

# Transformers Of The Third Generation SAF

by CPT Phua Chao Rong, Charles

## Abstract:

This essay will delve into the finer aspects of the Third Generation Singapore Armed Forces (SAF) transformation and suggest how the SAF, as an institution, can “change the culture, thinking and behaviour of our people about how they should work together.” Only then will SAF soldiers be empowered to be the owners and transformers (agents of change) of the Third Generation SAF.

*Keywords: Talent Management; One SAF; Future Systems Directorate*

## INTRODUCTION

Autobots, Transform! If only the Third Generation Singapore Armed Forces (SAF) transformation can be achieved by a mere command like in the movie “Transformers.” As one of the largest organisations in Singapore, the SAF cannot “Transform” instantaneously. Transformation takes time to proliferate through our large NSmen reserves. The SAF has hitherto been successful in hardware acquisition; the software and “heartware” aspects require more work. In fact, the Chief of Defence Force (CDF) 2007 Workplan objective for a ONE-SAF was skewed towards these aspects. Through the ONE-SAF vision, the SAF will Operationalise the first spiral of the the Third Generation SAF, Nurture first-class people and Engage our people towards stronger commitment and greater excellence.<sup>1</sup>

This ONE-SAF vision is ambitious, yet realistic, given the new age of intellectual activism and “make it happen” culture in Singapore. As the former CDF LG (NS) Desmond Kuek clarified further, “any kind of enduring change must begin in the hearts and minds of our people ... It sounds obvious, but it isn’t always easy. We will need to frame the issues, structure and organise ourselves systemically, have clear success models to follow, grow a new mindset, and lead from the front to show others how.”<sup>2</sup> This essay will delve into these finer aspects of Transformation and suggest how the SAF, as an institution, can “change the culture, thinking and behaviour of our people about how they should work together”;<sup>3</sup> only then will SAF soldiers be empowered to be the owners and transformers (agents of change) of the Third Generation SAF.

## THE THIRD GENERATION SAF: AN UNWRITTEN SOCIAL CONTRACT

Like all large entities, the SAF has a social contract with its people. Although social contract theory is a Western concept, it sufficiently covers the intangible transactions (expectations) between the management and its people in organisations and states. To a professional soldier, the SAF is its paymaster for his or her professional service. In order to execute his service professionally, the SAF needs to train, feed and provide for his holistic development adequately. In return, the soldier agrees to train and fight hard for his country, to the death if necessary.

However, factors such as work-life imbalance—a natural by-product of modern urban lifestyle aggravated by the current manpower crunch and a decreasing national birthrate—complicate matters. The resulting talent retention challenges further



*Whole Hearted Cooperation, Everyone is a Leader*

aggravate our manpower crunch and intensifies work-life imbalances for those who remain, perpetuating a vicious cycle.

The Third Generation SAF will win the hearts and minds of servicemen more easily if it cares for their needs and welfare. As Cicero professed, “the servicemen will work harder in reciprocity.”<sup>4</sup> Assuming a happy worker is a productive worker, their energies will be better focused towards achieving the ONE-SAF vision, making the SAF’s transformation effective. Hence, the Third Generation SAF requires new concepts, processes and policies to alleviate these concerns, nurturing first-class people and engaging them in working towards stronger commitment and greater excellence.

### **CONCEPTS: FROM “WORK HARD, WORK MORE” TO “WORK SMART, DEVELOP MORE, CONTRIBUTE MORE”**

The Third Generation SAF needs to transform the unwritten work philosophy from “Work Hard, Work More” to “Work Smart, Develop More, Contribute More.” In the global economy of the 20<sup>th</sup> century, the Second Generation SAF’s work processes were truly within the Western industrial-era paradigm, embracing the scientific method and predominantly utilitarian in measuring results. It believed in mass production and standardization as the sole yardstick of societal and organisational progress.<sup>5</sup> For top-down commands, discipline and order are important for the precise and orderly conduct of war. However, for a Third Generation SAF operating in the new global knowledge economy, the emphasis is on network-centric warfare and the knowledge warrior. Organisationally, de-layering (adopting a “flatter” organisation as suggested by Martin van Creveld in 1990) is an important goal which will probably not materialise any time soon in a military organisation due to command and control issues.<sup>6</sup> However, an acceptable amount of individual soldier empowerment can be expected at the tactical level due to the dispersed nature of the modern battlefield and information overload at the higher command levels.<sup>7</sup> Knowledge demands and work requirements on Third Generation SAF soldiers will only increase, further jeopardizing work-life balance. Hence, there is a need

to help our soldiers achieve self-realisation and job satisfaction in their career. The Third Generation SAF will be balanced between quantitative (efficiency) and qualitative growth (human welfare, inner development and multidimensional growth).<sup>8</sup> This entails allowing soldiers to “work smart” and “develop more,” thus empowering them to “contribute more” towards ONE-SAF.

