Malayan Campaign 1941-42
Lessons for ONE SAF

Brian P. Farrell  ■  Lim Choo Hoon  ■  Gurbachan Singh  ■  Wong Chee Wai
About the Authors

Foreword

Chapter 1
The British Defence of Singapore in the Second World War: Implications for the SAF
Associate Professor Brian P. Farrell

Chapter 2
Operational Art in the Malayan Campaign
LTC(NS) Gurbachan Singh

Chapter 3
Joint Operations in the Malayan Campaign
Dr Lim Choo Hoon

Chapter 4
Command & Control in the Malayan Campaign: Implications for the SAF
Mr Wong Chee Wai

Appendices
ASSOC PROF BRIAN P. FARRELL is the Deputy Head of the Dept. of History at National University of Singapore (NUS), where he has been teaching since 1993. He is a co-author of *Between Two Oceans: A Military History of Singapore*, published in Singapore in 1999. In 2002 he organised the international conference *Sixty Years On: The Fall of Singapore Revisited* at NUS, publishing papers from that conference under the same title later that year. Farrell has published more words regarding the defence and fall of Singapore in WWII in monographs, book chapters, articles and reviews than any other scholar. His best-known work is *The Defence and Fall of Singapore 1940-1942*, published in the UK in 2005. It was the first scholarly analysis to draw on all available surviving primary sources from all participants, as many such records had been withheld for 50 years; it also benefitted from personal exploration of nearly every former battlesite in Malaya and Singapore, some many times over.

LTC(NS) GURBACHAN SINGH was formerly a Military Studies Lecturer in SAFTI Military Institute. A Signals Officer by training, he served as a Directing Staff in Singapore Command and Staff College, a Branch Head in Joint Communications and Information Systems Department and the Commanding Officer of a Signal Battalion. LTC(NS) Singh is a recipient of the SAF Local Training Award, and he holds a Master of Science (Finance) from the National University of Ireland, a Master of Management Research from University of Western Australia and a Master of Science (Strategic Studies) from Nanyang Technological University. His special interests are in the Science & Strategy of War, Command & Control, Joint Operations, Operational Art, Innovation, Human Rights and Good Governance.
DR LIM CHOO HOON is a lecturer in Military Studies Branch, SAFTI Military Institute. He teaches Military Studies in Singapore Command and Staff College, SAF Advanced Schools and Officer Cadet School. He holds a MA in War Studies from King’s College, London and a Ph.D. in East Asian History from the Research School of Pacific & Asian Studies, Australian National University (ANU). He has taught history courses in ANU and Department of History, National University of Singapore. His research interests include East Asian Military History, Joint and Coalition Warfare and Strategic Thought.

MR WONG CHEE WAI is a Defence Executive Officer and currently the Head of Military Studies Branch in SAFTI Military Institute. He has been teaching military history in the SAF since 1993 and was the head of Military History Branch from 2000 to 2007. Prior to that, he was a military officer and had served as a branch head in MINDEF Policy Office and in staff tours in Army General Staff departments. Mr Wong was a recipient of the SAF (Local) Scholarship Award and graduated from NUS in 1984 with a Bachelor of Arts (First Class Honours). He was awarded the Defence Training Award in 1995 and graduated with a Master in War Studies from King’s College, University of London in 1996. His research interests are in the Malayan Campaign, Asymmetric Warfare, Causes and Termination of War, Strategic Thought and Peace Support Operations.
At the 2007 MINDEF Workplan Seminar CDF, LG Desmond Kuek, outlined the vision and strategy for O.N.E. SAF. The stated vision of “Nurturing First Class People in a World Class Organisation” resonates strongly with the role of SAFTI Military Institute (MI) in educating and training the 3rd Generation SAF officers. Since its beginning, SAFTI MI has emphasised the importance of nurturing our personnel to develop competent and committed first class people to thrive in a highly complex and connected operating environment. It has promulgated the SAF Core Values, made enhancements to training roadmaps of SAF officers, implemented the SAF Leadership Masterplan and introduced Organisation Learning practices within its five schools.

The ongoing transformation of SAFTI MI will support the SAF’s strategy of nurturing a first class people. With the formation of the Centre for Learning and Military Education (CLME), there will be added emphasis to instructor development, learning technologies and military studies. Given that SAF officers are expected to operate in an increasing complex environment, an education in military studies is useful and relevant. Military studies, which encompass military history and regional geo-politics, helps to educate the minds of military officers to expect the unexpected. This subject also requires reflection, study and thoughtful analysis which contribute to good judgement, a much needed quality in war. Military studies also help our soldiers, sailors and airmen to understand better the uncertainties, complexities and difficulties of war without having to participate in one.

To further military studies in the SAF, CLME’s Military Studies Branch (MSB) has extended its outreach programmes to non-SAFTI units and has organised seminars to supplement the formal learning in SAFTI schools. The inaugural military studies seminar organised by MSB in August 2007 dealt with the Malayan Campaign and its implications for the SAF. This topic is close to the heart of SAF personnel as it reminded us of the last time that our country was invaded and the failure of the defenders to rise to the occasion. While the context of every war is unique, and that the same strategic circumstances of 1941-42 are unlikely to arise in the future, there is still much that SAF officers can learn from a deeper analysis of the Malayan Campaign. It must be borne in mind that war is also about human mistakes and choices in command and control, the appropriate use of operational art and exploiting the synergy of the different Services (and coalition partners). These are areas where lessons can be learnt from every war and the Malayan Campaign is no exception.
This monograph is written jointly by staff of MSB and NUS History Department and is a follow-up to the August 2007 seminar. Associate Professor Brian Farrell, Deputy Head of the National University of Singapore’s Department of History, and the leading academic on this subject, starts off by framing the strategic and geo-political context of the Malayan Campaign and he highlights the implications for the SAF in terms of national decision-making as well as coalition and joint warfighting. The second article by former MSB lecturer, LTC(NS) Gurbachan Singh, discusses six dimensions of operational art in the Malayan Campaign and its applicability to the SAF in terms of people, processes and systems and organisation. Another MSB lecturer, Dr Lim Choo Hoon, emphasises the importance of joint operations in the Malayan Campaign and its relevance to the SAF in the third article. The last article by Mr Wong Chee Wai, Head MSB, discusses the handling of three key components of Command and Control (People, Information and Support Structure) in the Malayan Campaign by the British and Japanese and analysed their implications for the SAF.

This is the first time that a major publication has attempted to examine the Malayan Campaign from the perspective of the SAF. It is also timely to reflect on the insights drawn from a study of this campaign while transforming to a 3G SAF and while implementing the strategy for a O.N.E. SAF. I would encourage all military professionals to refresh their knowledge of the Malayan Campaign by perusing this monograph closely and to learn from and to reflect on a disaster which has formed part of our military heritage.

Happy reading!

BG JIMMY TAN
Commandant
SAFTI Military Institute
Singapore Armed Forces
DISCLAIMER
The opinions and views expressed in this work are the authors’ own and do not necessarily reflect the official views of the Ministry of Defence.
The principal authority responsible for defending Singapore and Malaya as the Second World War began was the British government. But for that government, this problem formed only one part of the central direction of a total war. That war also overlapped with the need to direct the defence of a global empire. No study of what happened in Malaya and Singapore in 1941-42, no matter what its particular focus, can rest on solid ground unless it takes these objective facts squarely into account. The problems, possibilities and choices facing both those attacking and defending Singapore were shaped by the politics of imperial defence. That factor always did more than anything else to sway choices made by the British government. This article will explore the issue that historical study can always most powerfully illuminate, whether the subject is the Malayan Campaign and its implications or any other problem in military history: context, context, context. It will make three arguments. First, using the study of military history to try to better understand problems the 21st century SAF might one day have to face is a sensible but not uncomplicated project, be it this or any other campaign. Military personnel need to understand the abuses as well as the uses of military history, to make effective use of it. Second, any military force, including the SAF, must be ready to operate in an environment in which decisions that can compromise it might be made by forces beyond its control. The Malayan Campaign underlined the fact that such decisions can sometimes be made by your friends. Finally, there is no ‘I’ in team. There is nothing new about the fact that warfare must be seen and waged as a joint exercise, between allies and between services. Disaster awaits those who ignore that cardinal fact, something the Malayan Campaign demonstrated brutally. The British failure to defend Singapore in 1941-42 stands as a lived and learned experience, harder and stronger than any theory. Studying it can allow us to explore all three of these arguments, to see how they related to each other when faced in the real world by real people, long ago but not far away.

THE HISTORICAL APPROACH TO STUDYING WAR

More than fifty years ago an academic historian who also became a Colonel in the Canadian Army, Charles P. Stacey, set out to bridge two worlds in his own country: the professional study of military history by professional academics, and the professional study of military history by professional soldiers. Stacey bridged them in his person. He served as Field Historian of the Army Historical Section, Canadian Army, in the Second World War, following its combat units as they
advanced in northwest Europe. He later wrote the bulk of the official histories of the Canadian Army and Government for World War II, and as the Director Historical Section Army Headquarters, and later Professor at the University of Toronto, did pioneering work to bring academic professionalism and scholarship into the study of military history in Canada. In 1955 Stacey wrote a small booklet for officer cadets, to introduce them to the study of military history as part of their professional military training. To both his civilian and military audiences Stacey presented the same basic message: military history can not simply be seen as a narrative chronicle through which one can search for the application of unchanging strategic principles, or for specific do’s and don’ts to apply to tactical problems of the moment. His words were aimed at Canadians, but his main argument was universal and enduring:

There is in fact no campaign, of whatever date, from which something cannot be learned concerning the behaviour of human beings at war. The intelligent officer will not of course expect the study of history to provide him with formulas to overcome every situation that may confront him. An officer who tries to solve his problems by consciously searching the historical precedents will not have a long career. Nevertheless, the judicious study of history can be an essential aid even in tactical or administrative matters. This is particularly the case, naturally, with recent history. Many lessons have been learned over and over again, at unnecessary cost in lives, simply because of neglect of experience of the past. It is not in matters of tactical detail, however, that military history makes its main contribution to the education of a soldier. The historical study of military institutions and campaigns is an admirable method of training and conditioning the mind for the solution of the problems of the present and the future. By thoughtfully reading the records of the campaigns and great captains of the past the modern soldier can discover the qualities of mind and heart which go to the making of a great commander, and can thereby prepare himself for his own future tasks.

Stacey’s message can be summed up in one word: context. The study of strategic theory looks for continuities, patterns, trends, even constants in the waging of war—the search for the universal and the eternal. Studying military history should bring us down to earth with a thud because of one cardinal point: it is not, can not be, detached from the history around it. Historians do not reject continuity, but they also insist we pay proper attention to particularity. Each era, each conflict will have unique features and factors. Singaporean military officers studying the defence and fall of Singapore in 1941-42 need to be very aware of what those factors were, and of the limits they set to any effort to try to apply
‘lessons’ from 1942 to problems of the 21st century. In 1941 Singapore was a colony. Its people were not responsible for, nor did they take the lead in, its defence. There was no local authority responsible to its own people empowered to make decisions about defending Singapore. The enemy was the Japanese Empire, a militaristic imperialist state pursuing an agenda of imperial conquest and pan-Asian racial domination. That agenda was itself part of what became a global total war, pitting every great power in the world against each other. The military aircraft Japan used were piston-engined. The invasion of Malaya it launched in December 1941 came from bases in Thailand, Vietnam and Hainan. And so on. Such a particular combination of factors will never recur again. So if the SAF must one day defend Singapore against an armed opponent, it must not rely on a close study of how it was done in 1941-42 as a blueprint for how exactly to do it again. It must look instead for other implications of the defence and fall of Singapore that remain relevant to its ongoing mission today.

**CHOOSING A STRATEGY**

The place to start is by studying the context in which the authorities responsible for defending Singapore made their key decisions, and examining the manner and nature of those decisions. For the British government, the defence of Singapore was one task in a long list of many other important tasks. Any future government of Singapore will regard its defence as its most sacred obligation. No British government ever did, or would have. Singapore was a distant colony in a global empire. The plans and policies adopted to defend Singapore were always conditioned by, and subject to, the overall defence needs of the British Empire. Those defence needs rested in the end on the needs of the metropolis, the United Kingdom. It would not, could not, be otherwise. After the great strain of the First World War, the British authorities faced an insoluble strategic problem. On the one hand they did not want to reduce the size of their Empire, on which they relied so heavily for national power, security, wealth and prosperity. On the other hand they did not want to commit the necessary men, money and machines to make all parts of the Empire secure against all foreseeable threats. This forced them to improvise and compromise. In the process, they made one fundamental decision that bore directly on the defence of Singapore: the absolute top priority in all defence plans was to preserve the authority of the British government in making defence policy and military strategy on behalf of the whole British Empire. When by 1921 it was obvious risks must be taken somewhere, because the British government would not pay the price to be strong enough everywhere, the Far East--Southeast and East Asia--was selected as one area where risks could...
be run. The choice that presented itself to British authorities was whether to accept a definite political risk then and there, or a possible military risk at some point in the future. They chose to run the military risk.

THE SINGAPORE STRATEGY: A STRATEGIC BLUFF

From 1921 on British defence policy was to hold the territories of the Empire in Asia against all comers. The military strategy adopted to implement that policy was the plan known to us as the ‘Singapore strategy.’ The strategy was to use the construction of a modern main fleet base at Sembawang as a pivot. The main fleet would remain in European waters. But in a time of crisis a powerful squadron would be sent out to Asia. It would operate from the base at Sembawang, using it as a platform from which to project strategic power. Its presence and power would either deter or defeat any external attack on the Empire, an attack that could only come from Japan. This strategy was never a viable military plan. The Japanese were never likely to attack the British Empire unless it was already engaged by another foe elsewhere in the world. And the base at Sembawang was ultimately reduced to a size too small to support a fleet large enough to defeat the Imperial Japanese Navy in a full engagement—if such a squadron were ever sent out, and such an engagement unfolded. Cost cutting remained top national priority. But the base was built nonetheless, and the strategy remained the military plan by which defence policy would be pursued. One British government after another accepted the risk that one day this military bluff might be called. In their eyes, the most important purpose of the ‘Singapore strategy’ was simply to exist. The fact there was a plan, and a base to give it life and form, allowed them to argue they remained in full control of arrangements to defend the Empire, come what may. This prevented close questioning of British dispositions by such Dominion allies as Australia and New Zealand, potential friends such as the United States, and, hopefully, the potential adversary. It also allowed British authorities to project the image of power and control to colonial populations. Had the British decided to admit they had no sound military plan to defend the Far East against a major attack, these political pressures would have boiled over very quickly. The Singapore strategy allowed them to put up a brave front behind which they could hope world events moved in a benign direction.

