

²⁹ *Ibid.*, 27.

majority of the information a Commander would need to make a confident decision, and the pursuit of perfectly scientific measurements has an exponential demand for resources.³⁰ Finally, the “Rule-of-Five” is an unbelievable, yet scientifically proven phenomena that suggests there is 93% probability that the median of all values in a data set lies somewhere between the largest and smallest values in a sample of any five measurements.³¹ This is a powerful tool that could allow Commanders to gain a high-confidence appreciation of their effects without massive resource demand. These tools form the foundation of the analysis in this paper, and the following sections will use Fermi-style analysis to tease out what we do know about SFA in order to develop a potential MOE framework.

SECURITY FORCE ASSISTANCE

The United States define Security Force Assistance as “the unified action to generate, employ, and sustain local, host-nation or regional security forces in support of a legitimate authority”.³² Unified action in this sense refers to the unity between a legitimate authority and the assisting partner force. Although SFA has various labels,³³ all aim to establish conditions that foster an independent and capable force that is committed to the legitimate state authority.³⁴ SFA is normally accomplished in one of three ways, none of which are mutually exclusive on the same operation, and all of which have their

³⁰ *Ibid.*, 94.

³¹ *Ibid.*, 29.

³² United States of America, *Security Force Assistance, FM 3-07.1*..., 1-1.

³³ United States of America, *Commander's Handbook for Security Force Assistance* (14 July 2008), 2; Emily Knowles and Jahara Matisek, “Western Security Force Assistance in Weak States, Time for a Peacebuilding Approach,” *The RUSI Journal* 164, no. 3 (April 2019), 11. SFA is also known doctrinally as ‘Building Partner Capacity’, ‘Foreign Internal Defense’, ‘Train, Advise, and Assist’, and ‘By, With and Through’; or colloquially referred to as ‘Remote Warfare’, ‘Surrogate War’, and ‘Light-Footprint Warfare’, which can also carry other connotations.

³⁴ United States of America, *Security Force Assistance, FM 3-07.1*..., 2-2.

own spectrum of intensity: Advising (mentorship and influence); Partnering (autonomous units working together); or Augmenting (embedded forces inside the partner's command structure).³⁵

The US have been conducting SFA since the late 19th century, familiarly assisting the Philippines in 1899 to combat a counterinsurgency (COIN).³⁶ Western SFA played a critical role in the rebuild of weak post-war states such as South-Korea and Japan in the 1940's. It continued as a policy instrument in theatres such as Vietnam, Lebanon, and Panama in the decades to follow, and more recently in African and Middle Eastern countries. The prevalent benefit of SFA is that it helps to eliminate the regional insecurity and lawlessness that breeds terrorist organizations,³⁷ at a fraction of the cost that it would otherwise take for western forces to do themselves.³⁸ Further, it provides a medium to maintain diplomatic relations with a host nation,³⁹ and at worse it allows a foothold in the region in which to surge operations if needed, as seen when providing SFA to Saudi Arabia during the 1991 Gulf War, then staging operations out of the country.⁴⁰ Although the case studies that are highlighted below have critics questioning the value of SFA, it is argued that anything is better than nothing, regardless of its true effectiveness.⁴¹

Two modern examples of SFA provide the context in which this paper was written, and will re-emerge in the sections to follow: Iraq and Afghanistan. Both are

³⁵ *Ibid.*, 2-9.

³⁶ Wuestner, *Building Partner Capacity...*, 4.

³⁷ Congressional Research Service, *Building the Capacity of Partner States through Security Force Assistance* (CRS, 2011), 9.

³⁸ Gene Germanovich, "Security Force Assistance in a Time of Austerity," *Joint Force Quarterly* (Fourth Quarter 2012), 15.

³⁹ Lauren Serrano, "Institutionalizing Security Assistance," *Marine Corps Gazette* (Aug 2016), 86.

⁴⁰ *Ibid.*, 86.

⁴¹ Stephen Biddle, *Building Security Forces & Stabilization Nations: The Problem of Agency* (Stephen Biddle, 2017), 134.

highly criticized as being ineffective. In post-9/11 Iraq, the Iraqi Security Force (ISF) completely folded in the defence of Mosul in 2014 from the Islamic State despite over a decade of western training and over \$25B of American funding.⁴² In some cases, the ISF simply abandoned their posts and fled.⁴³ Holistically, political and cultural forces such as corruption have significantly hindered efforts to motivate competent and capable forces.⁴⁴ Afghanistan has exhibited similar themes, as western partner forces struggle to overcome the deeply entrenched tribal, religious, and ethnic undertones that can degrade a unified national security force.⁴⁵ There, the Taliban and other power brokers have capitalized in an environment where the government and the Afghanistan National Security Forces (ANSF) have traditionally exhibited equally corrupt behaviour, and have failed to provide essential human security.⁴⁶

Critics of these operations are also fuelled by a lack of established measures of effectiveness for SFA.⁴⁷ Keystone US doctrine on SFA goes so far as to highlight the necessity and importance of MOE, but lacks any detail on what or how to focus efforts.⁴⁸ There is not even a consensus on what is an effective military force, let alone how to measure the effects of developing one.⁴⁹ A few academic texts offer promising titles, and

⁴² Stephen Biddle, Julia MacDonald, and Ryan Baker, “Small Footprint, Small Payoff: The Military Effectiveness of Security Force Assistance,” *Journal of Strategic Studies* 41, no.1-2 (2017), 117.