### **WORK SMART FOR WORK-LIFE BALANCE**

The Third Generation SAF’s Organisational Excellence should emphasize “the technical quality of our work, but also the quality of our people and their life in the organization; the target is a matter of attitude and a state of mind.”<sup>9</sup> Work pace and load needs to balance efficiency (ratio between outputs and inputs) with effectiveness (actual versus desired output) so that more time can be spent on people development and work-life balance instead of chasing deadlines.<sup>10</sup> It takes enlightened leadership at all levels to blend efficiency (doing things right) and effectiveness (doing the right things) to achieve “doing the right things right.” Effectiveness is a direct reflection of a leader’s ability to plan, synchronise, coordinate and anticipate competing requirements and a leader must avoid the practice of working late or on off days due to poor planning.<sup>11</sup> Regular third-party managed objective feedback loops conducted amongst their subordinates will help our leadership better know the “ground truth” of the organisation’s work efficiency and its impact on work-life balance.<sup>12</sup> In addition, new accounting standards, such as Activity-Based Costing (ABC), can be adapted to account for externalities like informal “economic” activity and social costs, to provide an accurate measure of work effectiveness. For example, a work-effective project will ensure minimal ABC, or man-hour costs multiplied by time taken (number of meetings).<sup>13</sup> Random performance audit checks by Joint or Service-level Inspectorates, using Activity-Based Management (ABM) tool to distinguish value-added costs (necessary) and non value-added costs (unnecessary), will improve work effectiveness in the SAF.<sup>14</sup> In time, people will be working smarter, while people and organisational development can be achieved together with more family time.



Army Half Marathon

## DEVELOP MORE: FROM “OFFICER TRAINING” TO “JOINT OFFICER PROFESSIONAL DEVELOPMENT ARCHITECTURE”

In the Third Generation SAF, we anticipate smaller and more independent forces roaming the new digitised battlefield; hence the physical and mental capabilities and the skill competencies of the individual soldier will be paramount.<sup>15</sup> As Colonel Cone from the United States (US) Army remarked, “[future] battles are won at the platoon level.”<sup>16</sup> This entails commanders to encourage their subordinates to undertake actions on their own, depart from the plan and be creative (subordinate initiative).<sup>17</sup> Time is needed to build trust between leaders and subordinates; leaders must train their subordinates how to think, not just what to think, and to use their creativity to solve problems on their own.<sup>18</sup>

Initiative translates into renewed importance of leadership at all levels in the Third Generation SAF. Leadership is the art of influencing others in a manner that earns their respect, their confidence and their whole-hearted cooperation.<sup>19</sup> Our leaders need to be versatile, possessing the “capacity to be multi-functional, to operate across the full range of military operations, to perform at the tactical, operational and strategic levels,” and “to improvise solutions in uncertain and changing battlefield conditions.”<sup>20</sup> Both the initiative and versatility of leaders depend on the individual’s mastery of the discipline’s fundamentals (knowledge and competencies).<sup>21</sup>

Knowledge competency is thus the first requirement of a Third Generation SAF officer. To train our officers to put on the different hats of soldier-warrior; soldier-diplomat; soldier-scholar; or soldier-administrator is no simple feat and they should be holistically developed through education, training and hands-on experience.<sup>22</sup>

The Third Generation SAF officer needs to have adequate knowledge of joint operations, be well-networked within the SAF, be competent in the arts and sciences of the military profession and ultimately be an effective leader. Hence, in formal education, is it sufficient to only expose the officer to advanced joint operations topics during the Tri-Service War-Fighting Course? Is it right for officers to officially pick up Clausewitz’s “*On War*” or Sun Tzu’s “*Art of War*” only when they attend the Command and Staff College? These are important questions, as answering “yes” runs contrary to the knowledge-intensive armed force that the Third Generation SAF is working towards. In a knowledge-intensive “economy,” knowledge is power.<sup>23</sup> Formal education and training will not suffice. Perfect knowledge is impossible but a good working knowledge is essential.