CIRCUMSTANCES, INTENTIONS AND CAPABILITIES

In 1921 this seemed like a reasonable calculated risk. There were no real threats even on the horizon. But events never stand still. The best way to evaluate
such national defence decisions is to apply the test of three entwined factors: circumstances, intentions and capabilities. National decisions should always be made through careful consideration of all three factors. Capabilities are the easiest to evaluate, but the most difficult to change. British retrenchment after the First World War reduced the armed forces, especially the fleet, to a level far below what turned out to be necessary when total war came again. It took so long to rebuild the necessary capability that in 1940-41 the Empire paid a terrible price for its imprudence, in Europe and Asia. Intentions are difficult to evaluate and can change with bewildering speed. Circumstances are easier to evaluate, but can also change much faster than capabilities can be adjusted to meet such changes. The final variant of the Singapore strategy that emerged from 1926, when the Sembawang base was slashed in size, turned out to be a plan that—come what may—failed this cardinal test. If global circumstances and Japanese intentions both changed drastically and rapidly, British capabilities were not going to be strong enough to bolster in time to match the threat. This ‘worst case’ scenario, dismissed as a remote contingency in 1923, came to pass in 1940.

When the Japanese threat became imminent, in 1941, the strategic situation could not have been more dire for the British. The French and Dutch armies were destroyed in 1940, their homelands overrun. This opened up the French and Dutch colonial territories in Southeast Asia to Japanese pressure. That put Japanese forces right on Malaya’s doorstep. Meanwhile the British were forced to fight for their very survival against a much stronger enemy, launching a direct attack on the British Isles. The German attack on the Soviet Union in June 1941 did not bring much respite. The British Chiefs of Staff did not expect the Soviets to repel the German onslaught and refused to take any real chances with the defence of the homeland itself. The critical mass of British military power remained concentrated in Europe, defending the homeland and trying to engage the Axis Powers in the Mediterranean. Too little was left to spare to bolster the defences of Malaya and Singapore effectively. The Japanese authorities rightly assumed that if they attacked the Western Powers in Southeast Asia that would mean war with the United States. But at that time the United States was not ready for war, and the European powers were vulnerable. The window of opportunity seemed open. The Japanese decided to go through it. The defenders of Malaya and Singapore found themselves outgunned in the air and at sea, strategically vulnerable. Provided they made no grave mistakes, the Japanese had every reason to anticipate full success when they invaded Thailand and Malaya on 8 December 1941. The British decision to take a military risk in the future rather than a political risk in the present compromised the defenders of Singapore when push finally came to shove.
IMPLICATIONS FOR THE SAF: NATIONAL DEFENCE DECISION MAKING

The British decision to take a military rather than political risk provides concrete evidence of an enduring fact: fundamental decisions that shape how armed forces can defend their country are not in the end made by soldiers. They are made by national command authorities, who may or may not pay close attention to the strategic advice provided by their military chiefs of staff—or who may or may not decide that other national priorities, pressures or agendas must be taken into consideration when making defence decisions. The decision of the 1920s to adopt a military strategy that was inherently unsound as a battle plan was just such a case: national authorities, responsible for considering all factors, chose this as the lesser risk. The dire changes in circumstances and intentions that exploded by 1940 left these same authorities stuck with a strategy that could not be improvised on the spot. No Singaporean national command authority is likely to be distracted by larger considerations than the direct defence of Singapore. But it will have to weigh a variety of political, economic, diplomatic and other considerations when it makes defence decisions. The SAF will have to bear in mind that when it comes to decision making at the very top, the decisions that determine what can be done on the ground, there is no such thing as ‘purely military considerations.’

THE RESULTING MISSION

When war came to Malaya and Singapore in December 1941, the military forces on the spot found themselves handicapped by two more assumptions built into the military planning. First was the tendency to want to ‘make the situation fit the plan,’ rather than adjust plans to circumstances. Second was the problem of tempo and time, the assumption the British could respond ‘from flash to bang’ fast enough to make the defences strong enough to hold. The strategic situation made these two assumptions fundamental to the prospects of defending Singapore. Once the Japanese knocked the US Navy’s Pacific Fleet onto the sidelines on the first morning of the war, by their attack on Pearl Harbor, Japanese air and seapower allowed them to drive straight into the heart of Southeast Asia without serious opposition. That made the campaign in Malaya a race: a race between the Japanese ‘driving charge’ advance towards Singapore and the ability of the British Empire to send strong enough reinforcements in time to repel them. The most important expression of the determination to ‘make the situation fit the plan’ was the mission assigned to Malaya Command, the ground forces on the spot: hold the naval base at Sembawang, until the fleet arrived to operate from it. The most important
expression of the ‘flash to bang’ assumption was the ‘air plan’: the theatre plan to rely on airpower on the spot to delay the Japanese long enough to allow strategic reinforcements to arrive. Neither assumption held up under Japanese pressure. Holding fast to both only made matters worse. The seams unraveled at their weakest points: the need to operate as a coalition of national forces, and the need to operate as an integrated team of all three services.

COLLECTIVE WEAKNESSES

The defenders of Singapore were a heterogeneous grouping of the armed forces of various parts of the British Empire: British, Indian, Australian, New Zealand and Malayan, supported by small units of Dutch colonial forces. The different contingents were further divided from within. British units comprised those who had been in Malaya since 1936 and those who arrived on the eve of war. The Indian contingent comprised units from all over South Asia, with important cultural and climactic differences, and most arrived only during 1941 itself. Half the Australian contingent arrived in September 1941. Malayan units comprised both regular and volunteer forces, the latter subdivided by racial subunits. These ground, air and naval forces all wore the same uniforms, used the same weapons, and operated according to the same broad doctrine. But they did not all bring in the same level of training or experience, or speak the same language, or eat the same food, or acclimatise effectively to Malaya and Singapore. They were an imperial family to be sure, but a coalition nonetheless. By comparison, the enemy was not acclimatized to Malaya, nor did he know the ground from experience. But his was a homogenous army, which spoke the same language, ate the same food, used the same weapons, doctrine and techniques, and operated under one national command.

The advantage was stark. When Malaya Command lost the initiative at the beginning of the campaign it was forced to try to regroup. The inherent friction within all coalitions made this much harder. As the Japanese advanced, finger pointing became irresistible. Senior Australian officers blamed Indian Army units for failing to stop the Japanese advance north of Kuala Lumpur, arguing the Indian contingent was badly trained and badly led. Senior British officers blamed Australian units for failing to stop the enemy in Johore, arguing the Australians talked a good fight but did not perform when the challenge came. Senior Australian officers retaliated by denouncing the British officers who directed Indian units, and the British dominated high command itself. This was a headlong charge down the slippery slope to disaster. Malaya Command literally unraveled from within by the time it made its final retreat to Singapore island in the last days of January.
1942. Confidence between national contingents neared the point of collapse, and the every unit for itself mentality spread too rapidly. One direct consequence of this was the avoidable loss of the entire 22nd Indian Brigade, cut off and finally forced to surrender when the rest of the army left it behind in southern Johore. The army that tried to dig in to defend the island was no longer really an army, a cohesive force able to coordinate its operations effectively. The GOC Malaya Command, Lt.-Gen. Arthur E. Percival, will always remain a controversial figure in the story of the fall of Singapore. In this respect he was a factor, because one quality he lacked was something his army badly needed: ruthlessness in command, zero tolerance for bickering and back-biting no matter what the source. Percival failed to prevent the instinctive tendency to single out national differences from getting completely out of hand. It acted as a corrosive agent, rusting away the links in the chain that should have bound the army together. This made its defeat all the more rapid and extensive.

**IMPLICATIONS FOR THE SAF:**
**OPERATING IN A MULTI-NATIONAL COALITION**

The only conceivable scenario in which the 21st century SAF will be fighting on its own is the direct defence of Singapore itself in circumstances where Singapore’s allies are unwilling, or unable, to assist its defence. SAF operations in Cambodia and East Timor were part of larger multi-national efforts and we must assume this will remain the more likely scenario for a long time to come. The defence and fall of Malaya and Singapore provide a stark if general warning in this respect. Defeat was probably unavoidable for the British Empire in Malaya after the fall of France in 1940, certainly after the attack on Pearl Harbor. But disaster, the rapid and humiliating collapse of the defence on the mainland, need not have happened. One important reason why it did was the failure of the defenders, especially Malaya Command, to manage the inherent problems of fighting as a coalition. The frustration and pressure of retreat and defeat naturally magnified those problems. Interoperability in all respects, including moral and psychological, spells the difference between victory and defeat in coalition operations. The SAF must learn to work effectively with foreign partners, just as they must learn to work with it. Finger pointing based on national differences, once started, can be impossible to stop.

**INTER-SERVICE DISJOINTEDNESS**

Failure to combine national contingents effectively undermined the defence of Malaya and Singapore. Failure to work effectively as a joint service team did
Lessons for ONE SAF

at least as much damage. The Malayan Campaign was in fact one of those rare examples in history where everything that could go wrong did go wrong. Never at any time from 1921 did British plans envisage what turned out to be the case in 1941: the army was left to fight the main battle to defend Malaya and Singapore, without any effective support from the air force or navy. So how did this happen? Circumstances were relevant, particularly from 1940. The sluggish British turn to rearmament in the mid-1930s meant that by the time a full blown crisis erupted in 1940 neither the Royal Navy nor the Royal Air Force could be expanded rapidly enough to spare sufficient units to bolster the defence of the Far East, while simultaneously fighting the main war in Europe. But beyond circumstances there was a consistent problem of attitude. ‘Joint-mindedness’ simply did not prevail between the armed forces, neither at home in the UK nor out here in Southeast Asia.

This problem started from the beginning, with the ‘Singapore strategy.’ The navy never paid any effective attention to the need for a proper combined arms plan for theatre defence. The assumption was that the arrival of the main fleet, or a major squadron, would simply transform the situation by itself. Naval plans for what the fleet would do once it arrived at Sembawang were really nothing more than vague aspirations about taking the war to Japan, up to and including a possible blockade of the Japanese home islands! These were not sound military plans. They paid no attention to co-operation with the air force, nor did they make any effort to sketch out realistic connections between operations and logistics. In naval minds, the roles of the air force and army were to protect Sembawang. Built into the main Singapore strategy was the concept of the ‘period before relief,’ the time the garrison must keep an enemy at bay until the fleet arrived. In 1923 this was set at 42 days. In 1938 it became 70 days, in 1939 first 90 and then 180 days. This final figure was patently ludicrous, unless truly formidable ground and especially air forces were on hand in Malaya. They were not. But because of such plans the army was forced to try to fight as long as it could, as hard as it could, north of Kuala Lumpur in December 1941. That forced it to spread out, allowing the Japanese to keep the initiative and defeat it in detail. Malaya Command’s mission was to hold the naval base. Hold meant preserve in a usable condition. This mission was not amended, despite the fact the only two capital ships sent out to the theatre were sunk by Japanese naval aircraft on 10 December, the Admiralty gave the Eastern Fleet permission to relocate from Sembawang on 13 December, and Vice-Admiral Geoffrey Layton did just that on 5 January 1942. That condemned Percival’s army to fighting at a disadvantage in order to hold a naval base for a fleet that was not coming. The
odds and ends of the Eastern Fleet that remained at hand after the destruction of Force Z did what little they could, but this naval dictation of the land battle truly crippled the defence.

**THE AIR PLAN FANTASY**

The emergence of the ‘air plan’ from 1936 made matters even worse. In 1936 the RAF high command in Singapore and London concluded it was unlikely the fleet would in fact arrive in time to take the lead role in defending Malaya and Singapore against any Japanese attack. They decided this role would fall to them by default. Ever since 1921 RAF officers had argued that the longer range and greater striking power of combat aircraft made their land-based torpedo and bomber squadrons the ideal force to deter or defeat any sea-borne invasion of Malaya and Singapore. In theory this made good sense. To breathe life to the theory RAF Far East began to construct airbases in northern Malaya and along its east coast, to allow them to deploy a force that could dominate the Gulf of Thailand and South China Sea. By 1941 there were 11 such airbases in operation on the mainland, and the Chiefs of Staff in London had confirmed the policy that, for the moment, the RAF would play the lead role in engaging any Japanese invasion force. Malaya Command plans were adjusted accordingly, as the army role became to defeat any Japanese forces that made it past the gauntlet of air attack at sea. Percival assumed, based on assurances from the staff at RAF Far East, that any Japanese force would be reduced by 40% before it reached Malaya.

Unfortunately this was a fantasy as whimsical as the ‘Singapore strategy’ itself. The theatre commanders suggested they required more than 580 first line aircraft to defend the area effectively against a major invasion. The Chiefs of Staff accepted the figure of 336. Actually on hand in Malaya and Singapore in December 1941 were 181, and less than a quarter of these were first line. The fighter aircraft, the American-supplied Brewster Buffalo, were outnumbered and hopelessly outmatched by Japanese fighters. Apart from two squadrons equipped with the reasonably effective Hudson bomber, the strike squadrons, especially the torpedo bomber units, were equipped with aircraft so obsolete they could make no dent against overwhelming Japanese airpower. RAF Far East fought with determination, but failed to seriously interfere with the Japanese invasion. Within four days it was so heavily defeated in the air and on the ground that the AOC Far East, Air Vice-Marshal C.W. Pulford, was forced to pull his forces south to cover the approaches to Singapore, to try to keep open the reinforcement life-line. This left Malaya Command virtually without air support as it tried to
stand and fight in the north. Worse, it had already been forced to spread out to defend positions which protected the northern airbases. But these positions further dispersed it, making it even easier for the Japanese to engage and defeat it one formation at a time. The battles at Kota Bharu and Jitra were fought solely because it was necessary to try to protect airbases nearby. They were both heavy defeats, which gave the Japanese the initiative on the ground from the start. RAF Far East made no effort before July 1941, by which time it was too late, to consult Malaya Command about the ground defence implications of the locations of its airbases. Higher command made no effort to make sure, either in Singapore or London, that service plans were effectively coordinated. The army was left to try to adapt its plans to the needs of the other services—and in the end compromised by both. This unforced error played a major role in transforming unavoidable defeat into avoidable disaster.