⁴³ *Ibid.*, 115.

⁴⁴ *Ibid.*, 118.

⁴⁵ Mark F. Cancian, *Tell Me How This Ends: Military Advice, Strategic Goals, and the “Forever War” in Afghanistan* (Center for Strategic & International Studies, 2019), VII.

⁴⁶ Terrance K. Kelly, Nora Benashel, and Olga Oliker, *Security Force Assistance in Afghanistan: Identifying Lessons for Future Efforts* (RAND Corporation, 2011), 6.

⁴⁷ Meharg, “Measuring Effectiveness in Complex Operations”..., 1.

⁴⁸ United States of America, *Security Force Assistance, Joint Doctrine Note 1-13* (29 April 2011), III-13; United States of America, *Security Force Assistance, FM 3-07.1*..., 5-10; United States of America, *Commander’s Handbook for Security Force Assistance*..., 9.

⁴⁹ Thomas C. Bruneau and Aurel Croissant (ed.), *Civil-Military Relations, Control and Effectiveness Across Regimes* (Lynne Reiner Publishers, 2019), 36.

are good references to determine the types of things that should be measured, but ultimately fail to articulate *how* to measure them.⁵⁰ This is also in spite of several NATO special task groups devoted to better measurement of effectiveness on operations.⁵¹ The issue is compounded by the fact that SFA is normally associated with COIN and Stability Operations,⁵² which carry their own set of MOE but are not representative of SFA effectiveness. For example, availability of electricity or tax revenue have been cited as MOE in COIN operations, but have little causal relationship with SFA.⁵³

Thus, this paper cannot contend to solve what several decades of expert analysis could not – it will merely leverage existing literature on conditions for successful SFA as Fermi-style indicators on what to measure, coupled with recommendations on how to measure it based on best practices in measurement. The sections below provide answers to those smaller questions, and are categorized by viability (training standards and sustainability), legitimacy (cultural goals for the HNSF), and political subordination (emphasizing sound civil-military relations).

VIABILITY

First and foremost, stakeholders in SFA need to come to a consensus on what exactly effectiveness looks like, as political agendas tend to generate conflicting definitions.⁵⁴ In Afghanistan for instance, it should be asked what is good enough? If they made strides towards moderate improvement, would that be enough?⁵⁵ Instead, the

⁵⁰ Pat Paterson, “Measuring Military Professionalism in Partner Nations: Guidance for Security Assistance Officials,” *Journal of Military Ethics* 18, no. 2 (2019). As an example.

⁵¹ NATO, *Innovations in Operations Assessment*..., 80.

⁵² United States of America, *Commander’s Handbook for Security Force Assistance*..., 11.

⁵³ Connable, *Embracing the Fog of War*..., 70.

⁵⁴ Meharg, “Measuring Effectiveness in Complex Operations”..., 10.

⁵⁵ Cancian, *Tell Me How This Ends*..., 24.

Commander's Unit Assessment Tool used to evaluate ANSF units had five levels of assessment, but the highest one (full independence) was utterly unattainable due to widespread under-resourcing and the sophistication of the entire system⁵⁶ – so why dangle it as the standard that will fail to be achieved? NATO defines it best as the “Acceptable Condition: the defined level for the metric at which a desirable situation has been achieved.”⁵⁷ Rather than the gold standard, it is the target standard. Friction arises when MOE do not align with the conceptual approaches and institutional development of a force.⁵⁸ In Afghanistan, Western Forces struggled to bridge system gaps (technological in particular) to enable sustained success from a less capable ANSF.⁵⁹ The HNSF needs to be highly involved in the process of system design and performance assessment to make SFA viable. Due to cultural, institutional, and societal factors, the best judge of standard in any metric of performance is the end user themselves.⁶⁰

Similar to the need for systems adjustment, logistics is well documented as both a critical enabler for an effective military,⁶¹ and a key gap in some historical SFA operations. In Afghanistan, essential logistical functions such as supply, transportation, and planning were done by the partner force to ensure quality delivery,⁶² understandable given the mutual impact that logistics has on both forces in the field. However, it does nothing to further the HNSF capacity and their ability to sustain after SFA ends. While Kandak Combat Service Support forces worked alongside coalition logistic forces similar

⁵⁶ Adam Mausner, *Reforming ANSF Metrics: Improving the CUAT System* (Center for Strategic & International Studies, 2010), 4.

⁵⁷ NATO, *NATO Operations Assessment Handbook*..., 1-18.