*Creative juices are stimulated not just in less formal work settings, but also through wide reading.*

We need to nurture first-class people who have the passion to develop themselves professionally and the SAF must create

that favourable environment to encourage positive learning attitudes. The Joint Officer Informal Learning Network is a good complement to the formal education system. Using SAFTI MI and its resources as a base, study groups can embark on mutual peer-to-peer learning. It maximises the learning of every SAF officer and encourages each individual to think in terms of the joint war-fighting paradigm. Constant revision is essential to keep minds prepared for any eventuality. Hence, such additional avenues for continual military education, without the need for assessment, will improve and reinforce officers’ understanding of the less sensitive operational military knowledge.

The mutual learning should not be restricted to military topics. In order to cross-train soldiers as diplomats, scholars and policy makers, training

should include other subjects such as organisational psychology, finance, and anthropological or cultural studies which may be useful to the SAF. After all, Colonel John Boyd's oft-quoted OODA (Observe, Orient, Decide and Act) loop was developed after many years of informal research into strategy and seemingly non-military related literature. Creative juices are stimulated not just in less formal work settings, but also through wide reading. The SAF Professional Reading Programme is a good start.<sup>24</sup> Events such as thematic sharing sessions and public lectures by authors of new books will further reinforce the importance of reading to a knowledge-intensive Third Generation SAF. Only with professional competence and character can a Third Generation SAF leader make a lasting impact that naturally fosters independence, initiative and the ability in subordinates to excel even in his absence.<sup>25</sup>

### CONTRIBUTE MORE: FROM SERVICE-CENTRIC TO ONE-SAF CONTRIBUTIONS

With better work effectiveness and first-class development, our leaders are expected to contribute more towards our ONE-SAF vision as part of the Third Generation SAF social contract. The ONE-SAF requires strategies to work towards common political and cultural goals in the SAF. The following are some suggested intermediate goals that informal groups can work towards:

#### Beyond Formal Matrix Structures: Innovation Incubators

In the Third Generation SAF, we need to both do things differently (mainstream innovation) and do different things (radical reinvention) simultaneously.<sup>26</sup> Military entrepreneurs in Future Systems Directorate (FSD) already do the latter, but one need not belong such a unit before planning for the future: ONE-SAF requires all our people to be transformers and think for the SAF. After developing professional expertise, Third Generation SAF officers should exhibit the ability to improvise based on known concepts; this is where innovation incubators provide a platform to exercise such creativity and initiative for the SAF's transformation.<sup>27</sup>

Such innovation incubators can focus on conceptual experimentation. Their topics can vary from potential weapons systems to high-yield human

resource (HR) strategies to new war-fighting strategies for the SAF. These serve as a potential breeding ground for useful suggestions or proposals that may be further developed, either formally via FSD and other relevant agencies, or informally via SAF project grants such as the National Youth Achievement Award Nexus National Education grant. Boyd's fight to include his Energy-Manoeuvrability (EM) theory into the F-16 design, despite many organisational barriers, is a shining example of what the SAF needs to do to promote good initiatives and positive learning attitudes.<sup>28</sup> The SAF should encourage and harness such grassroots ideas and feedback in this "wrangler's club for the masses."

#### Asymmetric Strategies Towards "ONE-People"

ONE-SAF involves a joint culture, which takes time to build. Culture is defined as the norms, values and practices that define a people. The SAF has seven core values, but for any effective SAF culture to exist, we must also acknowledge the presence of sub-cultures and the cultivation of distinct service cultures. Servicemen must understand the "multiple identity" nature of culture: in a globalized, cosmopolitan environment like the SAF, a person can simultaneously belong to different cultures with varying loyalties.<sup>29</sup> In the ONE-SAF, services will increasingly be tasked to work as Joint Headquarters and Joint Task Forces.<sup>30</sup> The *modus operandi* for joint operations will then permeate across the SAF.

For the Third Generation SAF to practice initiative, leaders, peers and subordinates must not only believe in each other's skills and ethics, but also understand how they think. Networking across various levels is thus important.<sup>31</sup> A joint professional development architecture and innovation incubators are good ways to enhance networking across SAF, based on the unifying goals of learning and innovations respectively. The target audience should be officers up to the rank of Lieutenant Colonel since they will inherit the Third Generation SAF in three to five years' time: it is vital that they start to think, work and network as ONE-SAF. Senior commanders (Colonel and above) have already established networks through SAF social events, work conferences and years of experience. After sufficient confidence is established, learning and innovation opportunities should be opened up to all servicemen.