IMPLICATIONS FOR THE SAF:
JOINT SERVICE PLANS AND OPERATIONS

The British failure to make joint-mindedness a central feature of their plans and operations, from start to finish and from top to bottom, was an almost criminal military blunder. The single service focus of the ‘Singapore strategy’ and its vague ideas about subsequent operations compares starkly to the integrated joint service plan by which the Japanese invaded Thailand and Malaya. The unilateral air force construction of facts on the ground was an even greater blunder. When circumstances prevented the RAF from deploying the units needed to make those air bases effective, they instantly became a grave liability. Should the Japanese seize them, they would be able to move their own combat air units forward and multiply the force they brought to bear in Malaya and Singapore. That single fact forced Malaya Command to deploy in places it never wanted to operate from, and fight a land battle it was always going to be disadvantaged in. The Japanese did in fact seize and exploit these air bases, and the force multiplier of their airpower proved to be a major advantage in their ‘driving charge’ on Singapore. The implication for the 21st century SAF can not be more stark. It is the oldest cliché: there is no ‘I’ in team. There is no one single dominant service that is more important than the others. The operations of all services will always shape and influence the situations of the others. Working effectively together at all stages from plan to battle, and at all levels from grand strategy to formation tactics, is absolutely essential in modern warfare. The SAF will never be able to afford the luxury of a single-service war plan or single-service mentality. Full stop.
To summarise. Studying military history can help us use the learned and lived experience of others to better understand the kind of problems that can and do arise in military operations, or that are related to the use of military forces. Studying a major campaign that took place in our own part of the world can bring the added advantage of familiarity, but also poses the challenge of avoiding the temptation to look for easy ‘direct lessons.’ Studying the Malayan Campaign and the defence and fall of Singapore can provide food for thought about how national defence policy decisions are made: what sort of criteria are taken into consideration, what pressures are faced, what vested interests are at play. It can add to our understanding of a process, one which will always affect the environment in which military plans are made, military operations conducted. Above all, the Malayan Campaign is an abject empirical lesson in why clichés become clichés. Coalitions are inherently awkward instruments for waging war, whatever their particular nature. And joint-service challenges are not choices on a menu, they are essential parts of the military diet. We must all think and act as ‘triphibians’ in modern warfare. There is one final implication of the fall of Singapore in 1942 that the SAF knows full well, but is worth repeating here. Any defence of Singapore must take place as far as possible outside of Singapore. In 1941 the British at least had the peninsula to fall back through, the island to fall back on, and their own island to go home to when the war was won. The battle for Singapore itself in February 1942 was short but sharp, the cost high for all involved. For the SAF there is no hinterland. And this is home.

Endnotes

1 Stacey’s major works of Canadian official history were: Six Years of War: The Army in Canada, Britain and the Pacific, (Ottawa: Queen’s Printer, 1955); The Victory Campaign: The Operations in North-west Europe 1944-1945, (Ottawa: Queen’s Printer, 1960); Arms, Men and Governments: The War Policies of Canada 1939-1945, (Ottawa: Minister of National Defence, 1970).
INTRODUCTION

The successful Japanese invasion of Malaya and Singapore was an unprecedented event in world history. So overwhelming were the odds and resounding the victory that it made defunct many of the myths about the strength of the British Empire and its impregnable fortress at Singapore. This achievement has been variously attributed to the lack of a realistic and deliberate Far East strategic policy, the poor training and organisation of the allied forces and the strong leadership of Lt-Gen Yamashita, Commander of the 25th Japanese Army. I will however argue that this victory was, to a significant extent, made possible by the application of the concept of ‘Operational Art’ by the Japanese military. The Japanese Army’s planning and numerous adaptations kept up the momentum of their advance and maintained the vital initiative throughout the campaign. Contrary to popular belief we now know that some of these innovations were not pre-planned but adapted during the campaign. The British forces on the other hand made numerous errors under pressure and never really recovered from the initial surprises. Firstly let us examine what Operational Art is.

HISTORICAL PERSPECTIVE OF THE OPERATIONAL ART

While the specific term may not have been used, the notion of operational art can be elicited from the early writings of Sun Tzu. Sun Tzu placed emphasis on attacking the enemy’s plan, on deception (e.g. ‘When able, feign inability; When deploying troops, appear not to be), and on the importance of understanding the terrain. These concepts are key to applying the operational art of war. It would be reasonable to suggest that many ancient battles have also embodied various aspects of operational art. In 490 B.C. Darius, although unsuccessful,
attempted to draw the army out of Athens through an amphibious operation at Marathon. In 216 B.C. Hannibal crossed the Alps to attack the Romans. So when did the notion of operational art become evident?

In *The Operational Art of War*, Claus Telp attempted to trace such developments to the writings of Saxe and the genius of Frederick the Great and Napoleon but qualified that it could also have been developed by the Russians or Austrians. It was at the turn of the 18th century where we begin to see the organisation of fighting units into independent divisions and corps. It was also during this period that the German General Staff was created as a dedicated planning and coordinating staff carefully nurtured by the highest military leadership. It is therefore highly plausible that the Germans could have been the first to examine how to employ divisional forces at the operation level.

It could also be argued that much of what Clausewitz and Jomini wrote on strategy during this period was in fact about the operational level of wars of those times. They were essentially suggesting a framework to better appreciate the decisive battlefield successes of Napoleon. It should also not come as a surprise that Napoleon himself studied the exploits of Hannibal and Frederick the Great. John English suggested that it was not until Field Marshall Helmut von Moltke the Elder, that the term operativ was first used. Moltke firmly believed that no plan survives contact with the enemy, and therefore further developed the General Staff into a centralised planning entity with a decentralised command and control system. To him, one of the purposes of the General Staff was to plan the manoeuvre of divisions and corps formations to the point of contact with the enemy. Moltke subsequently led the German Army, through carefully coordinated manoeuvres made possible by the general staff system, to great success against the Austrians at Koniggratz and subsequently the French in 1870.

While the notion of operational art may have been passed down through practice over time, the term operational art was most likely first used by the Russians, in particular through Mikhail Nikolaevich Tukhachevskii’s concept of deep operations and deep battle. Frederick Kagan summarised Tukhachevskii’s ideas where operations must flow together as though they were simply ‘separate extensions of a single operation’ and where the ‘uninterruptedness of the conduct of operations is the main condition of victory”. According to Kagan the concept of deep battle was further reinforced by G. S. Isserson, the Chief of
the Department of Operational Art at Moscow’s Frunze General Staff Academy who argued that the most important moment is near the end of the operation or before reaching culmination. Isserson advocated that the ‘offensive must be like a whole series of waves flowing toward the shore with growing strength in order to deliver uninterrupted blows from the depths’. Kagan surmised that at the heart of Soviet operational art was the echelonment of the attack and the principle of strategic dispersion of forces prior to their massing for the final decisive blow².

Based on historical examples and the literature we can surmise that operational art involves seizing and maintaining the initiative, through good planning, surprise and the synergistic execution of combined arms operations based on good anticipation and decisive action. It is important to emphasise the fact that action or execution and not plans or preparations, wins or loses battles. The key to attaining the initiative is speed and surprise, and the key to retaining the initiative is the uninterrupted conduct of operations. Execution entails continuously anticipating, making adjustments and creating options to maintain the initiative. The attack must move rapidly. Speed is absolutely essential to success; it promotes surprise, keeps the enemy off balance, contributes to the security of the attacking force, and prevents the defender from taking effective countermeasures. Properly exploited, speed can confuse and immobilise the defender until the attack becomes unstoppable. Finally, speed can compensate for a lack of mass and provide the momentum necessary for attacks to achieve their aims.

Having examined the concept of operational art, it is now time to scope its definition. The US FM 101-5-1 defines operational art as:

_The employment of military forces to attain strategic and/or operational objectives through the design, organisation, integration, and conduct of strategies, campaigns, major operations, and battles. Operational art translates the joint force commander’s strategy into operational design, and, ultimately, tactical actions, by integrating the key activities at all levels of war_

Or it could be defined as:

_The orchestration of all military activities involved in converting strategic objectives into tactical actions with a view to seeking a decisive result_
A more action based definition and one that I prefer is as follows:

*Maneuvering in space, time and perception, using rapid and focused actions to generate tempo and create opportunities, in order to gain positional and/or psychological advantages so as to decisively achieve the strategic end-state.*

The recurring theme in ancient history appears to point towards achieving surprise through bold and decisive initiatives, pitting strength against weaknesses, task organising forces, flexible movement and concentration of forces, sequencing of events, exploiting success by reserve echelons and sustaining or protecting their lines of operations. Having adequately defined operational art, it is now possible to better understand how it can be achieved.

**FACETS OF OPERATIONAL ART DESIGN**

From the definition we should be able to discern that are some of the key attributes or ingredients essential for successfully conducting operations. American operational art literature identified some 14 dimensions or facets which include termination, synergy, simultaneity and depth, anticipation, balance, timing and tempo, operational reach and approach, forces and functions, arranging operations, centers of gravity, direct versus indirect approaches, decisive points and culmination. While these facets may be comprehensive, it could be argued that some of these facets appear to be descriptive characteristics while others may be more prescriptive and therefore serve as critical planning considerations for the successful conduct of operational art. One could also reasonably make a case that there are considerable overlaps for example between simultaneity and tempo, depth and operational reach, and synergy and arranging operations.

For purposes of brevity and prescribing an alternative approach, I have chosen to narrow down the dimensions of operational art to the following:

a. End-state  
b. Anticipation  
c. Centre of Gravity (COG) and Decisive Points (DPs)  
d. Speed and Tempo  
e. Synergising and arranging of forces - manoeuvre  
f. Culminating Point - Echelonment and Sustainability

The next section will examine the proposed dimensions of operation art within the context of the Malayan Campaign.
MALAYAN CAMPAIGN AND THE OPERATIONAL ART

Japanese conquests in China and ambitions to establish a Greater East Asia Co-property Sphere put the US, Great Britain and Japan on a collision course. The situation worsened with the abrogation of the Japanese-American Commercial Treaty in January 1940, and the increasing trade restrictions that ultimately led to a trade embargo against Japan in July 1941. Resource-dependent Japan increasingly began to accept the inevitability of going to war to achieve a negotiated settlement. On 26 Nov 1941 the Imperial Conference decided go to war on 8 Dec 1941 unless war could be avoided. Strategically, Japan realised that it could not win a war against a combination of all the major powers that had important interests in the Far East. Japan therefore successfully sought a neutrality treaty to eliminate the Soviet Union from any coalition against it. It also correctly identified that the greatest threat to its conquest for a co-prosperity sphere was the US Pacific Fleet at Pearl Harbour, Hawaii.

END-STATE ANALYSIS

End-state essentially refers to the state of affairs which needs to be achieved to end a campaign on favourable terms. It is critical to maintain focus on the purpose of the campaign rather than getting distracted by intermediate successes.

Based on the strategic realities, the Japanese campaign plan was well conceived. Phase I from D to D+50 involved a simultaneous attack on the US Pacific Fleet and the landing at the Kra Ithmus and Northern Malaya for the push towards ‘fortress’ Singapore. Phase II up to D+100 involved the annexation of the Bismarck Archipelago, the capture of the entire Malayan Peninsula and the naval base in Singapore, the occupation of the South Burmese airfields, and moves into the Malacca Passage and Straits of Macassar in preparation for an invasion of the Netherlands East Indies. Phase III up to D+150 involved the capture of Sumatra and Java and the occupation of Burma. It was an audacious plan, involving the projection of power that spanned 7000 miles and the near simultaneous destruction of the Pacific Fleet and landing at Thailand. Impressively, 70 minutes before Pearl Harbor, the Japanese successfully landed at Kota Bahru.

The end-state for the Malayan Campaign was clearly the capture of ‘fortress’ Singapore and the control of lines of communication up to the Malacca Straits. This will decisively defeat the British in the Far East and allow shipping of resources within the co-prosperity sphere.
A thorough understanding of the end-state at all levels and what it will take to achieve them can be best illustrated by the initiatives exercised at the various potential decisive points near the Thai border, Jitra and the Slim River. As narrated by Tsuji, the Japanese Chief Operations Officer, the Japanese commanders did not wait for instructions and took it upon themselves to seek out and apply pressure on the retreating British Forces.

ANTICIPATION ANALYSIS

The essence of anticipation can be traced back to Sun Tzu: “If you know the enemy and know yourself, you need not fear the results of a hundred battles.” It entails understanding the types of capabilities and forces available to the opponent and using intelligence, surveillance, and reconnaissance assets to form a clear picture of the enemy’s situation and intentions. Anticipation during execution entails continually analysing the actual situation on the ground and having a range of options to exploit opportunities and respond to uncertainties.

Having clearly identified the military end-state for the Malayan Campaign, the Japanese 25th Army embarked on anticipating what it would entail to successfully capture Singapore. The Doro Nawa Unit, known as the Taiwan Army Research Section conducted extensive terrain analysis, made templates of projected enemy force dispositions, and analysed likely British actions. The analysis was subsequently confirmed during secret aerial reconnaissance flights over the Malayan Peninsula. The Japanese were therefore able to accurately assess how the British will defend Malaya and Singapore.

Due to their commitments in the European theatre, the Japanese correctly assessed that the British will rely on the Royal Air Force and Malaya Command to utilise delaying tactics against the Japanese advance while they wait for reinforcements. While the Japanese were aware of British plans to resist them near the Thai frontier, they also correctly assessed the weak enemy air force strength as an indication that the British did not expect a Japanese invasion during the northeast monsoon. British strategy also relied on Force Z, spearheaded by two British battleships, the Prince of Wales and the Repulse, being an adequate deterrent and as an interceptor of the Japanese landings.