⁵⁸ Kelly, Benashel, and Olikier, *Security Force Assistant in Afghanistan*..., 101.

⁵⁹ *Ibid.*, 78.

⁶⁰ NATO, *Innovations in Operations Assessment*..., 212.

⁶¹ Paterson, “Measuring Military Professionalism in Partner Nations”..., 150.

⁶² Kelly, Benashel, and Olikier, *Security Force Assistant in Afghanistan*..., 70.

to any other fighting unit, additional coalition tasks and accountability requirements detracted from their time and capacity to properly mentor the ANSF.⁶³ Indeed, US SFA doctrine stresses the need to organize critical logistic functions for the HNSF; however it lacks emphasis on the need to transition those tasks, or how to hand them over.⁶⁴ The British in Iraq had similar issues, spending up to a year mentoring the ISF only to see things go to pieces when logistic responsibilities were handed over.⁶⁵ MOE should be framed around gradual hand over of logistics and prolonged partner force mentorship rather than control.

Of course, viability starts with a concentration on the partner forces' own ability to provide effective advice and assistance. Understanding the Operational Environment (OE), including how to influence and advise others, is the first imperative of SFA.⁶⁶ In Afghanistan, the increasing demand for ANSF throughput required ever-increasing demands for rapid deployment of training personnel to support it, who had only been lightly trained on how to conduct SFA themselves.⁶⁷ This lack of training permeated in very basic forms, such as an inconsistent understanding of how to use the CUAT in evaluating ANSF capabilities.⁶⁸ In spite of it being cited as a critical gap in recent SFA operations,⁶⁹ US SFA doctrine outlines its necessity fairly explicitly. Their Field Manual on SFA provides an excellent list of 'developing skills' and influence techniques that

⁶³ *Ibid.*, 80.

⁶⁴ United States of America, *Security Force Assistance, FM 3-07.1...*, 2-3.

⁶⁵ Colin Freeman, "Why 'Sandhurst in the Sand' Hasn't Worked in Iraq," *Telegraph Media Group Ltd* (05 Nov 2014), last accessed 21 Mar 2020, <https://www.telegraph.co.uk/news/worldnews/middleeast/iraq/11211172/Why-Sandhurst-in-the-Sand-hasnt-worked-in-Iraq.html>, 3.

⁶⁶ United States of America, *Security Force Assistance, FM 3-07.1...*, 2-1.

⁶⁷ Kelly, Benashel, and Olikier, *Security Force Assistant in Afghanistan...*, 33.

⁶⁸ Mausner, *Reforming ANSF Metrics...*, 3.

⁶⁹ Kelly, Benashel, and Olikier, *Security Force Assistant in Afghanistan...*, 83.

could serve as potential MOP before training forces are deployed. Improved advising techniques and OE awareness, including understanding how western culture such as reliance of technology clashes with HN customs, is bound to produce at least marginally increased effectiveness in SFA Ops.

LEGITIMACY

Two other imperatives for SFA Operations include Providing Effective Leadership and Building Legitimacy, indicating their importance for the longevity of the HNSF.⁷⁰ SFA carries the risk of increasing the capacity for violence of actors with poor appreciation of human rights, which may further exacerbate issues.⁷¹ As an example of ineffective metrics, quantity of International Human Rights (IHL) training is often tracked as an indicator that HNSF is being acceptably trained, even though several African forces, for example, have been known to violate IHL when SFA providers were not present.⁷² There is an inverse correlation between the quality of leadership training and the inappropriate use of violence.⁷³ MOP should focus on improving HNSF leadership and ethical awareness. And while legitimacy itself is difficult to measure objectively,⁷⁴ the absence of eroding events serve as viable MOE.

Bribery, corruption, extortion and issues of loyalty erode the legitimacy of a HNSF.⁷⁵ Fostering professionalism in the HNSF is routinely cited as one of the most important goals in SFA;⁷⁶ however, recent assessment tools such as the CUAT fall short

⁷⁰ United States of America, *Security Force Assistance, FM 3-07.1...*, 2-2.

⁷¹ Knowles and Matisek, "Western Security Force Assistance in Weak States"..., 13.

⁷² *Ibid.*, 17.

⁷³ United States of America, *Security Force Assistance, FM 3-07.1...*, 2-6.

⁷⁴ United States of America, *Security Force Assistance, Joint Doctrine Note 1-13...*, III-5.

⁷⁵ Knowles and Matisek, "Western Security Force Assistance in Weak States"..., 15.

⁷⁶ Paterson, "Measuring Military Professionalism in Partner Nations"..., 147.

of attempting to measure those intangibles that affect the hearts and minds of the local population.⁷⁷ Beyond the population, such negative culture has impacts on retention as well, which wastes SFA efforts. In several instances in early 2010, the ANSF had attrition rates over 3% (~4,300 troops) per month with a shocking 30,000 personnel attrition in a 12 month span.⁷⁸ A commonly cited reason for attrition and absenteeism linked back to low-pay, which is a by-product of corrupt management of funding.⁷⁹ MOE focused on detecting corruption may well deter subversion and reinforce sustainable practices.