There are many interest groups that can unite our ONE-People, such as sports and community service. Sports bind people together through physically rewarding exertion and a sense of camaraderie. National level sports events like Army Half Marathons, runway cycling and biathlons build rapport between Singaporeans and National Servicemen. More informal sports events and pro-family activities can be organised at the national level by the SAF to contribute towards the goal set by the Ministry of Community, Youth and Sports (MCYS) of a pro-family and athletic Singapore. The more serious sportsmen and fitness enthusiasts may even contribute to the SAF Sports Association's (SAFSA) leagues and Army Fitness Centre's innovative fitness regimes respectively. If Singapore is to instil a strong sporting culture, the SAF, with its benign influence on many Singaporean fathers and fathers-to-be, plays a pivotal role. Through such sports-related networking, we engage One-People and strengthen their commitment to health and fitness—a win-win solution for the SAF and Singapore as a whole.

*For the Third Generation SAF to practice initiative, leaders, peers and subordinates must not only believe in each other's skills and ethics, but also understand how they think. Networking across various levels is thus important.*

Community service unites the compassionate and develops the spirit of ONE-People amongst them. At the strategic level, local community service projects improve civil-military relations (CMR) by portraying the SAF's goodwill, beyond the monetary contributions to the annual President's Challenge and periodic visits to SAF-adopted homes. At the individual level, it brings our soldiers (especially National Servicemen) back to the community they are fighting for, heightens their civic-consciousness and strengthens their commitment to defence. This strategic move is both timely and important as CMR is problematic even in some developed nations. In addition, overseas community service projects like the National Youth Council's (NYC) Youth Expeditionary

Project (YEP) help train our budding soldier-diplomats, a much needed asset for SAF's future peace support operations.<sup>32</sup> Strategically, diplomacy is a key pillar of our defence policy and these projects, when properly communicated and conducted, serve as diplomatic tools to spread Singapore's goodwill to the region.<sup>33</sup>

### **“METANOIA”: FROM CAREER TO CO-CAREER ACTIVITIES**

“Develop More” and “Contribute More” strategies engage and nurture people, but they are traditionally considered Co-Career Activities (CCAs): side activities that servicemen can engage in when they have time, *outside* work. In the Third Generation SAF, a mindset change is essential to transform these CCAs into vital building blocks of ONE-SAF. The SAF must have the “metanoia” (mindset change) and “discipline” to put these theoretical strategies into practice.<sup>34</sup> Some suggested policies are outlined below.

#### **People Development**

People Development should be a key performance indicator (KPI) in the Third Generation SAF. The Second Generation SAF already recognises the importance of people development as evidenced in the Annual Feedback Form (AFF).<sup>35</sup> However, the unwritten organisational focus on Workplan KPIs effectively marginalizes people development; officers should instead be assessed on their achievement of both intangible people development and tangible work done. In war, it is the human element that turns opportunities into successes or failures; hence the importance of creating the “best crew.”<sup>36</sup> The quality of subordinates reflects the quality of their leader. Hence, a superior's personalised grooming, albeit time-consuming, adds value to learning in a personal manner that no SAF course can replicate; the whys and wherefores was expressed by Barzun, former provost of Columbia University who was a strong critic of mass-education without proper personalised instruction *vis-à-vis* Rousseau's one-child-one-tutor ideal.<sup>37</sup> Hence, besides churning out projects, papers and exercises, superiors should tutor their subordinates in the areas of military science, leadership and joint operational competencies. In addition, superiors must also provide space for

subordinates to develop themselves via CCAs and non-Route of Advancement (ROA) upgrading courses from the SAF or the Ministry of Defence (MINDEF) Centre for Management Development (MCMD). As CDF elucidated, people development should be considered an investment of time and resources in order to bring out the potential in each individual and team.<sup>38</sup> The return on investment will be seen in the quality of their contributions towards ONE-SAF.