These realisations shaped the Japanese plan. The priority was to secure the airfields and destroy any naval threat that could jeopardise the mission. Terrain analysis greatly influenced the organisation of forces with significant emphasis on
engineers. This paid off at the Perak River crossing which was repaired in less than a week instead of a month as anticipated. It also confirmed the need to use jungle tracks at Kroh-Grik, the employment of tanks for speed and frontal assaults at strong points, outflanking manoeuvres by boat infiltrations and the use of bicycles for speedy infantry movement.

More importantly as narrated by Tsuji, during execution, the 25th Army HQ Staff continued to review and adjust the plans based on firsthand frontline reviews/actions. The novel tactics of employing tanks to defeat strong points along roads was apparently also conceived after the initial encounters at Jitra.

**COG AND DECISIVE POINTS ANALYSIS**

Centre of Gravity (COG) has been variously defined as “The source of power that provides moral or physical strength, freedom of action, or will to act.” or according to the US Army Operations manual citing Clausewitz as “The hub of all power and movement, on which everything depends.” One possible approach to identifying the center of gravity is to first examine a critical capability of the adversary that could significantly enhance the possibilities of a successful mission. This critical capability is likely to have a critical requirement or condition which could be exploited as a critical vulnerability. The choice of attacking the critical capability or vulnerability depends on several factors. This includes one’s own strengths and vulnerabilities, ease of accessibility, end-state considerations, the potential cascading effects and doctrine. As an illustration, the US Army wherever feasible, advocates attacking the strength or critical capability of the adversary while the US Marines generally aim to seek out and attack the critical vulnerabilities or weaknesses that would nullify the capabilities. While the Army may advocate focusing on a single COG, the Air Force tends to identify and attack numerous COGs. The Air Force version stems from its definition as “those operations intended to directly achieve strategic effects by striking at the enemy’s COGs ... which were the characteristics, capabilities, or localities from which a force derived its freedom of action, physical strength, or will to fight. There is also a school of thought that COGs could change or shift in the course of the campaign.

Alexander the Great had a strong army but a very weak navy. In his campaign against the Persians, his success depended upon gaining control of the Mediterranean Sea and he determined that the Persian COG was their shore
bases. Securing those bases with his army meant that he was able to gain control over the sea without a naval battle.

The Japanese operational COG was their naval convoy system. To protect the naval convoys, the lines of communication, and the deployment of forces ashore, the Japanese simultaneously attacked Pearl Harbour and used their air and naval forces to gain air and naval superiority over northern Malaya. With good operational security, deceptive routing and simultaneous action at Kota Bahru they were able to secure Singora and Patani. They used nearby airfields to subsequently secure the Alor Star aerodrome. The Japanese also actively sought and destroyed the British battle cruiser Repulse and the new battleship Prince of Wales.

The Allied COG was ‘fortress’ Singapore. Its early engagement would result in the collapse of the British defence strategy. From the onset the Japanese sought to bomb Singapore. In order to do this more effectively they needed to attain air and sea superiority early. This was achieved by securing the decisive points of Singora, Patani, Kota Bharu and Alor Star and the aerodromes in the vicinity. From these aerodromes the Japanese Air Force not only effectively engaged Singapore but also supported the Army’s speedy advance down the Malayan Peninsula.

The other major decisive points revolved around critical river and jungle terrain constrictions where the only southward movement had to be along axes and across bridges. These included Jitra, Gurun, Kampar, Slim River, Tampin and Muar. When the Japanese broke through the Slim River position, central Malaya was lost and its largest city, Kuala Lumpur, was open for exploitation. The British subsequently never recovered from this defeat.

**JITRA**

The poor communication system and flooded trenches made it difficult for the 11th Indian Division to effectively defend the Jitra position. On 11th December, a Japanese tank charge into the British defences of the 1/14th Punjab Regiment and the 2/1st Gurkha Rifles routed the positions. British troops at Jitra undertook an overnight ten mile withdrawal. Japanese troops, originally thought to be inferior in jungle warfare, continued to surprise their Commonwealth counterparts as they moved quickly down the peninsula. The Japanese used bicycles to greatly enhance their mobility through the rubber plantations and jungle tracks.
GURUN

This gap has fairly secure flanks with the 4000 foot Kedah peak on the left, and the foothills of the central Malayan mountain range on the right. The disorganised retreat from Jitra meant that many units were seriously under-strength. The Japanese pushed on boldly with one battalion supported by tanks and easily broke through the demoralised British positions.

KAMPAR

As a result of very heavy casualties from the severe fighting at Jitra and Gurun early on in the campaign, two British brigades amalgamated at the St Michael Institution in Ipoh on Dec 20, 1941. On Dec 23, together with the Indian units, this brigade moved to Kampar to prepare for a stand to hold the advancing Japanese 25th Army. The hastily prepared defence position north of Kampar and the counter-flanking actions of the Punjabi Regiment of the 12th Indian Brigade helped to stall the Japanese advance for 34 days. However, ultimately the British were forced to withdraw to Trolak to avoid being cut off by a flanking movement from Teluk Intan to the south-west.
SLIM RIVER

On 7th January at 0330 Japanese tanks overran the roadblock and defences at Trolak, about 5 miles north of Slim River. About 30 tanks and 100 infantry on trucks advanced to Slim River. Due to the bold action of Lt Watanabe who jumped out of his tank to sever the fuse to the bridges’ demolition charges, the Japanese took the Slim River Bridge at 0830. Two Indian brigades were practically annihilated.

JOHORE

On 14th January, the Japanese encountered troops from the Australian 8th Division, commanded by Major-General Gordon Bennett and experienced a tactical setback, due to the stubborn resistance put up by the Australians at Gemas. The battle, centred around the Gemencheh Bridge proved costly for the Japanese, who suffered up to 600 casualties. The bridge itself, which had been demolished during the fighting, was repaired within six hours.

SINGAPORE

The Japanese correctly anticipated the British main defensive plan of Singapore. This allowed them to successfully deceive the British defenders as to the direction of the main Japanese offensive from the northwest.

SPEED AND TEMPO ANALYSIS

Speed and tempo facilitates the seizing and maintaining of the initiative through surprise and increasing uncertainty for the adversary. John Boyd also contends that ‘if you can go through the Observation-Orientation-Decision-Action (OODA) Loop faster than your enemy, you’ll live and he’ll die’. Any pause during the operation could allow the adversary to regroup and regain the initiative. John Boyd advocated that one of the best way to operate faster is to have an implicit guidance throughout the chain of command. This notion is depicted in the centre of the diagram below.
Speed and tempo are by far the most significant attributes of the Malayan Campaign. When the initial landing at Kota Bahru was detected, Krohcol force (a 2-battalion task force from the 3rd Indian Corps) was ordered to cross the border and take up a position at the ‘Ledge’, a position in South Thailand critical for the defence of North Malaya. While Krohcol force failed to reach the ‘Ledge’ by the next day, the Japanese cleared the 75 miles from Patani to the ‘Ledge’ by the 10th of December. Throughout the campaign the Japanese aggressively pushed on with their advance, and refused to provide the British any opportunity to regroup, reorganise or resupply. There was relentless pressure placed on the withdrawing Commonwealth forces by air attacks and outflanking manoeuvres. Despite the numerous bridges, the Japanese engineers were always at hand to maintain the momentum of the advance.
SYNERGISING AND ARRANGING OF FORCES ANALYSIS

Synergising is by far the most important capability and one that could be finessed through greater experience in conducting operations. Commanders need to know the capabilities and limitations of their forces and sequence their employment in an optimal manner where the whole is greater than the sum of its parts. By exploiting the services’ capabilities, we can greatly enhance our reach and tempo while significantly increasing the uncertainty of the adversary. Taking into consideration the geography and the adversary’s actions, the commander must manoeuvre in space and time using rapid and focused actions in order to gain a position or psychological advantage over the enemy. Forces must be capable of marching separately and concentrating at the decisive points. The joint or combined arms capability and capacity must be exploited to achieve the critical flexibility and agility in operations.

There was intense inter-service rivalry between the Japanese Armed Forces before the war. However, the cooperation achieved between the services during the Malayan Campaign was unprecedented. The cooperation was between the 25th Army, 3rd Air Group, the Southern Squadron, 22nd Air Flotilla, and the 4th and 5th Submarine squadrons. The unity of command was achieved in many ways by the common objective of capturing Singapore, and the specific limitations of the Services. The naval forces needed air protection for their vulnerable sea transport convoys and specifically from Force Z. The Air Force needed to secure the critical aerodromes in Northern Malaya and needed manpower from the army to improve the airfields in southern Thailand. The army was heavily dependent on the naval forces for transport and numerous coastal hook operations, and on the air force to attack the numerous strong points and maintain pressure on the retreating British Forces.

Concentration of force was another factor that contributed significantly to the successful conduct of the Malayan Campaign. Yamashita took an unprecedented decision to exclude one allocated division from his final plan. This eased up naval transport and subsequent logistic support requirements. The vulnerable landings at Singora and Patani were supported by an initial landing at Kota Bahru. The plan also entailed the concentration of the Imperial Guards via the land route through Thailand.

The arrangements for the capture of Malaya and Singapore were also well conceived. The Japanese developed and employed an innovative form
of manoeuvre using successive amphibious operations, ‘leap-frogging’ forces down the peninsula in a well-orchestrated and integrated joint force effort. This allowed them to make simultaneous frontal assaults and place forces to the flanks and rear of heavily prepared enemy defenses and major combat forces. While the British strategy was to delay the Japanese advance as far as possible to ‘buy the time and space needed to bring in reinforcements’, General Yamashita embraced a strategy of the ‘driving charge’ where the army would relentlessly pursue the enemy, to repel or destroy the enemy without allowing him the opportunity to regroup. To forestall the British defence plan of Northern Malaya, an attack on Kota Bharu was simultaneously made with the landings of the main force at Singora and Patani with the aim of diverting the attention of the RAF and the allied land forces. The Japanese swiftly bombed the Sungei Patani aerodrome and also captured the important aerodromes of Kota Bharu and Alor Star to negate the threat of the British Air Force from the onset. The Japanese 22nd Air Flotilla promptly sought out the Prince of Wales and the Repulse and sunk them off Kuantan.

To maintain flexibility and agility, the Japanese plan catered for multiple approaches. This plan was continually adjusted based on changing circumstances. For instance, the 25th Japanese Army HQ redirected the 18th Division to land at Singora despite the objections of the Southern Army HQ (superior HQ of 25th Army) which wanted them to land at Mersing. Throughout the campaign the ground commanders exercised a high degree of initiative and promptly responded to challenges and opportunities. Upon seizing the initiative at Jitra and Alor Star, the Japanese relentlessly pursued the Commonwealth troops, causing significant chaos at successive defence lines and achieved overwhelming victories.

The element of surprise was exploited by masking the main landings at Singora and Patani by the landing at Kota Bahru, Speed and tempo of battle and a deliberate deception plan at Pulau Ubin executed by the Imperial Guards continuously kept the British off balance.

CULMINATING POINT ANALYSIS

A Culminating Point in an operation or battle is reached when the current operation can just be maintained but not developed to any great advantage. (JWP 5-00) This must be avoided at all cost by the time tested use of echelonment and judicious logistic and/or mobility planning and execution. To prevent a
premature culminating point, it is critical that the operation is sustained in terms of fighting spirit, options as well as logistics.

The Japanese did this very well by continuously rotating forces at all levels. On several occasions, the frontline forces were given reprieve. This was achieved on the move by landing and deploying fresh troops to the frontline. Fortunately for the Japanese such initiatives were facilitated by the requisition of ‘Churchill Supplies’ left behind by the Commonwealth forces. Moreover, the Japanese were quick to utilise captured transport and supplies to sustain their operations.

Despite their successes, Yamashita’s decision to push on with the attack on Singapore almost brought him to his culminating point. Fortunately for him, the British decided to surrender a short while after.

IMPLICATIONS FOR THE 3rd GEN SAF

The various operational lessons learned from the Malayan Campaign could serve as a useful checklist for the SAF as it formulates its 3rd Gen organisation, systems and processes.

PEOPLE

It is clear that development of the leadership and fighting spirit must continue to be the primary focus of the 3rd Gen SAF. Officers must fully understand the end-state and be well grounded in the operational art of war. The execution of operations is by their very nature going to be uncertain. Officers at all levels must be conversant with the human factors that can impact warfare e.g. building trust, morale, fighting spirit and managing fear, uncertainty and setbacks. Much of this cannot be trained in peacetime and will have to be picked up from reading widely in military history.

Officers must be trained to anticipate and take the initiative to adapt and innovate without the need to check back for instructions or directions. Not all wartime solutions need to be technological in nature. They will need to take bold and decisive actions at all levels. There must a strong linkage between top leadership and the junior officers at the frontline. Helmuth von Moltke transformed the Prussian General Staff into a “unique instrument combining flexibility and initiative at the local level with conformity to a common operational doctrine and to the intentions of higher command.”
SYSTEMS & ORGANISATION

From the analysis, it becomes apparent that the 3rd Gen SAF must be highly integrated across Services and formations so as to achieve the desired reach, speed and tempo to seize and maintain the critical initiative and the agility and flexibility to respond to opportunities and uncertainties. It must also have superior mobility and logistics to maintain its momentum. The 3rd Gen SAF must always anticipate and challenge current ‘realities’ continuously. It is also critical for every level to ensure that it has the necessary reserve capacity to handle opportunities and uncertainties. The command and control system needs to be based not on technology and bandwidth but on the implicit guidance/communication between the various levels.

While the Japanese were fortunate to have lived off the ‘Churchill supplies’ left behind, modern day equipment and systems may not offer similar advantages. There is a need to ensure that logistics systems and structures which in peacetime may not appear to directly contribute to combat power are not overlooked or compromised.

PROCESSES

It is vital for the 3rd Gen SAF to increase the level of joint training between the Services. While it may be necessary to maintain a healthy level of inter-Service rivalry, the speed, reach and responsiveness of a well integrated joint task force is no longer a matter of choice.

Joint doctrine needs to be developed and validated to ensure that there is a detailed and through understanding of each others’ capabilities and limitations. At the operational level the training must aim to develop a deep sense of mutual trust and respect for each other.