Progress towards legitimacy starts in the military education of the HNSF leadership. “Military Reflection” has been coined as the essence of what makes a military able to learn and adapt, and consists of their ability to conduct independent policy analysis, to de-centrally execute military decisions, and to have the freedom to evaluate military options.⁸⁰ It has been suggested that SFA providers focus more effort in this realm, teaching HNSF *how* to think rather than *what* to think.⁸¹ However, cultural and societal factors can inhibit progress. The United Arab Emirates (UAE) established a war college and imported US teachers and administrators. They saw a transformation in thinking among the Emirati officers while at the college, as barriers prohibiting individual thought and freedom of speech were removed; however, that way of thinking did not persist once they reintegrated with the organization and society.⁸² It is clear that

⁷⁷ Mausner, *Reforming ANSF Metrics...*, 4.

⁷⁸ United States Government Accountability Office, *GAO 11-66: Afghanistan Security: Afghan Army Growing, but Additional Trainers Needed; Long Term Costs Not Determined* (Jan 2011), 19.

⁷⁹ Kelly, Benashel, and Olikier, *Security Force Assistant in Afghanistan...*, 25.

⁸⁰ Nathan W. Toronto, *How Militaries Learn: Human Capital, Military Education, and Battlefield Effectiveness* (Lexington Books, 2018), xiv.

⁸¹ *Ibid.*, xx.

⁸² *Ibid.*, 81.

transforming organizational culture takes time, and change will always be at odds with established norms. Actions will not change if not preceded by a change in thinking.⁸³ Political will is an essential element to spark change in this case,⁸⁴ and MOE aimed at assessing progress in thought and values allows an understanding of gains towards professionalism and legitimacy. It has also been noted that true military professionalism is dependent on the elected political control over the armed forces.⁸⁵

POLITICAL SUBORDINATION

Civil-Military Relations (CMR) has been cited as the most important driver of successful SFA over the long term,⁸⁶ and is one of the greatest recurring themes in SFA literature. SFA in the UAE led to some positive gains in CMR, as seen when political leaders sat with families to explain the methodology behind the operations that incidentally killed 52 Emirates. This event could have easily triggered a civil-military crisis, but instead served to strengthen trust in the government.⁸⁷ Contrarily, poor CMR and politicization of the military has been cited as a critical factor in the fall of Mosul to ISIL in 2014.⁸⁸ Similarly, the US in Afghanistan realized that their efforts to train local militias that were not under control of the government was not a long term solution, and shifted mid-campaign to a focus on the politically-subordinate ANSF.⁸⁹

⁸³ Andrey Pavlov and Mike Bourne, "Explaining the Effects of Performance Measurement on Performance: An Organizational Routines Perspective," *International Journal of Operations & Production Management* 31, no. 1 (2011), 114.

⁸⁴ Toronto, *How Militaries Learn...*, xv.

⁸⁵ Paterson, "Measuring Military Professionalism in Partner Nations"..., 152.

⁸⁶ Knowles and Matissek, "Western Security Force Assistance in Weak States"..., 15.

⁸⁷ Toronto, *How Militaries Learn...*, 66.

⁸⁸ *Ibid.*, 91.

⁸⁹ Kelly, Benashel, and Olikier, *Security Force Assistant in Afghanistan...*, 20.

Civilian control over the military is defined as the relative political power of the military compared to nonmilitary political actors, and lies somewhere on a sliding scale between full military dominance to complete civilian control.⁹⁰ Civilian control is exercised through five decision making elements, which provide potential MOE focus areas: Elite Recruitment refers to meritocratic selection of leaders; Public Policy refers to due process in policy making; Internal Security refers to the decisions and actions to maintain law and order; National Defence refers to decisions of foreign policy and war; and finally Military Organization refers to the major resourcing and system decisions of the forces.⁹¹ The military should play advisory roles in these decisions, but should not make them unilaterally, nor should they hold final decision authority. It is important to note that democratic governance is not a pre-requisite for civilian control. China provides an example where an authoritarian regime successfully exercises civilian control over its military, the key difference is that the military is politicized by definition whereas politicization should be avoided in a democracy.⁹²

Conversely, military political power is also exercised in several ways that provide potential MOE focus areas. The Political Roles of the Military dataset (PRM) is an existing dataset solely focused on the military's political influence and aims to differentiate ruling vs supporting militaries.⁹³ It tracks regime origin data as well as useful MOE vectors such as the military's privileges regarding criminal prosecution, and their veto power in political processes.⁹⁴ The PRM is one of many datasets that aim to

⁹⁰ Bruneau and Croissant (ed.), *Civil-Military Relations...*, 7.

⁹¹ *Ibid.*, 7.

⁹² *Ibid.*, 9.

⁹³ *Ibid.*, 40.