### Failure: The Mother of All Success

Junior leaders will rarely take initiative unless they trust their senior leaders to have matured beyond a zero-defect mentality.<sup>39</sup> Hence, experimentation and risk-taking will not bloom unless the SAF accepts occasional personal and sub-organisational failure as a means to organisational excellence. Thomas Edison conducted countless experiments before finding the correct element for our light bulb. The SAF needs to embrace the Chinese axiom “failure is the mother of success” for peacetime personnel growth and gradual progression towards long-term excellence. Would-be Edisons and Boyds in the military often experience poor careers despite their transformational contributions; this must change if SAF wants more transformers.<sup>40</sup>

### Route of Contribution, Not Merely Route of Advancement

As US Military Academy Professor Kagan suggested, the training and promotion system must tie advancement to demonstration of initiative.<sup>41</sup> Similarly, a *POINTER* monograph on leadership also proposed the Route of Contribution (ROC) approach over the conventional Route of Advancement (ROA).<sup>42</sup> The author interprets ROC as valuing intellectual capital and balancing the assessment of capability (thinking soldier) with the heart to contribute beyond self (leadership with the heart).<sup>43</sup> Such people are promoted because the organisation values their capabilities and contributions, and welcomes them to contribute more at a higher level in a virtuous cycle. This can be extrapolated to suggest the possibility that career advancement can be based on a holistic assessment of one's routine work performance and additional contributions towards ONE-SAF. The contribution criterion assesses the peacetime civil servant, while the capabilities and performance



*People Development – Bringing out the qualities of individuals*

criterion assesses the operational readiness of the wartime soldier.<sup>44</sup> Such rethinking of HR policies will sustain the people development and engagement efforts of ONE-SAF.

### FROM TALENT MANAGEMENT TO TALENT DEVELOPMENT

Finally, the key to a successful knowledge-intensive Third Generation SAF is talent development. Organisational renewal is tied to the release of human energy and talent.<sup>45</sup> In the Second Generation SAF, we identified scholars as talents by nature, to be further nurtured. This is important for strategic leadership renewal but is insufficient when we need talented leaders at all levels in the Third Generation SAF. As LG (NS) Desmond Kuek propounded when he was Chief of Army, “everyone is a leader.” Similarly, everyone has some talent and the SAF should nurture all personnel who are willing to be groomed and harness their diverse talents for our purpose. Network-centric warfare has become so complex that multiple talents are needed and hence the power of the talented masses is vital. The individual's development becomes as valuable as the organisation's growth.<sup>46</sup> This new HR thinking will signal the SAF's benevolent concern for its members' well-being and development; our servicemen will feel valued and reciprocate with strengthened commitment to defence (heartware) and contribution to the organization. The “wrangler's club for the masses” is one such talent development policy for SAF regulars.

### National Service Transformers of ONE-SAF

The talent development policy for Full-Time (NSF) and Operationally-Ready (NSmen) National Servicemen

should not be overlooked. G1 Army and the National Service Affairs Department (NSAD) are already working on value-added national service to strengthen the heartware of servicemen. It is also useful to re-think how NSmen can add value to the SAF.

From the perspective of ownership, more national service commanders (Company Sergeant Majors and above) can be co-opted into key conceptual, experimentation and implementation processes to encourage active participation in the Transformation process. Regulars and NSFs flow pass the units; only the NSmen truly stay in their units for at least 10 years. These NSmen are integral to the unit and the SAF should let them develop their unit's transformation process; they will be more committed to the Third Generation SAF because the SAF values their input.

### *The Third Generation SAF is a knowledge-intensive and talent-based economy.*

From the perspective of functionality, the deployment of NSmen Warrant Officers and Specialists can be reconsidered. An easy way is to deploy NSmen according to their last NSF appointment and vocation. However, recalling a Corporal (NS) who is a software engineer with an annual income of \$100,000 to charge up hills and execute basic infantry drills for in-camp training does not do justice to his professional expertise or the SAF's defence budget. This soldier can be better employed designing new software or even troubleshooting the division's Command and Control Information Systems (CCIS). The SAF will better benefit from his skills and hopefully enhance his commitment to defence at the same time. With management centred on talent, NSmen will feel valued by the SAF and their heartware will be strengthened. In the long run, this administratively taxing policy signals the SAF's appreciation of talent and the responsibility is placed on NSmen to develop their talents.