The Army’s Appreciation of Situation while important and comprehensive, needs to be used judiciously during execution. Its numerous levels and channels of parallel coordination could potentially gridlock and compromise flexibility at the operational level. The move should be towards greater independence of action through organic firepower and sustainability at the lower level. Commanders must have the capacity and agility to adapt quickly to the changing dynamics of real war (uncertainties and opportunities) and be prepared to adjust or change their plan without extensive upward coordination.
Endnotes

2 Ibid.
5 Tsuji, Japan’s Greatest Victory, Britain’s Worst Defeat, (Sarpedon Publishers, Incorporated, 1997).

Bibliography


Chiaravalle, Susan M. Operational Art: Lessons from Japan’s Malayan Campaign and Capture of Singapore, Naval War College, Newport, 1995


Greer, James A. (Col). Operational Art for the Objective Force, Military Review, Sep 2002

Hull, Andrew W. Massing of Forces and Means: A Key Soviet Operational Concept, Jane’s Soviet Intelligence Review. 3 no.3, March 1991
James, David H. The Rise and Fall of the Japanese Empire. London: Allen & Unwin, 1951


Krause, Michael D. and Phillips, R. Cody. Historical Perspective of the Operational Art, Center of Military History, United States Army, Washington, D.C., 2005


Percival, Arthur Ernest. The War in Malaya, (Extract from his official report to the government 1946)


Telp, Claus. The Evolution of the Operational Art: 1740-1813, From Frederick the Great to Napoleon, U.K., Routledge, 2005


Joint Operations in the Malayan Campaign

The historiography of the Malayan Campaign, or the fall of Singapore, has provided many reasons why the British failed to put up a creditable defence. Chief among them was the strategic predicament faced by Britain in 1940-41, after the fall of France. British Malaya received a low priority for all military resources such as tanks, artillery and, above all, the “promised” naval fleet and modern aircraft. The inexperienced and poorly trained land forces were scattered and ill-coordinated because their primary role was the defence of airfields across the Malay Peninsula. Some criticised poor intelligence and the neglect of pre-invasion warnings. Others lambasted senior British commanders for failing to prepare and coordinate forces for a more effective defence against the Japanese invasion. These valid reasons cannot explain fully why the British forces, which enjoyed numerical superiority and terrain familiarity, could only hold Malaya and Singapore for 70 days.

This article is an attempt to provide some reasons for the rapid collapse of British defence in Malaya. It will argue that the success of Japanese air, naval and land attack on the British defence in northern Malaya laid the foundation for the 25th Army’s speedy conquest. This first phase of the Japanese campaign marked the high point of joint operations in the Malayan Campaign. There are three key arguments in this article. First, the air force had a special role in joint operations. The integration of the air force with the other services had a great impact on the outcome of the campaign. Second, although a leading country in joint operations before World War II, British forces paid a heavy price for failing to coordinate its Navy, Air Force and Army against the Japanese. The early loss of air and sea superiority had a serious impact on subsequent land operations. Finally, tactical effectiveness in joint operations was decisive in the 25th Army’s success in Malaya. Successful naval-land, air-maritime and air-land operations allowed the Japanese to achieve air and naval superiority and to secure vital footholds. This paved the way for the subsequent British defeat and the speedy Japanese advance.

JOINT OPERATIONS DEFINED

Joint operations has been defined by the SAF as

“an operation carried out by elements from two or more services of the same nation for the accomplishment of a common mission. This requires the military activities of the involved service components to be integrated for the operation.”

1
Joint Operations are complex military operations that involve two or more armed forces of the same nation i.e. Army and navy, Army and air force, navy and air force, or all the three Services. Most frequently, joint operations include forces from all services in some capacity. Joint operations are primarily concerned with the coordinated actions of the armed forces. It requires the formation of a multi-service coordinating headquarters at the operational level of war which is one of the keys to military success.

Although joint operations may be traced to the early history of warfare, it became prominent only in the 20th century. During World War II, joint operations dominated warfare in both the European and Asia-Pacific theatres. In many instances, geopolitical circumstances of these major conflicts had also necessitated combining the joint capability of several nations which waged what was essentially termed ‘coalition warfare’.

Prior to World War II, “joint” warfare comprised mainly “specialised” joint operations. These were multi-service, multi-dimensional, multi-functional, and driven by common operational objectives. But each service was allocated a specific area of operation and tactical missions. It lacked unified command structure, doctrine and capabilities to work as a joint force. As a result, the main emphasis of this type of joint operations was co-ordination and de-conflicting of activities among the services rather than integrated operations.

The Malayan Campaign was fought from southern Thailand all the way to the island of Singapore. Although the main bulk of the fighting took place on the Malay Peninsula, the first phase of the invasion involved amphibious landings on the Isthmus of Kra and the east coast of Malaya, and naval and air battles in the South China Sea. The establishment of complete naval and air superiority by the Japanese and their successful amphibious landings at Singora, Patani and Kota Bahru seriously crippled the British defence effort. An analysis of these land, sea and air operations, which were the highlights of joint operations, will be the focus of this study.

BRITISH COMBINED OPERATIONS & DEFENCE OF SINGAPORE

The British did not use “joint” in their military parlance but used an equivalent term “combined operations”. In the early 20th century, this term usually referred to expeditions that combined navies and armies in the pursuit of a strategic objective, supplemented by an air element.
Unlike the contemporary usage of the term ‘joint operations’, combined operations had two distinctive characteristics. Although a combined force included elements of the armed forces, it implied a type of military activity such as an expeditionary force rather than a type of military organisation. In addition, combined operations were also strongly dominated by the navy. Such a combined operation was likely to be an army-navy expeditionary force which formed at a friendly port, sailed to a defended objective, conducted air and naval operations, and finally put a landing force ashore to capture the objective. As such, a combined operation generally arose from an exigency and its structure was loosely organised rather than placed on a permanent footing. The only exception was the Royal Marines which were created to close the gap of operating between the sea and the shore.

**SINGAPORE NAVAL BASE**

In 1919, Admiral Jellicoe visited Singapore and recommended that a fleet be permanently established in the Far East to secure its sea communications. He recommended the building of a naval base large enough to accommodate and service an entire naval fleet. In 1921, the Committee of Imperial Defence made the decision to build such a naval base in Singapore but rejected the idea of stationing a permanent fleet here.

The so-called “Singapore Naval Base” strategy was one that relied on the despatch of a fleet from Europe to Asia in the event that British interests were threatened. This strategy was based on the assumption that a “two-hemisphere Empire” could be defended by a “one-hemisphere Navy”. The success of this strategy required either that British interests in Europe and Asia would not be threatened simultaneously, or that Britain would have the active support of a friendly nation i.e. the United States. When war broke out in Europe by 1940, Britain decided to keep its main naval fleets in home waters and despatched only two capital ships, the Prince of Wales and the Repulse, instead of a sizable and balanced naval task force with adequate air cover, to Singapore.

The construction of a naval base in Singapore also brought about a proposal to build permanent defences on the southern coast of the island. It consisted of naval guns and coastal fortifications supported and manned by garrison units. In the event of war, these defences were required to hold out until the arrival of the fleet.
Up to the early 1930s, British defence of Singapore was based on a “combined operation” with the Royal Navy as the mainstay of the Imperial defence force supported by local garrisoned land forces during peace time. When war occurred, a sizable naval fleet supported by Royal Marines units would form a task force to fight a war in a distant colony of the British Empire. As the approach of the task force would be from the sea, the defence of Singapore was geared towards protection of its southern coast. The northern part of Singapore and the Malay Peninsula were not protected by any form of defences.

**ROYAL AIR FORCE**

The introduction of air power in warfare was both an asset and challenge to the conduct of joint operations. Aircraft with high speed and mobility are powerful weapons for surface operations. General Douglas MacArthur, the US Supreme Commander of South Pacific Area, warned Admiral Louis Mountbatten, the Supreme Commander of Southeast Asia in 1943 that Britain needed more air power to fight the Japanese.3 Air power played a decisive role in the Malayan Campaign. However, the participation of the air force could also complicate the conduct of joint operations. The role of the Royal Air Force (RAF) in the defence of Malaya was a case in point.

In 1924, when the First Sea Lord asked the British cabinet to approve the building of a naval base and a network of naval guns to defend it, this proposal was strongly opposed by Lord Trenchard, the Commander-in-Chief of the RAF. He criticised the proposal as short-sighted and obsolete. Trenchard instead proposed that Singapore was to be protected by the RAF which would destroy hostile naval ships before these could sail close to her shores. The Air Ministry claimed that torpedo-bombers, protected by fighters and assisted by reconnaissance aircraft would provide a cheaper and more efficient deterrent against any hostile attack. Aircraft could attack enemy forces far beyond the range of heavy guns. In addition, the mobility of the aircraft allowed the squadrons to be stationed elsewhere which maximised defence expenditure.

The Admiralty and War Office, on the other hand, believed that with improved techniques in fire control, heavy guns could adequately deter enemy warships and a seaborne attack. Heavy gun defences were permanent and could meet emergencies immediately whereas aircraft might not be available at critical moments because these could be deployed to meet threats in other war theatres.
This debate continued for a few years before a compromise was reached to construct both airfields and naval coastal guns at the same time. However, it was not until the Japanese withdrew from the League of Nations in 1933 that action was taken to reorganise coastal batteries.

In the early 1920s, the British War Office ruled out an attack on Singapore from the north as it believed the jungles in the Malay Peninsula to be impenetrable. Landings on Johor's eastern coast were also considered unlikely especially during the north-east monsoon (October to March). These assumptions, however, were questioned in the 1930s.

At the Staff College in Quetta, India in 1930, in a military exercise to test likely approaches for a Japanese attack, some students concluded that the Japanese would land in Malaya to get access to air bases before they attack Singapore. The General Officer Commanding (GOC) Malaya Command (the British Army in Malaya), Major-General William Dobbie in 1937 submitted a report which indicated that landings on Malaya's east coast during the northeast monsoon were not only possible but also probable. Poor visibility would restrict air reconnaissance and reduce the efficacy of air attacks on an enemy fleet.

In December 1931, a sub-committee of the Committee of Imperial Defence led by Stanley Baldwin recommended that coastal defences should be organised based on tri-service cooperation. The naval guns would be the main deterrent against a naval attack, and the air force was an essential addition to fixed defences and also served as a means of attack. The air force would play a role in all aspects in the defence of the Singapore base including fighter defence and offensive action against enemy ships.

Although London endorsed both the naval base strategy with fixed defences and the deployment of Royal Air Force in the defence of Singapore and Malaya, the service coordination on the ground was marked by poor planning and inter-service cooperation. For example, when the Air Ministry decided to construct airfields at Kota Bharu and Kuantan in north-east Malaya, and Kahang in eastern Johore, they did not consult the army which was responsible for the ground defence of these sites.

The RAF selected these sites because they could extend the RAF operational radius from Singapore to Malaya. The RAF could carry out reconnaissance
and offensive operations against enemy seaborne forces approaching the coast from the Gulf of Siam and the South China Sea. But for the land forces, these sites were located too near the coast where defence against an enemy who had succeeded in landing was extremely difficult. In addition, as the airfields were far apart, the protection of these sites would force the army to spread out thinly. Committing ground units to defend airfields also deprive the army’s deployment of forces on critical defence positions. The overall effect was that it reduced the army’s ability to fight an effective defence battle.

The general policy of the Far East Command (higher HQ of the Malaya Command) by the late 1940s was to construct as many airfields as possible, grouped to allow the concentration of aircraft. By December 1941, twenty-six airfields were completed on both sides of the coast. Fifteen of these were grass fields which would become muddy in wet weather and needed further improvements. Most of the airfields were without air artillery. Most important of all, as a result of the fall of France, Britain had to face the German military threat at home. The number of aircraft available in Malaya was only 158, far below the 336 the British Chiefs of Staff considered as the minimum required and the 566 originally requested for.

THE COMMONWEALTH ARMY

Given the serious weaknesses of the Royal Navy and Royal Air Force in Malaya, the primary responsibility for defence suddenly fell on the army. Its immediate problem was how to look after these airfields. The airfields became a defence liability and a danger if captured by the enemy. The army was not prepared for this unexpected role. Trained neither for jungle nor mobile warfare, many of the 87,000 personnel were unfamiliar with the ground they had to defend.

In May 1941, Lieutenant General (Lt Gen) A. E. Percival became the new GOC, Malaya Command and was faced with a dilemma. Should the army be deployed well forward north to deny enemy landings on the north-eastern coast and defend the airfields, or hold forces farther to the south in anticipation of landings at Mersing or even on Singapore? He decided to deploy the army in the north but the ground commander in the north had too few forces (two divisions plus) to perform their tasks. Two sets of airfields along the east and west coast had to be defended but his lines of communication were limited to a single railway line.
By September 1941, Percival had the following army units under his command. First, there was Lt Gen Heath’s III Corps, comprising two Indian divisions- the 11th under Maj-Gen Murray-Lyon and the 9th under Maj-Gen Barstow. The 28th Indian Brigade was the corps reserve. Also under Heath’s command were 5 battalions stationed at strategic airfields in northern Malaya and Penang. The disposition of III Corps had thus been heavily determined by the RAF’s requirements. Second, there was the Australian 8th Division under the cocky Maj-Gen Gordon Bennett. It consisted of two brigades and formed the second defence grouping. Finally there were the fortress troops of Singapore. Comprising two Malayan infantry brigades as well as coastal and air defence units, they had lost their front-line status as attention became focused on northern Malaya. Percival’s reserve was a mere brigade, the 12th Brigade under Brigadier Paris. Totalling 88,000 men in 31 battalions, Malaya Command’s strength fell short of the 48 battalions Percival felt essential to counter-balance his air and naval weaknesses.

In an effort to reduce the army’s weaknesses, Malaya Command came up with a contingency plan called “Operation Matador”. It was a pre-emptive action into Siam to deny the Japanese landing grounds at the ports of Singora and Patani. Although this plan might catch the Japanese off balance, it involved a violation of Thailand’s neutrality and needed advance authorisation. In early December 1941, London instructed the high command that Matador could be launched only after the Japanese had landed in Siam or in the Dutch East Indies. But by then it would be too late as the initiative would be in enemy’s hands. This was what happened. Despite warnings of impending Japanese operations, political concerns about Thai neutrality led to the cancellation of Matador on 7 December 1941. The planning of this operation had absorbed so much time of the III Corps staff that little attention was paid to the defence of the airfields and other defence preparations.