⁹⁴ *Ibid.*, 45.

measure how susceptible governments are to coups. Coup-proofing is a well-researched area focused on measuring military subordination, but data should be used with caution. While the presence of coup indicators is worry-some, the lack of indicators does not necessary mean that the military is appropriately subordinate; it may simply mean that they currently enjoy a beneficial balance of power and may have no reason to upset the system.⁹⁵

Due to its importance, it has been suggested that SFA providers focus less on conventional military training, and more on improving CMR.⁹⁶ The exclusive ownership over violence is one of the greatest levers of power in any state.⁹⁷ Statistically, half of all post-civil war states will relapse back into conflict after 5 years.⁹⁸ These are the same states that SFA aims to stabilize, and has traditionally been done with a heavy focus on improving their capacity violence. MOE aimed towards assessing advances in civil-military relations may well improve the longevity of SFA efforts.

DISCUSSION

The previous three sections have highlighted the most critical drivers of sustained success in SFA, based on an extensive literary review. MOE designed to measure the viability, legitimacy, and political subordination of HNSF should provide sufficient metrics to satisfy proof of progress, or evidence of stagnation on SFA operations. While precise MOE are outside the scope of this paper, this section will review existing frameworks for MOE collection and propose a framework based on MOE best practices.

⁹⁵ *Ibid.*, 44.

⁹⁶ Knowles and Matisek, “Western Security Force Assistance in Weak States”..., 18.

⁹⁷ *Ibid.*, 15.

⁹⁸ *Ibid.*, 13.

US Doctrine officially endorses the use of DOTMLPF as a checklist of requirements for SFA providers to train towards. The acronym represents the primary elements of a fully functioning military, and stands for Doctrine, Organization, Training, Material and Equipment, Leadership, Personnel, and Facilities.⁹⁹ They also include Command and Control, Communications, Intelligence, and Operational Effectiveness as desired assessment areas.¹⁰⁰ Another subordinate MOE framework within US Doctrine falls along the four pillars of Internal Defence and Development (IDAD): Balanced Development refers to the whole of government pursuance of national goals; Security refers to public protection and a safe environment; Neutralization is the political conceptualization of security; and Mobilization is the organized popular support of the government.¹⁰¹ However, the IDAD pillar framework lacks specifics on how to tie into SFA initiatives. Similarly, although the DOTMLPF framework provides excellent guidance on how to create an effective force, it does not provide much indication on whether that force is headed in the right direction. Specifically, it lacks focus on viability, legitimacy, and political subordination, the key indicators of sustainable SFA.

NATO's Innovations in Operations Assessment publication provides a useful template for adaptation into SFA. Their "Campaign Assessment" model has been used in past COIN operations, such as when ISAF employed a variation in Afghanistan.¹⁰² It examines a single organizational level (brigade for instance) and assesses their progress along a spectrum of evaluation criteria on a five point scale with word picture descriptors. The example provided in the NATO publication includes assessments on Security,

⁹⁹ United States of America, *Security Force Assistance, FM 3-07.1...*, 3-12.

¹⁰⁰ *Ibid.*, 3-12.

¹⁰¹ *Ibid.*, 5-10.

¹⁰² NATO, *Innovations in Operations Assessment...*, 51.

Governance, Socio-Economic, and Regional Relations, as depicted in Figure 1.¹⁰³ This holistic assessment can then be applied to various levels in the chain of command across the organization to develop trends. It is similar to the business industry's use of the "Balance Scorecard", which is used by over 80% of Fortune 500 companies and leverages best practices from the field of project-management to evaluate success across a broad spectrum of categorized outcomes.¹⁰⁴

	Level 1	Level 2	Level 3	Level 4	Level 5
Security	Area A is not secure	Area A is partially secured but with significant risk of reversion	Area A is partially secured but with moderate risk of reversion	Area A is partially secured but with minimal risk of reversion	Area A is fully secured with minimal risk of reversion
Governance	Key government actors are not present in area A	Some key government actors are present in area A and/or their actions are significantly undermining security	A majority of key government actors are present in area A and/or their actions are moderately undermining security	All key government actors are present in area A and/or their actions are minimally undermining security	All key government actors are present in area A and they are actively working to enhance security
Socio-Economic	Security conditions in/around area A are significantly hindering legitimate socio-economic activity	Security conditions in/around area A are moderately hindering legitimate socio-economic activity	Security conditions in/around area A are having minimal impact on legitimate socio-economic activity	Security conditions in/around area A are having no impact on legitimate socio-economic activity	Security conditions in/around area A are enhancing legitimate socio-economic activity
Regional Relations	Other countries are playing an overall significantly negative role with respect to security in area A	Other countries are playing an overall moderately negative role with respect to security in area A	Other countries are playing an overall minimally negative to minimally positive role with respect to security in area A	Other countries are playing an overall moderately positive role with respect to security in area A	Other countries are playing an overall significantly positive role with respect to security in area A

Figure 1 - Sample Campaign Assessment Template
Source: NATO, *Innovations in Operations Assessment...*, 50.