## CONCLUSION

The Third Generation SAF is a knowledge-intensive and talent-based economy. The magic of great leaders

such as Alexander the Great lie not in their ability to exercise total, impersonal control, but in their ability to unleash the creative excellence of their subordinate leaders and channel that energy in the right direction.<sup>47</sup> The ONE-SAF vision clearly seeks to nurture and "align the hearts and minds of our people" towards the goals of the Third Generation SAF.<sup>48</sup> This article has suggested some strategies for people development and engagement. To jump start the process, our Third Generation SAF leaders need to be charismatic enough to care about our people, what they feel is important and the positive forces that motivate them to excel.<sup>49</sup> "Work Smart" tackles work-life imbalance; "Develop More" and "Contribute More" empower our regulars with private sector survival skills. These are useful by-products from achieving the goals of ONE-SAF, thus maximising return-on-investment. In the Third Generation SAF, both intangible and tangible assets should be valued; long-term efficiency, work environment and employee health should be recognised.<sup>50</sup> Only then can we harness our creative energies to proclaim with gusto, "Autobots, Transform!" 🌐

## ENDNOTES

1. LG Desmond Kuek, "In Conversation with LG Desmond Kuek," *cyberpioneer* (31 July 2007), [http://www.mindef.gov.sg/imindef/publications/cyberpioneer/people/2007/jul07\\_people.html](http://www.mindef.gov.sg/imindef/publications/cyberpioneer/people/2007/jul07_people.html).
2. Ibid.
3. Ibid.
4. Cicero, *De Re Publica*, I, 27, 53-54; II, 47; *De Officiis*, I 20, 85; II 16-17, as cited in "What is Leadership? Some Classical Ideas," *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 19.
5. Willis Harman and John Hormann, "The Breakdown of the Old Paradigm," in *The New Paradigm in Business: Emerging Strategies for Leadership and Organisational Change*, ed. Michael Ray and Alan Rinzler (New York: Penguin Putnam, 1993), 18-19.
6. Martin van Creveld, *Technology and War* (New York: Chrysalis Books, 1991).
7. Christopher D. Kolenda, "Discipline: Creating the Foundation for an Initiative-Based Organisation," in

- Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 94.
8. Fritjof Capra, "A Systems Approach to the Emerging Paradigm," in *The New Paradigm in Business: Emerging Strategies for Leadership and Organisational Change*, ed. Michael Ray and Alan Rinzler (New York: Penguin Putnam, 1993), 235.
  9. Charter of Promon Tecnologia S.A., in *The New Paradigm in Business: Emerging Strategies for Leadership and Organisational Change*, ed. Michael Ray and Alan Rinzler (New York: Penguin Putnam, 1993), 182.
  10. G. A. Cole, *Management: Theory & Practice*, 5th Edition (London: DP Publications, 1996), 130.
  11. Robert W. Cone, "Battle Focused Training," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 319-320.
  12. John W. Woodmansee Jr., "Unleashing Human Potential: The Leader's Role in Creating the Climate for High Performing Organisations," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 346.
  13. H. Thomas Johnson and Robert Kaplan, "Relevance Lost," as cited in *The ABCs of ABC: Activity-Based Costing and Management*, ed. Jim Billington (MA: Harvard Business School Publishing Corporation, May 1999).
  14. Billington, *The ABCs of ABC*.
  15. Mark P. Hertling, "The Battle of Oom Chalouba, 17 June 2008: The Leader's Role in Preparing Units for the Physical Demands of Combat," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 293.
  16. Robert W. Cone, "Battle Focused Training," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 314.
  17. Frederick Kagan, "Soviet Operational Art: The Theory and Practice of Initiative 1917-1945," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 226.
  18. Christopher D. Kolenda, "Discipline: Creating the foundation for an initiative-based organisation," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 92.
  19. Daniel W. Christman, "21st Century Leadership: The Broadened Attributes of a Soldier," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 258.
  20. Gordon R. Sullivan, "Leadership, Versatility and All that Jazz," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 43-44.
  21. *Ibid.*, 44-46.
  22. Daniel W. Christman, "21st Century Leadership: The Broadened Attributes of a Soldier," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 258.
  23. Francis Bacon dictum as cited in Christopher Coker, *The Future of War: The Re-enchantment of War in the 21st Century* (Oxford: Blackwell, 2004).
  24. Singapore Armed Forces, "SAF Professional Reading Programme," [http://www.mindef.gov.sg/safti/saftilibrary/reading\\_programme/contents.html](http://www.mindef.gov.sg/safti/saftilibrary/reading_programme/contents.html)
  25. John C. 'Doc' Bahnsen, "Charisma," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 262.
  26. George Land and Beth Jarman, "Moving Beyond Breakpoint," in *The New Paradigm in Business: Emerging Strategies for Leadership and Organisational Change*, in Michael Ray and Alan Rinzler (New York: Penguin Putnam, 1993), 259, 264-265.
  27. Gordon R. Sullivan, "Leadership, Versatility and All that Jazz," in *Leadership: The Warrior's Art*, ed. Christopher D. Kolenda (PA: Army War College Foundation Press, 2001), 54.
  28. CPT Phua Chao Rong, Charles, "Colonel John Boyd – The Man, His Contributions and Some Reflections for 'Personnel Transformation,'" *POINTER* 33, no. 3 (2007): 110.
  29. CPT Phua Chao Rong, Charles, "Training and Communities in Third Generation Transformation," *POINTER* 33, no. 2 (2007): 79.
  30. LG Kuek, "In Conversation with LG Desmond Kuek."
  31. Kolenda, "Discipline: Creating the Foundation for an Initiative-Based Organisation," 92.
  32. "NYC YEP," 20 January 2007, <http://www.nyc.pa.gov.sg/1152070941141/1153988495976.html>.
  33. "MINDEF's Defence Policy," *MINDEF*, 18 January 2007, [http://www.mindef.gov.sg/imindef/about\\_us/defence\\_policy.html](http://www.mindef.gov.sg/imindef/about_us/defence_policy.html).
  34. Peter M. Senge, "The Fifth Discipline: The Art and Practice of the Learning Organisation," in *Classic Readings in Organizational Behaviour*, ed. J. Steven Ott, Sandra J. Parkes and Richard B. Simpson (Beijing: Peking University Press, with permission from Thomson Learning, 2003), 486-489.
  35. Our SAF Officer Annual Feedback Form's excellent grade for leadership requires an officer to exhibit his/her efforts to develop his/her subordinates.