**JAPANESE JOINT OPERATIONS & INVASION PLANS FOR SOUTHEAST ASIA**

Although the Japanese Armed Forces conducted many joint operations before the outbreak of the Pacific War, they did not have a joint operations doctrine. Ever since the creation of a modern Japanese military during the Meiji Restoration, the Imperial Army and Navy developed as two separate entities. Both services reported to the emperor individually and there was no organisation to coordinate their efforts. Both had different threat perceptions and each developed different strategies to counter them. The army traditionally looked
north toward Russia and later the Soviet Union as its main threat while the navy focused on the Pacific with the United States as its likely enemy. Rivalries for a larger share of the budget and support from the Emperor had also prevented both services from working as a team.

In the early 20th century, air power had given the military new impetus for joint operations. Unlike the RAF which was an independent service, the Japanese Air Force was divided into the Naval Air Force and the Army Air Force. The Naval Air Force was the larger of the two and had superior equipment. It was usually employed against more distant and spectacular targets. The Navy Air Force achieved great successes during the Pacific War with the raid on Pearl Harbour and the sinking of the Prince of Wales and Repulse. The latter was also an example of collaboration between Army and Navy Air Forces, and between the army and the navy in joint operations.

The Army Air Force’s military objectives were usually those nearer to the frontline in support of ground forces. Before 1941, most of the army’s aircraft were short-ranged fighters such as the Nakajima Ki-27 (or “Nate”) with a range of only 390 miles. But they were replaced by Ki-43 in 1941 which had a range of over 740 miles. Although the Ki-43 fighter lacked armour and self-sealing petrol tanks, it could operate from bases in the Gulf of Siam to reach northern Malaya and even Singapore. The Army Air Force also had its bombers which carried out raids on targets in Penang and Rangoon from bases in French Indo-China. In sum, the Army Air Force had developed longer distant bombing capability by 1941 but it still retained its roles in reconnaissance and close air support for land forces.

**JOINT MILITARY TRAINING**

Apart from the organisation of the air force, common training and education for the army and air force officers also helped to promote the concept of joint operations. When an air cadet course was established at the Japanese Military Academy in 1926, in addition to special air force training, air cadets would attend a common military education and lived among the army cadets. When the Military Air Academy was established in 1937, air cadets were chosen from junior cadets who already had two years of training at the Military Academy. In this way, when they graduated, air officers had a fairly good knowledge of army operations. To further strengthen ties between the two services, artillery and infantry officers were selected each year for liaison duty with the air force, and they received reconnaissance training.\(^4\)
The Japanese also established Air-Ground Communication Squads in each headquarters. These squads were usually led by signal officers who had received training in air-ground communications. When an air-ground action was planned, various tactical details were worked out. These included procedures for air-ground communications, ensuring that the two forces were closely coordinated.

According to Masanobu Tsuji, Yamashita’s chief of operations in Malaya, the Japanese military had also two full-scale joint operation rehearsals. The first exercise took place in March 1941 and it involved large-scale navy and army maneuvers. The exercise scenario was an attack on Singapore following an amphibious landing in Malaya. The 5th Division, escorted by Combined Fleet elements and with cover from army air units, crossed the East China Sea while under simulated attack from air and naval units. It made a landing on Kyushu, and simulated the capture of coastal defenses. The exercise focused on anti-submarine and anti-aircraft defense of convoys, the tactical challenges of amphibious landings, and rapid construction of airstrips in newly occupied areas.

The second exercise took place in southern China in June 1941. Officers and men sweated under the hot sun for ten days while testing tactical and logistical advances from the Army Research Section. The exercise culminated in the amphibious landing of a reinforced infantry battalion on Hainan Island in China. The island’s circumference (over 600 miles) roughly approximated the distance from the planned landing sites in Thailand to Singapore, and the assault force made its way around the island to simulate an attack on the British base at Singapore. The troops made training attacks, practiced destroying and repairing bridges, and exercised other useful skills. Because of this, the Japanese learned a great deal about equipment, tactics, and organisation for warfare in the tropics.5

**SOUTHERN ARMY WAR PLANS**

As the Imperial Navy would be responsible for the western and central Pacific campaign, the Imperial Army would look after the southern campaign but would be supported by the navy and naval air force. The Imperial Army allocated twelve divisions, four independent brigades and two air groups of army air and navy air for the southern campaign.

By the end of October 1941, the Japanese high command had finalised its war plans for the “Southern Campaign”. It had identified the first set of objectives as the Philippines, Pearl Harbour and Malaya with subsidiary operations against
Hong Kong, Wake Island, and Guam. The Dutch East Indies would await later conquest. All these objectives should be secured within 150 days. By then, the Allies would no longer have air, naval and ground forces capable of blocking the resource-rich region of Southeast Asia.

A headquarters for Japan’s Southern Army was established at Saigon in late 1941 with Count Terauchi as the overall commander. For the purpose of the campaign, Southern Army comprised four smaller armies, each with its own designated objective. The 14th Army was to invade the Philippines, 15th Army was to take Thailand and Burma, 25th Army was to seize Malaya, and 16th Army was to overrun the Dutch East Indies. The conquest of Southeast Asia was to be accomplished at breakneck speed. In planning the campaign the Japanese aimed to capture Hong Kong in three weeks, Manila in seven weeks, Singapore in about three and a half months, and Java in about five months.

The 25th Army, commanded by Lieutenant General Yamashita Tomoyuki, was given the mission of capturing Malaya. Yamashita graduated from the Japanese Military Academy in 1906, and from Staff College of 1915 class which included General Tojo (war-time Prime Minister of Japan) and Lt-Gen Homma (Commander of 14th Army). His previous appointments were military attaché at Warsaw and Vienna, Director of the Military Affairs Bureau and Chief of Staff of the Army in north China. In 1940, prior to his appointment as commander 25th Army, he was the Inspector of Aviation. It was reported that he visited Europe and made a study of the German Luftwaffe and its co-operation with land forces.6

The 25th Army was allocated four divisions and a brigade of tanks but Lieutenant General Yamashita committed only three divisions for the Malayan Campaign. In addition, the 25th Army and the 14th Army were supported by 3rd Air Corps (under command of Southern General Army HQ) and 22nd Air Flotilla (Imperial Navy) with a combined strength of 564 aircraft. Both armies were also supported by two battleships, 9 cruisers and 13 destroyers. In comparison with the British forces, the Japanese military had overwhelming superiority in air and naval strength but numerical inferiority in land forces. This force structure implied that the success of land operations depended heavily on achieving air and naval superiority in the first phase of the war.

The capture of Singapore was Southern Army’s principal objective, as the island was the bastion of the British Empire and the most important naval base in Southeast Asia. For the invasion of Malaya, 25th Army headquarters was allotted the 5th, 18th
and Imperial Guards Divisions, and the brigade size 3rd Tank Group. Elements of these divisions had conducted training exercises in landing operations in China during the year. The 56th Division was available in reserve in Japan if required.

The 5th and 18th Divisions were experienced formations and had seen heavy fighting in China. By 1941 these two divisions had already accumulated much operational experience. The 5th Division had taken part in fierce combat in north and central China in 1937-38, and had spearheaded the coastal assault landing that preceded the seizure of Canton in October 1938. The 5th Division had also taken part in the occupation of northern Indo-China in September 1940, and was thus well acquainted with the jungles, rubber plantations and climate of South-East Asia.

The 18th Division had taken part in the Shanghai-Nanking campaign of 1937 and other campaigns in China. The 18th Division’s General Mutaguchi Renya was the regimental commander of the detachment involved in the Marco Polo Bridge Incident.

The Imperial Guards Division, on the other hand, had seen only limited action. The Guards were raised from all Japanese military districts, and comprised officers of leading families and men of above average physique.

The Japanese Army was not heavily equipped in terms of weaponry, nor was its transport, medical service or general logistic support particularly well developed. This was probably a consequence of not having fought a war against a developed nation since 1905. Japanese artillery was less plentiful than in a European army, and Japanese tanks were smaller than their European equivalents. However, the fighting in China had provided the Japanese military the opportunity to update its methods. In China, commanders had learnt to manoeuvre their forces quickly, often at night, in a bid to envelop their enemy. The Japanese approach to war placed an emphasis on stealth, speed, surprise and infiltration.

AMPHIBIOUS LANDINGS

On the dawn of 4 December 1941, the 25th Army’s first wave of ships slipped out of the concentration area at Samah Harbour, Hainan. The flotilla’s course brought them round the Cape of Cambodia. It then changed to a north-westerly course as it entered the Gulf of Siam, hoping to disguise its destination.
The British, having been tipped off about impending hostilities, intensified their aerial patrols in the Gulf of Siam. At 1330 hours on 6 December, a reconnaissance plane from Kota Bahru spotted some of the Japanese ships south of Cape Cambodia, streaming into the Gulf. On receipt of this report, the 11th Division was immediately put on a half-hour alert in anticipation of the ‘Matador’ order. However, Brooke-Popham, Commander-in-Chief of British Far East Command, fearful of violating Siamese neutrality, held back. Instead, precious time was lost as he sent aircraft out in a futile attempt to shadow the convoy. No further actions were taken by Brooke-Popham or Percival until 0100 hours on 8th December when news of the landing at Kota Bahru was received. At approximately 0200 hours the Japanese also began landing at Singora and Patani. These landings seemed to have caused considerable confusion in the British camp and it was only at 1330 hours, 12 hours after ‘Matador’ had been ruled out, that the 11th Division was told to fall back on Jitra. Having been geared towards ‘Matador’ since the 6th, this change of mission was a demoralising blow to the troops. The incessant rain and the reorganisation of stores and equipment certainly did not help to raise morale. By the evening of 8th December, as the 11th Division moved into its new position, the Japanese advance guard had already begun their advance towards the Malayan border.

The Japanese landings at Kota Bahru met with stiff opposition from the 8th Indian Brigade, and all three troopships were damaged by defending aircraft. However, by dawn, the untried defenders were in utter chaos and the Japanese led by Col Takumi had little trouble in achieving their immediate objectives.

On 8 December the Japanese disembarked troops at Singora in Thailand. The Japanese air force began an assault on Alor Star and Sungei Patani, the two major RAF airfields in north-west Malaya. Sungei Patani airfield was heavily bombed. A warning that unidentified aircraft were approaching had been received but the station commander missed the opportunity to scramble his fighters. Two Buffaloes took off through bursting bombs, but upon closing with Japanese bombers the pilots found that their guns would not work. They were not carrying any ammunition. In this air raid, no less than ten Buffaloes and Blenheims were destroyed or damaged on the ground by incendiary bombs. Sungei Patani station’s headquarters was also hit and the main runway badly damaged.7

At 1025 hours another twenty Japanese bombers raided Sungei Patani. More damage was inflicted and No. 21 Squadron was further reduced to only four serviceable Buffaloes. At Alor Star airfield, the Blenheims’ No. 62 Squadron was also caught on
the ground by Japanese bombers. Four Blenheims were destroyed and another five were damaged and the station’s buildings and fuel dump were set ablaze.

The remaining aircraft at Sungei Patani and Alor Star were ordered back to Butterworth. By the end of 8th December, the RAF in northern Malaya had lost over half its flying strength to strong Japanese air forces based in Indo-China.

Without air defence at Patani and Singora, the Japanese army faced practically no resistance except from the turbulent seas and the landings went smoothly. Army Commander Yamashita was among the first to land at Singora. Following a quick reorganisation, the Japanese began their push south from Singora and Patani that afternoon. The Saeki Regiment, spearheaded by a light tank company, raced down the Singora-Jitra road. Further east, the Ando Detachment, of Brigade strength formed the other pincer, moving rapidly along the Patani-Kroh road to threaten the 11th Division from the east.

SINKING OF THE PRINCE OF WALES AND REPULSE

The situation by the end of the first day could not have been worse for the British. The two-punch strategy by the air and land forces at the beaches had never got off the ground, nor had the ‘Matador’ plan. Indeed by evening, all the defence plans were in tatters but worse was yet to come.

At 1735 hours the small but powerful Force Z (comprising two capital ships and four destroyers) sailed out of the naval base as the British played their last pre-emptive card. But awesome as the two capital ships were, Force Z was sorely unbalanced. Without air cover, it had to face the hazards of Japanese air attacks. Admiral Philips’ intention was to attack the concentration of Japanese vessels at Singora by surprise and then make a swift withdrawal. However, at 1400 hours on 9th December, he was spotted by a Japanese submarine. Three hours later, he found himself shadowed by Japanese reconnaissance planes. With surprise lost, Philips had little alternative but to turn back. But the Japanese had assigned a task force to hunt down the fleet. They found their prey off Kuantan, and in a two-hour battle both the ‘Prince of Wales’ and ‘Repulse’ were sent to the bottom by a 76-strong bomber force. With the destruction of Force Z, the South China Sea became the unchallenged domain of the Japanese Navy.

The disaster also had a profound psychological effect on the forces defending Malaya. Fed by their own propaganda that the two capital ships were their best guarantee of security, many, like Churchill, could not help feeling that the bottom
had fallen off. Hence, by the end of the 3rd day of hostilities the British forces had suffered irreparable damage. Amongst the three services, only the army could maintain some fighting capability against Japanese attack.

**CONCLUSION**

British forces paid a very high price for failing to effect well coordinated joint operations in northern Malaya. The loss of naval and air superiority and vital footholds to the Japanese in the first three days of the war led to the defeat of III Corps and the loss of a large hinterland in Malaya. Above all, it created a loss of confidence and fighting morale that the British forces could never recover from.

On the other hand, Japanese tactical air-maritime-land co-operation was the key to successful amphibious landings and to achieving air and naval superiority which secured a strong foothold for the 25th Army. These successes had given a strong booster to the 25th Army despite being inferior in strength and resources.

Air power was a major contribution in joint warfare. Japanese success hinged on the organisation of its Air Force and willingness of the Navy to cooperate and suppress individual service differences and work towards a common objective.

**IMPLICATIONS FOR THE SAF**

The Malayan Campaign highlighted the essence of a realistic concept of joint operations. Although institutional development, technology and doctrine are important, the basis of joint operations was hard training and realistic exercises.