¹⁰³ *Ibid.*, 50.

¹⁰⁴ Redden, *Questioning Performance Measurement...*, 5.

For use in SFA, the categorization could be replaced with Viability, Legitimacy, and Political Subordination. Once MOE is developed for those specific goals, they can inform the text of the level descriptors as either a single narrative or a series of check boxes. Since every level of the organization from tactical to strategic enable each goal in different ways, an assessment table will need to be generated with different descriptors for each level. This framework arguably achieves commonly cited best practices for assessment, providing a holistic view towards the end-goal rather than focusing on too-specific goals,¹⁰⁵ and integrating efforts at each level towards a common end-state.¹⁰⁶

This system is not unlike the CUAT used to evaluate the Afghanistan National Army in the early 2010's. Some critical shortfalls of the CUAT have already been discussed, and further, the CUAT was so decentralized that it was difficult to have standardized and impartial assessments.¹⁰⁷ Those detailed, tactical assessments still serve a valuable purpose, but may not provide the best view of holistic efforts. This paper advocates that to get a more accurate sense of overall SFA trends, subjective assessment is best done by a central and highly qualified assessment team. Assessment teams are not new concepts, as operations in Afghanistan for example used a similar Regional Validation Transition Team.¹⁰⁸ The main issue is the resource availability for these detailed assessments that take significant time to conduct, which can quickly overrun an assessment team tasked with evaluating the entire organization.¹⁰⁹ Commanders willing to take some risk can take advantage of the "Rule-of-Five" to narrow collection efforts

¹⁰⁵ NATO, *Innovations in Operations Assessment...*, 212.

¹⁰⁶ Redden, *Questioning Performance Measurement...*, 21.

¹⁰⁷ Mausner, *Reforming ANSF Metrics...*, 5.

¹⁰⁸ *Ibid.*, 6.

¹⁰⁹ NATO, *NATO Operations Assessment Handbook...*, 2-7.

into something more manageable. More detailed investigation of the highest and lowest values of a narrowed dataset can then yield insight on drivers and inhibitors of success.¹¹⁰

There are several counterarguments to this framework. Afghanistan provides an excellent example where the country is far from homogeneous, which can greatly affect statistics the higher up they are amalgamated.¹¹¹ Care should be taken in the application of the “Rule-of-Five” to not stretch that statistical phenomena further than what is reasonable, instead dividing assessments according to local conditions. Further, critics of assessment teams believe there is danger in allowing Commanders to “grade their own homework,” however those effects can be avoided by granting appropriate autonomy and candor to the assessment team.¹¹² Human cognitive bias also plays a role, and is likely to subvert the MOE imperative that demands consistent measurements over time.¹¹³ Even if an expert team can overcome its biases, it is inevitably susceptible to evolving judgements based on lessons learned throughout a tour or campaign. This can be mitigated with sufficiently detailed performance standards that are well planned and kept consistent over the operation. Finally, there are conflicting studies that question whether performance measurement framework has any positive effect. In fact, the Balanced Scorecard framework adapted in this paper has been shown to even have negative effects on some organizations.¹¹⁴ The rebuttal for this critique in SFA is that it may not practically matter. This paper has established the benefits of SFA that extend well beyond the basic learning needs of the Host Nation, and that any progress can be perceived as a

¹¹⁰ Kent Barnett and John R. Mattox, Ph.D, “Measuring Success and ROI in Corporate Training,” *Journal of Asynchronous Learning Networks* 14, no. 2 (2010), 35.

¹¹¹ Mausner, *Reforming ANSF Metrics...*, 1.

¹¹² NATO, *Innovations in Operations Assessment...*, 63.

¹¹³ NATO, *NATO Operations Assessment Handbook...*, 1-14.

¹¹⁴ Redden, *Questioning Performance Measurement...*, 22.

success. The proposed framework at least focuses assessment on critical drivers of well-functioning militaries, and serves the primary purpose of MOE to connect initial goals with actual outcomes for political and operational decision making.

CONCLUSION

Metric-based decision making is a critical enabler for risk-awareness and accountability. Whether defined as ‘operations assessment’ in NATO, or ‘performance measurement’ in Business, determining effects that link goals to outcomes is firmly entrenched in western methods of planning, and its importance is evidenced by the resources committed towards its research and execution.¹¹⁵ Despite decades of co-existence, SFA and MOE doctrine do not yet seem to have integrated effectively. It could be that the wrong things have been measured. It could be that previous operations have attempted to measure too much. Whatever the case, there has yet to be a strong linkage between the two. This paper has attempted to bridge that gap to an extent.