36. Woodmansee Jr., "Unleashing Human Potential," 345-346.
37. Jacques Barzun, *The House of Intellect* (New York: Harper & Brothers Inc, 1961), 92.
38. LG Kuek, "In Conversation with LG Desmond Kuek"
39. Kolenda, "Discipline: Creating the Foundation for an Initiative-Based Organisation," 92.
40. Phua, "Colonel John Boyd," 112-113.
41. Kagan, "Soviet Operational Art," 248.
42. LTC Chan Y. K., COL S. Singh, MAJ R. Ramaya, and Lim K. H., "System and Spirit: Leadership Development for 3G SAF," *POINTER Monograph 4* (2005), 56.
43. *Ibid.*, 39.
44. Phua, "Colonel John Boyd," 112.
45. John Gardner, *Leadership* (Free Press, 1993), 348.
46. George Land and Beth Jarman, "Moving Beyond Breakpoint," in *The New Paradigm in Business: Emerging Strategies for Leadership and Organisational Change*, ed. Michael Ray and Alan Rinzler (New York: Penguin Putnam, 1993), 259, 264-265.
46. Kolenda, "Discipline: Creating the Foundation for an Initiative-Based Organisation," 94.
47. Kolenda, "Discipline: Creating the Foundation for an Initiative-Based Organisation," 94.
48. LG Kuek, "In Conversation with LG Desmond Kuek"
49. Bahnsen, "Charisma," 262.
50. Marilyn Ferguson, "Transformation of Values and Vocation," in *The New Paradigm in Business: Emerging Strategies for Leadership and Organisational Change*, ed. Michael Ray and Alan Rinzler (Penguin Putnam: New York, 1993), 32-34.



**CPT Phua Chao Rong, Charles** is currently Head Research at Joint Intelligence School, CIG/SMI-Institute. An Intelligence Officer by vocation, he did a Signals Platoon Commander tour in the Armour Formation and held several appointments in Military Intelligence Organisation (MIO), G2-Army and CIG/SMI-Institute. An Academic Training Award (Overseas) recipient, he holds a Master of Science (Research) with Merit and Bachelor of Science (Second Upper Honours) in International Relations from the London School of Economics and Political Science (LSE). He is a recipient of the Global Sachs Global Leaders Award (2004) for academic and leadership excellence at LSE, and also received the Hong Kong and Shanghai Banking Corporation Youth Excellence Award (2005) for youth leadership and community service from President S R Nathan. A five-time Commendation Award winner in the SAF Chief of Defence Force Essay Competition and winner of Outstanding and Commendation awards in the Chief of Army Essay Competition 2010, he has also published in Royal United Services Institute (RUSI) Journal, *Military Review*, *POINTER* and co-authored a chapter in an Institute of Policy Studies (IPS) publication.