Cultivating “jointness” culture is a necessary condition for joint operations but it should not be at the expense of “service” culture. The Japanese case has demonstrated that joint operations hinged on service competency. The basis of a joint approach to operations is understanding warfare in a given medium: land, sea or air. Unless military professionals master one dimension of war, they cannot significantly contribute to the conduct of joint operations.

Military history since the outbreak of World War II has underscored the critical roles of joint warfare. Japanese success was based on the willingness to cooperate in joint operations apart from other organisational, doctrinal and technological factors. Willingness is about attitude and perception. Essential attitude and perception are best inculcated from the early years of military training and education.
Endnotes

1 JSP-10, Ministry of Defence, Singapore, Dictionary of Military Terms, Abbreviations and Acronyms, (Feb 94), pp2-98.


Command & Control in the Malayan Campaign: Implications for the SAF

INTRODUCTION

During the Second World War, the Japanese 25th Army inflicted a crushing defeat on the defending Commonwealth troops in Malaya and Singapore. This Japanese victory in the Malayan Campaign was attributed to many causes but two key factors stand out. The first was the inadequate provision of military resources to Malaya and Singapore and the other was the inept conduct of the defence by the British-led forces. The first factor was clearly the responsibility of British decision makers in London but the second was due mainly to ineffective command and control by Malaya Command and its immediate headquarters – Far East Command. Though this Campaign was fought more than 65 years ago using equipment and processes that are obsolete, there are certain enduring lessons on command and control which we can learn irrespective of technology and time.

WHAT IS COMMAND AND CONTROL?

Command and control is the single most important activity in battle as it is essential to all military operations and activities. It embraces all military functions and operations, giving them purpose and harmonising them into a coherent whole. Command and control is the means by which the commander decides what needs to be done and what appropriate action needs to be taken.\(^1\) For the purpose of this paper, the SAF definition of command and control will be used, i.e. the exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities and procedures employed by a commander for planning, directing, and controlling operations in the accomplishment of the mission.”\(^2\)

Command has often been associated with leadership but these are actually two separate but related functions performed by a Commander. Command is “the authority vested in an individual of the armed forces for the direction, coordination and control of military forces”\(^3\) while leadership in the SAF context is defined as a process of influencing others to accomplish the mission, inspiring their commitment and improving the organisation. Hence, leadership is concerned with inspiration and motivation while command is a managerial and legal function.
According to the US Marine Corps doctrine, there are 3 basic elements of command and control – People, Information, and Support Structure. War is essentially a clash between human wills and it is people who drive the command and control system. At any level, the key individual is the commander who has the final responsibility for success. Information, the second basic element in command and control, serves two key functions. Firstly, it is used to help create situational awareness as the basis for a decision. Secondly, it is used to direct and coordinate actions in the execution of the decision. The final element of command and control is the support structure which includes the organisation, procedures, equipment, facilities, training, education, and doctrine. In short, command and control helps generate swift, appropriate and decisive action to deal with uncertainty. It helps to reduce the amount of uncertainty that commanders must deal with so that they can make sound decisions. Effective command and control will be measured by how people use information to decide and act wisely.

FIRST ELEMENT OF COMMAND AND CONTROL: PEOPLE

The ‘People’ element in command and control is determined largely by who the commander is, what is his command concept and whether he is fighting an ethical war. The analysis of the ‘People’ element in the Malayan Campaign will focus on these three aspects while acknowledging that other ‘People’ aspects such as effective staff officers and the fighting spirit of the troops also played important roles in command and control.

Choice of Commander The importance of selecting the right Commander for the job cannot be overestimated. In the military, all decision-making, actions and expressions of moral restraint are centralised in the person of the Commander. He has multiple roles – leader, strategist, tactician, warrior, professional and moral arbiter. To command in war-time is to assume responsibility for taking and saving human lives. Given the critical role of a commander in war, were the right commanders selected by the two sides in the Malayan Campaign? The appointments of the two key commanders in this campaign offered a fascinating study in contrasting personalities.

Lt-Gen Arthur Percival was appointed as General Officer Commanding, Malaya Command in May 1941. He was selected by Gen Sir John Dill, Chief of the Imperial General Staff as the latter was impressed with Percival’s dedication and
intelligence. There was also a need to appoint a tactful GOC Malaya who could work with the other two Services, the commanders of the Commonwealth coalition forces and the colonial administration. The fact that Percival had experience in Malaya as GSO1 Malaya Command in 1937 was also a factor. While these considerations were valid, there was one key consideration which militate against the choice of Percival. His personality and temperament were unsuitable for a wartime commander and leader. He was indecisive and lacked the ruthlessness and aggressive qualities needed to be a military commander in war. The irony was that Percival's mentor, Gen Dill thought he was doing Malaya a favour by sending one of his best officers to deal with the Japanese threat.

The lack of suitability of Percival was borne out during the Malayan Campaign when he failed to impose his will on his subordinates, particularly Lt-Gen Heath, Commander III Indian Corps. It was noted in the diary of Maj Gen Bennett, the 8th Australian Division Commander, that Percival wanted the army to fight and to stop retreating but lack the personality to make it fight or even to remove officers who lack the fighting spirit” (an oblique reference to Gen Heath). During the campaign, Percival made several serious mistakes. One which deserved mention was his passiveness in the initial days of the war when there was uncertainty whether to activate the plan for the 11th Indian Division to move to Singora to fight the Japanese at the landing beaches (codenamed Ops Matador). He did not compel his immediate superior, ACM Brooke-Popham to decide quickly on the activation of Ops Matador as it would not be proper to insist on anything from a superior officer. Given the indecisiveness of Brooke-Popham, Percival should have acted quickly to secure 11th Division’s line of communications by putting the Krohcol force (a brigade minus force) on standby in Kroh (Krohcol’s task was to protect 11th Division’s line of communications by securing the ‘Ledge’, a defensive position along the Patani-Kroh road). However, Percival left it to Gen Heath as he deferred to the latter and failed to supervise this crucial operation. The result was that Japanese forces reached the Ledge first and 11th Division had to evacuate their main defensive position at Jitra to prevent encirclement.

On the other side of the fence, the Japanese selected one of their best, if not their best general to command the army designated to invade Malaya: the 25th Army. Lt-Gen Tomoyuki Yamashita had a reputation for inspirational leadership and in Malaya, he lived up to this reputation. Unlike Percival, Yamashita had extensive experience in command and displayed great realism
and judgement in his soldiering career as exemplified by his decisions during the Malayan Campaign. To illustrate, during the battle for the Kranji Peninsula on 9th Feb 42, the Japanese Imperial Guards launched a piecemeal attack across the Straits of Johore. As the battle progressed, they were either pinned down in a corner of Kranji or were bogged down in the swamps with a number of assault boats destroyed by burning petroleum poured into the Kranji river. In panic, the Division Commander, Lt-Gen Nishimura requested that the attack be called off and re-launched from the Sarimbun beachhead sector which had already been secured by the Japanese 5th Division. Such a switch could result in the annihilation of those Imperial Guards that had landed in Kranji. Lt-Gen Yamashita rejected the request and demanded that the reports of annihilation by enemy forces be verified first. He judged rightly that Nishimura was panicking and making a rash request which endangered those Guards already in Kranji.

With inadequate resources at hand, even a far better commander and leader than Percival was unlikely to delay the Japanese juggernaut long enough for adequate reinforcements to arrive. What really hurt the defence was an inferior air force and complete lack of tank forces pitted against the imaginative and fast-paced tactics of the Japanese. But with an aggressive, ruthless and inspiring commander at the helm, the chances of averting a defeat would be increased and the probability for a complete military disaster would be much reduced.

**Command Concept**  
It is in the mind of the Commander that all specialisation, personalities, doctrines, and missions must be integrated into some pattern of united effort. Rand Corporation researchers in 1999 had formulated the theory of command concept to explain the essence of command which lies in the cognitive processes of the commander, in particular the ideas that motivate command decisions and serve as the basis for control actions. Command concept is defined as a vision of a prospective military operation that informs the making of command decisions during that operation. This vision is concerned with what could and ought to be done in applying military force against an enemy.

It is timely now to examine the command concept of the two opposing armies. When Lt-Gen Yamashita took over command of the 25th Army in November 1941, the plan to capture Malaya was already drawn up. Nonetheless, he approved the final version and certainly had his own vision on how the plan was to be successfully implemented. Lt-Gen Yamashita's command concept would be something like this:
• To capture Malaya and Singapore in 100 days with four divisions supported by Southern Armies’ Air Group and Naval forces commencing in early December 1941.
• To achieve command of the air and sea by early destruction of enemy air and naval capabilities.
• To concentrate the main effort in west Malaya to exploit the good road and rail network.
• To emphasise speed and mobility and exert maximum pressure on the enemy so as to prevent them from effective re-grouping and consolidation of their defences.
• To maintain the initiative and keep the enemy off-balance by attacking on more than one front including insertion of forces into enemy’s rear to create confusion and to disrupt their lines of communications.
• To actively collect intelligence on enemy courses of action and objectives.

Lt-Gen Yamashita’s vision of prospective military operations in Malaya comes close to an ideal command concept. As Yamashita was only appointed 25th Army Commander one month before the actual invasion, he had not much time to communicate and implement his command concept. Yet his vision was to a very large extent implemented by his commanders at all levels – a remarkable achievement indeed. At the operational level, the Takuma detachment (Brigade plus force) and subsequently the 18th Division operated independently on the east coast of Malaya to sustain a credible second prong attack (see Map 1). At the tactical level, battalion-size forces conducted coastal hook landings at Perak and operated behind enemy lines in Johore to threaten enemy lines of communications. Such actions at the tactical level indicated a high level of situational awareness with regards to enemy intentions and capability. His successful capture of Singapore was in part facilitated by intelligence on British deployment on the island. Yamashita was fortunate in that he was strongly supported by sizable air and tank forces and two top notch Army Divisions. However, the implementation of his command concept was not flawless. As suggested by historian Brian Farrell, Yamashita failed to ensure that the causeway was destroyed which would have posed great difficulties for the Commonwealth troops to re-group in Singapore.

Lt-Gen Percival was not so fortunate in terms of resource allocation which were painfully inadequate for him to achieve his modest command concept for the Malaya Campaign summarised as follows:
• To defend Malaya and Singapore with a three-divisions (plus) force supported by the Far East Air Force and Far East Fleet
• To implement a forward defence strategy and to hold Japanese forces as far north as possible to buy time for reinforcements to reach Singapore
• To defend the airfields of Malaya to enable the RAF to destroy Japanese forces and to deny their use by the Japanese
• To train and prepare Malaya Command for war against the Japanese
• To work closely with the other Services, Commonwealth forces and the Civil Service in the defence of Malaya and Singapore

Percival’s command concept was politically necessary as the British (being the colonial master) had to try to defend the whole of Malaya despite insufficient military forces. The concept was also sound in that it recognised the vital importance of military reinforcements as the means for defeating the Japanese. However, on the whole, Percival’s command concept was found wanting in terms of conceptualisation and implementation and he lacked the personality and means to implement his command concept. He failed to supplement his defence with field and anti-tank defences along the north-south trunk road, the approaches to Johore Baru and the northern shores of Singapore despite pleas by his chief engineer officer, BG Simson. Percival allowed the misguided concern for civilian morale to overrule military necessity. He also failed to emphasise intelligence collection and analysis of his enemy. This led to poor situational awareness such as an overestimation of the strength of the Japanese forces and an inept deployment of his forces. In implementation, Percival managed to improve working relations with the other Services and the Civil Service. However, his command concept was not shared by Lt-Gen Heath who was concerned about encirclement and destruction in north and central Malaya and had preferred to concentrate in Johore for the decisive battle. Percival was unable to impose his will on Heath and failed to remove someone who did not support his vision. Lastly, he did not ensure his forces were well trained in jungle fighting, anti-tank tactics, mobile and aggressive defence and in combined arms and coalition fighting though there were some mitigating circumstances. Percival’s command concept failed as he was unwilling to take calculated risks to concentrate his forces at key locations in Malaya and he did not take the necessary measures to compensate for his military weaknesses.

Hence, the Malayan Campaign has shown us that a sound and realistic command concept was the key to successful command and control. In order for such an effective command concept to materialise, the right commander with a far-sighted military vision and professional competence must be appointed and he must have the will, forceful personality and resources to implement it.
Ethical War

Another aspect of the ‘People’ component of Command is ethics. Commanders are expected to ensure that their troops fight a war in accordance with the Geneva Conventions so as to safeguard human rights. This means adhering to the conditions for conducting a just war or *jus in bello*. One of these conditions would be to refrain from committing atrocities such as the killing of unarmed civilians and prisoners of war. On this aspect, there were at least two instances during the Malayan Campaign. The first occurred in Penang in December 1941 when three soldiers from the Japanese 5th Division committed pillage and rape and were court-martialed. General Yamashita also punished their battalion and regimental commanders with thirty days’ close arrest. The second incident occurred at Parit Sulong in Negri Sembilan in January 1942 when 150 wounded Australian and Indian soldiers were massacred by the Japanese Imperial Guards. This incident occurred after the Guards suffered heavy casualties in a hard-fought battle with the Commonwealth troops in the Parit Sulong area. The culprits were not punished as Lt-Gen Yamashita was unaware of this incident.

The ethical nature of Yamashita’s command was not in doubt. He had made it a policy that the enemy wounded should receive the same treatment as his own wounded soldiers. Yamashita was a strict disciplinarian who was watchful over the misconduct of his subordinates. Japanese atrocities occurred in Parit Sulong despite the punishment meted out by Yamashita for the Penang incident. Such war time criminal behaviour could be caused by temporary extremes of rage built up in men who had seen their friends and buddies killed. Another cause could be the inadequate personality traits of unstable individuals, especially those beset by ethnocentricity or other forms of fear and hatred, coupled with poor leadership. Troops who vent their rage and sadism at wounded enemy POWs and civilians during operations can come from any race or nationality. Under the conditions of war, such as the Vietnam War, good men can indeed become bad men, My Lai being a case in point. Strong ethical leadership at all levels of Command can prevent, moderate or reduce human rights abuses. The Malayan Campaign had shown that ethical leadership at the very top is not enough. The implication then is that commanders at all levels have to be firmly imbued with the concepts of *jus in bello* and ethical leadership and with the provisions of the Geneva Conventions, not just during war but also during peace-time training. We are also reminded of the need for commanders at all levels to be especially vigilant during difficult operations when troops experienced temporary extreme rage. This will not be easy as fighting a just war may rank low on the priorities of commanders who are more concerned with mission attainment.
SECOND ELEMENT OF COMMAND AND CONTROL: INFORMATION

Information serves to create situational awareness which enables commanders to make sound decisions and it is used to direct and coordinate actions in the execution of the decision. The Malayan Campaign provides an interesting study of how information or intelligence was used and whether these two functions were served when information was made available.