Leveraging best practices in measurement, this paper has focused on what is known about SFA and effective militaries, rather than becoming mired in what is unknown. The three prevalent themes that recurred most often in SFA literature were the need to develop viable training programs and assessment methods, the need to emphasize the legitimacy and professionalizing of the force, and the absolute requirement for political subordination and effective civil-military relations. These three themes provide measurement vectors towards effective SFA. This paper then applied established measurement methodology to make best use of constrained resources in operational

¹¹⁵ NATO, *Innovations in Operations Assessment...*, 80.

assessment, recommending a risk-based approach to collection that balances confidence levels with expended effort. A dedicated training assessment team, focused on manageable data sets, can produce high-probability subjective evaluations of overall progress, while narrowing the focus for further investigation towards only what is working well or not. An assessment template tailored for each level of command, and integrated towards the same effects across the entire organization, can focus effort on what has the greatest long-term impacts.

Precise MOE under this framework fell outside the scope of this paper, and should be considered for further research. Similar to the way in which this framework was developed, researchers should consider what is known about each theme to decompose the complexity into something more tangible. Another area for further research is how to better conduct SFA in general, which was also out of scope for this paper. Answering that question may reveal further MOE or alternative frameworks that may change what needs to be measured.

In conclusion, this paper has not advocated to replace established tactical assessments of unit effectiveness, nor developmental frameworks such as DOTMLPF for establishing effective militaries. It has simply aimed to fill a gap that is well documented in SFA literature. While there are well-established tools to assess the effectiveness of a fighting force, those tools lack the scope to assess the sustainability of efforts in SFA. By focusing on key drivers of lasting success, the proposed framework decomposes the complexity of measuring effects in SFA.

BIBLIOGRAPHY

- Ankamah, Samuel Siebe, and S.M. Manzoor E. Khoda. *Political Will and Government Anti-Corruption Efforts: What Does the Evidence Say?* John Wiley & Sons, Ltd., 2017.
- Barnett, Kent, and John R. Mattox, Ph.D. “Measuring Success and ROI in Corporate Training.” *Journal of Asynchronous Learning Networks* 14, no. 2 (2010): 28-44.
- Biddle, Stephen. *Building Security Forces & Stabilization Nations: The Problem of Agency*. Stephen Biddle, 2017.
- Biddle, Stephen, Julia MacDonald, and Ryan Baker. “Small Footprint, Small Payoff: The Military Effectiveness of Security Force Assistance.” *Journal of Strategic Studies* 41, no.1-2 (2017): 89-142.
- Bruneau, Thomas C., and Aurel Croissant (ed.). *Civil-Military Relations, Control and Effectiveness Across Regimes*. Lynne Reiner Publishers, 2019.
- Cancian, Mark F. *Tell Me How This Ends: Military Advice, Strategic Goals, and the “Forever War” in Afghanistan*. Center for Strategic & International Studies, 2019.
- Connable, Ben. *Embracing the Fog of War: Assessment and Metrics in Counterinsurgency*. RAND Corporation, 2012.
- Connelly, Edward M., Kent C. Myers, and Michael G. Golden. “A Measure of Effectiveness (MOE) Method and Software Aid, with a Case Study of a Soviet Artillery Unit.” Human Factors Society 33rd Annual Meeting (1989).
- Congressional Research Service. *Building the Capacity of Partner States through Security Force Assistance*. CRS (2011).
- Darilek, Richard E., et al. *Measures of Effectiveness for the Information-Age Army*. RAND Corporation, 2001.
- de Coning, Cedric, and Paul Romita. *Monitoring and Evaluation of Peace Operations*. International Peace Institute, 2009.
- Di Salvatore, Jessica, and Andrea Ruggeri. “Effectiveness of Peacekeeping Operations.” *Oxford Research Encyclopedia of Politics* (Sep 2017).
- Freeman, Colin. “Why ‘Sandhurst in the Sand’ Hasn’t Worked in Iraq.” *Telegraph Media Group Ltd* (05 Nov 2014), last accessed 21 Mar 2020, <https://www.telegraph.co.uk/news/worldnews/middleeast/iraq/11211172/Why-Sandhurst-in-the-Sand-hasnt-worked-in-Iraq.html>.
- Galbreath, David J. “Moving the Techno-Science Gap in Security Force Assistance.” *Defence Studies* 19, no. 1 (2019): 49-61.

- Germanovich, Gene. "Security Force Assistance in a Time of Austerity." *Joint Force Quarterly* (Fourth Quarter 2012): 14-19.
- Goodman, Neal, Ph.D. "Making the Most of a Train-the-Trainer Program." *Training Magazine* (Jul/Aug 2018): 56-57.
- Hartman, Ellen, *et al.* "Psychological Measures As Predictors of Military Training Performance." *Journal of Personality Assessment* 80, no. 1 (2003): 87-98.
- Hendrix, Cullen S. "Measuring State Capacity: Theoretical and Empirical Implications for the Study of Civil Conflict." *Journal of Peace Research* 47, no.3 (2010): 273-285.
- Hubbard, Douglas W. *How to Measure Anything: Finding the Value of "Intangibles" in Business*. John Wiley & Sons, Inc., 2007.
- Kapoutis, Ilias, *et al.* "Measuring Political Will in Organizations: Theoretical Construct Development and Empirical Validation." *Journal of Management* 43, no.7 (Sep 2017): 2252-2280.
- Kelly, Terrance K., Nora Benashel, and Olga Oliker. *Security Force Assistant in Afghanistan: Identifying Lessons for Future Efforts*. RAND Corporation, 2011.
- Knowles, Emily, and Abigail Watson. "Remote Warfare: Lessons Learned from Contemporary Theatres." *Remote Warfare Program*, June 2018.
- Knowles, Emily, and Jahara Matisek. "Western Security Force Assistance in Weak States, Time for a Peacebuilding Approach." *The RUSI Journal* 164, no. 3 (April 2019): 10-21.
- Luong, Denny. "Staff Visits as a Tool for Security Force Assistance." *Army Sustainment* (Sep-Oct 2018).
- Lynch, Rick, and Phillip D. Janzen. "NATO Training Mission – Iraq: Looking to the Future." *Joint Force Quarterly*, no.40 (First Quarter 2006): 29-34.
- Mac Ginty, Roger. *Hybrid Peace: The Interaction Between Top-Down and Bottom-Up Peace*. SAGE Publications, 2010.
- MacMillan, Jean, *et al.* "Measuring Team Performance in Complex and Dynamic Military Environments: The SPOTLITE Method." *Military Psychology* 25, no.3 (2013): 266-279.
- Mateja, Peter. *Measuring the Success of Peace Operations: Directions in Academic Literature*. Norwegian Institute of International Affairs, 2016.
- Mausner, Adam. *Reforming ANSF Metrics: Improving the CUAT System*. Center for Strategic & International Studies, 2010.
- McCormick, Shon. "A Primer on Developing Measures of Effectiveness." *Military Review* (July-August 2010): 60-66.

- Meharg, Sarah Jane. "Measuring Effectiveness in Complex Operations: What is Good Enough." Canadian Defence & Foreign Affairs Institute (2009).
- National Research Council. *Making the Soldier Decisive on Future Battlefields*. The National Academies Press, 2013.
- NATO. *Innovations in Operations Assessment: Recent Developments in Measuring Results in Conflict Environments*. NATO Communications and Information Agency, 2013.
- . *NATO Operations Assessment Handbook*, v.3.0. July 2015.
- Oliker, Olga. *Building Afghanistan's Security Forces in Wartime: The Soviet Experience*. RAND Corporation, 2011.
- Paterson, Pat. "Measuring Military Professionalism in Partner Nations: Guidance for Security Assistance Officials." *Journal of Military Ethics* 18, no. 2 (2019): 145-163.
- Paul, Christopher, et al. *Assessing and Evaluating Department of Defense Efforts to Inform, Influence, and Persuade*. RAND Corporation, 2015.
- Pavlov, Andrey, and Mike Bourne. "Explaining the Effects of Performance Measurement on Performance: An Organizational Routines Perspective." *International Journal of Operations & Production Management* 31, no. 1 (2011): 101-122.
- Redden, Guy. *Questioning Performance Measurement: Metrics, Organizations, and Power*. SAGE Publications Ltd, 2019.
- Sepp, Kalev I., Ph.D. "Best Practices in Counterinsurgency." *Military Review* (May-Jun 2005): 8-12.
- Serrano, Lauren. "Institutionalizing Security Assistance." *Marine Corps Gazette* (Aug 2016): 84-88.
- Stecher, Brian, et al. "Implementing Measures of Teacher Effectiveness." *Phi Delta Kappan* 94, no. 3 (2012): 39-43.
- Toronto, Nathan W. *How Militaries Learn: Human Capital, Military Education, and Battlefield Effectiveness*. Lexington Books, 2018.
- United States Government Accountability Office. *GAO 11-66: Afghanistan Security: Afghan Army Growing, but Additional Trainers Needed; Long Term Costs Not Determined*. Jan 2011.
- . *GAO Report on Security Force Assistance*. Apr 2013.
- United States of America. *Assessment and Measures of Effectiveness in Stability Ops: Tactics, Techniques, Procedures*. 2012.
- . *Commander's Handbook for Security Force Assistance*. 14 July 2008.
- . *Planner's Handbook for Operational Design*, v.1.0. 07 Oct 2011.

- . *Security Force Assistance, FM 3-07.1*. May 2009.
- . *Security Force Assistance, Joint Doctrine Note 1-13*. 29 April 2011.
- V-Dem Institute. *Democracy Facing Global Challenges, V-Dem Annual Democracy Report 2019*. V-Dem Institute, 2019.
- Wilcox King, Adelaide, and Carl P. Zeithaml. "Measuring Organizational Knowledge: A Conceptual and Methodological Framework." *Strategic Management Journal* 24, no.8 (2003): 763-772.
- Wuestner, Scott G. *Building Partner Capacity/Security Force Assistance: A New Structural Paradigm*. February 2009.