In order for a Command HQ to plan, train and prepare for operations, it must have information on the potential enemy; in particular their strength, capability and intentions. Accurate information regarding Japanese capabilities and intentions were available but ignored by the British. This was partly due to the habit of ethnocentrism, that is, evaluating an enemy by measuring him against oneself. As the British could not maintain air forces capable of offensive action in more than one overseas theatre, it was assumed that the Japanese could not take offensive action in Southeast Asia when they were already engaged in China. When experts such as Colonel G.T. Wards, the British military attache in Tokyo warned Malaya Command in April 1941 that the Japanese Army was a first-class fighting machine, his view was dismissed by then GOC Malaya Command, General Bond. It was believed that against an enemy ‘which held its nerve and its fire’ the Japanese would not have it so easy. The British fancied themselves as such a steely enemy and overestimated themselves. Due to such misperceptions, the British grossly underestimated Japanese military capability. For instance, it was believed that the Japanese lacked training in jungle warfare and would react badly to surprise attacks. Even as late as September 1941, the Far East Combined Bureau (an inter-service intelligence agency), advised that the Japanese were unlikely to attack before the monsoon ended in early 1942. Given this optimistic forecast, Lt-Gen Percival planned for combined arms exercises in early 1942 – reflecting his pathetic lack of situational awareness.

Gaining accurate information about the enemy is just the first step. How such information is used to direct and coordinate actions in the execution of a decision would reflect on the quality of the commander and his HQ. An insightful example was provided by the reaction of ACM Brooke-Popham, Commander-in-Chief, Far East Command, to the spotting of Japanese troop transport convoys in the South China Sea on 6 December at 1300 hours (two days before the invasion). This convoy was just 300 km away from Malaya. Signals intelligence had indicated the departure of Japanese convoys and impending invasion (diplomatic talks in
Lessons for ONE SAF

Washington between the US and the Japanese had just collapsed). The British Chiefs of Staff had authorised Brooke Popham to launch Operation Matador on his own authority on 5 December. Three days before, the US had given assurance of their support in the event of a Japanese attack.

Given the imminence of the Japanese invasion and US assurance, how did Brooke-Popham react? He feared that the Japanese might be baiting him by feinting an attack and he did not want to end up being the aggressor by launching Ops Matador and invading Siam. All Brooke-Popham did on 6 Dec 41 was to order the RAF to keep up their monitoring of the convoys. He lost the only opportunity to make a bold move to occupy Singora as it would be too late to activate Matador the next day. On the next day, 7 Dec 41, he incredulously decided again to postpone Matador instead of cancelling it. He had been advised by Percival that Ops Matador was no longer feasible yet he still dithered and 11th Indian Division waited at Alor Star railway station instead of preparing their defences at Jitra. Neither did he order a move into southern Thailand to block Japanese forces coming from Patani nor did he instruct the air force and navy to prepare for immediate strikes. Brooke-Popham’s inept response meant that Japanese amphibious landings were ineffectively opposed by British air and naval forces on 8 Dec 41 and the main defences at Jitra were not ready when attacked.

In contrast, the Japanese made far better use of information to create situational awareness for decision making and to direct and coordinate actions in the execution of a decision. While Japanese intelligence was far from perfect, they had accurate information on the intentions and capabilities of the British, particularly their grand strategy in the Far East, the weakness of the RAF and RN and the deployment of British forces in Malaya and Singapore. The Japanese were able to collect useful military information due to a variety of factors. As early as 1936, Japanese intelligence operatives were gathering information on the Southern Area (Japanese term for Southeast Asia). They also made the right decision to share information with their allies – Germany and Italy. From them, Japan obtained secret documents which revealed British defence strategy in the Far East.

There were occasions when Japanese situational awareness and decision making were helped by information about the enemy and own forces. For instance, during the battle for central Malaya, Yamashita launched amphibious forces off the west coast of Malaya to threaten 11th Indian Division line of communications. Tsuji objected as British air and naval power, though greatly reduced, still posed a threat
to these forces. Yamashita insisted on such operations as he was keen to employ all means to keep the British off balance.28 His decision would have been based on information that the Japanese had ample air cover, and that the British air and naval power had been greatly decimated and hence he was willing to take calculated risks. His strategy to use coastal hooks paid off handsomely and helped the Japanese get inside the British decision cycle or OODA (Observe, Orientate, Decide and Act) loop.29 During the fighting in Malaya, the British leadership suffered ‘strategic paralysis’ and was unable to react effectively to Japanese thrusts.

The preceding discussion suggests that effective command and control will be measured by how commanders use information to decide and act wisely.30 From ACM Brooke-Popham, we learnt that accurate and reliable information is useless in the hands of an incompetent and indecisive commander. It is what one does with the information that counts, not just the quality of the information. The way that Lt-Gen Yamashita used information to reach effective and quality decisions reveals the importance of appointing experienced and professional commanders with good judgement. The rapid tempo of modern day operations makes this even more important as the amount of information that can be gathered in time to be of use would be even more limited.31 Another implication was the failure of the British to challenge the erroneous assumptions about the enemy due to prejudice and ethnocentrism. Hence, there is a need to constantly re-evaluate and re-assess the assumptions made about our potential enemies’ capability and intentions. The Japanese experience also highlighted the importance of exchanging information with our allies and coalition partners.

THIRD ELEMENT OF COMMAND AND CONTROL: SUPPORT STRUCTURE

As for the third element of command and control, this paper will not examine the organisation, procedures, equipment and facilities which made up the command and control systems32 of the two opposing forces as these would be dated in view of rapid advances in communications and computer technologies. In the Malayan Campaign, the aspects of support structure that merits highlight would be training and doctrine. The lack of realistic and ruthless training was a key factor for the failure of Malaya Command to defend Malaya. Lt-Gen Percival was hampered by many obstacles in his quest to improve the training of his forces in Malaya. These include the need to build beach obstacles and defence works, tight control of expenditure by the War Office, units not receiving their full war scales and scattered deployment of formations.33 While these factors contributed
to inadequate training of Malaya Command, the failure to adjust orthodox military doctrine to conditions in Malaya was by far the most critical.

Malaya Command units were, by and large, still training to fight an orthodox defence, that is, to hold a line of fixed positions in a static defence, relying on the firepower of entrenched troops and machine guns. The enemy would be engaged and killed or driven off by the supporting artillery. Counter-attack was used to repel an incursion and to restore a front. Crucial decisions in battle were made by generals and colonels rather than platoon and section commanders. It was crucial to preserve lines of communication to prevent outflanking or encirclement. Such a doctrine evolved from the plains of northern Europe and the deserts of North Africa but did not take into account the jungle terrain of Malaya which favoured the attacker. Limited visibility of thick vegetation reduced the advantages of firepower and made it difficult to control large bodies of men. Fighting a static defence by holding a fixed line was not a viable proposition as it would be easy to infiltrate between positions or go around them. Battles revolved around control of the trunk road. Defence had to be mobile and aggressive which often meant fighting for the road off the road. Defence should focus more on inflicting losses on the enemy rather than holding a specific position. Hence, counter-attack must be emphasised. In many situations, the battle was fought most effectively at the small group level. 34

There were exceptions to the general failure to adapt orthodox army tactics to local conditions. 12th Indian Brigade, the Command reserve, realised that adopting a conventional static defence was a recipe for disaster in Malaya. They trained to operate in open country, rubber plantations and jungle vegetation. The 8th Australian Division troops were also more open-minded and innovative in their training compared to their British and Indian counterparts. The failure of most Malaya Command units to modify their training and fighting doctrine to a different environment can be attributed to both structure and command. No training directorate was set up in the pre-war years to formulate doctrine or to supervise training. At the command level, Percival did nothing about this deficiency and left tactical training to the units themselves. 35 Moreover, many senior officers in Malaya Command clung to the notion that the jungle was impenetrable. Those officers who adapted their fieldcraft to local conditions were dismissed as ‘cranks’ or ‘overzealous’. 36 Hence, it was not surprising that units took the easy way out and just continued doing what they knew rather than take the hard way to find out through tactical exercises in difficult terrain under hot humid conditions what doctrine and tactics were suitable for Malaya.
In contrast, the Japanese Army had the disadvantage of not having operated in tropical conditions and having to fight in unfamiliar terrain. These disadvantages were tackled through intensive training and preparations in the months prior to the Malayan Campaign. More importantly, the Japanese were prepared to adjust and to adapt to tropical conditions and Malayan terrain. It set up the Taiwan Army Research Department to conduct research and to come up with a new doctrine for conducting jungle warfare, amongst other tasks. This doctrine was tested by the Japanese Army in tropical terrain on Hainan Island where they conducted a strategic advance over hundreds of kilometres. The Japanese Army General Staff also conducted ten major exercises to test and refine their doctrines as well as to confirm the organisation and equipping of their forces for the campaign in Southeast Asia. By December 1941, the Japanese had prepared and trained their expeditionary forces with a common doctrine devised for fighting in Southeast Asian conditions, including Malaya.

The preceding review of the training and doctrinal aspect of the two opposing armies had highlighted some important lessons for the SAF. The side that won an impressive victory did not ignore local conditions but instead adapted their doctrine and tactics to the jungle environment of Malaya. Not only that, they worked hard at it with major combined-arms exercises in areas with similar climatic conditions. Innovation and adaptability were the hallmarks of the successful Japanese army in Malaya. The failure of the British-led forces to transform their battlefield doctrine and tactics led to their forces being outflanked and pulverised whenever they tried to hold positions along the main trunk road. While British military defeat could also be attributed to inferior resources such as second-rate air power and lack of tank forces, their inappropriate tactics and doctrine coupled with training inertia compounded their military disaster. Hence, the need to constantly innovate and transform one’s military forces to keep up with changing strategic circumstances is well illustrated. The SAF is certainly moving in the right direction with its current transformation effort.

CONCLUSION

In retrospect, there is much to learn about command and control from the experiences of the British and Japanese Armed Forces in the Malayan Campaign that are relevant to contemporary warfare. We in the SAF have to constantly ask ourselves whether the lessons of the Malayan Campaign have been truly distilled and imbibed. Have we appointed officers who are visionary, inspiring and ethical to the top command positions? Have we utilised our intelligence wisely and
constantly challenged our assumptions and biases on our potential adversaries? Are our training and doctrine constantly updated to take into account the latest changes in our likely area of operations? And finally, are we able to come up with sound and realistic command concepts during actual operations? If the answers are yes, yes, yes and yes, then we would have absorbed the implications of a campaign that cost the British Commonwealth some 20,000 troops killed or wounded.

Endnotes

3 Carl Builder, Steven Bankes and Richard Nordin, Command Concepts: A Theory derived from the Practice of Command and Control, (Santa Monica: Rand, 1999), pxiii.
5 Ibid., p10.
8 Ibid., p270.
9 Ops Matador was a two-part plan to fight the Japanese in southern Thailand. Part One was to move 11th Indian Division to Singora and to battle the Japanese at the beaches of Singora. Part Two was to secure the ‘Ledge’, a dominating ground along the Patani-Kroh road by Krohcol to prevent Japanese forces landing at Patani to use the Patani-Kroh road to encircle 11th Division defending Jitra.
10 Peter Thompson, The Battle for Singapore, (London: Portrait, 2005), p73. In fact it was reported that Heath, being the stronger character, overawed Percival.
12 Carl Builder, Steven Bankes and Richard Nordin, Command Concepts: A Theory derived from the Practice of Command and Control, (Santa Monica: Rand, 1999), pxiii.
18 Ian Ward, Snaring The Other Tiger, (Singapore: Media Masters, 1996), p47.
19 Tsuji, Singapore, p150.
21 Ibid., p90.
22 Farrell, Defence and Fall of Singapore, p127.
27 Ibid., p132.
31 Ibid., p9.
32 Defined by the US Department of Defense as “the facilities, equipment, communications, procedures and personnel essential to the commander for planning, directing, and controlling operations of assigned forces pursuant to the missions assigned”.
33 Ibid., p. 117.
34 Ibid., p. 119.
35 Ibid., p. 120.
36 Ibid., p. 121.
37 Ibid., p. 124.
38 Tsuji, Singapore, p11.
MAP 1: IMPLEMENTATION OF LT-GEN YAMASHITA’S COMMAND CONCEPT


Bibliography

Allard, Kenneth, Command, Control, and the Common Defense, (Yale University Press, 1990)


Dictionary of Military Terms, Abbreviations and Acronyms, (Ministry of Defence Singapore, 1994)


Tsuji, Masanobu, Masanobu Tsuji, Singapore 1941-1942, (Singapore: Oxford University Press, 1960)


Van Creveld, Command in War, (Cambridge: Harvard University Press, 1985)

Ward, Ian, Snaring The Other Tiger, (Singapore: Media Masters, 1996)

Appendix 1: The Singapore Strategy Retreats as Japan Advances
# Build-Up to Battle of Singapore

<table>
<thead>
<tr>
<th>Date</th>
<th>Main Events</th>
</tr>
</thead>
</table>
| 1921-2     | - Washington Naval Talks and Agreements.  
|            | - Anglo-Japanese Alliance replaced by Four-Power Treaty (consultative).  
|            | - British Government announces intention to build a first class Naval Base in Singapore. Search for anchorage large enough to accommodate the entire Main Fleet (Green Scheme). Period before relief set at 42 days. |
| 1923       | - Imperial Conference formally adopts the Singapore Strategy. Plans for Naval Base reduced to “Red Scheme” |
| Mar 1924   | - British Labour government suspends building of Singapore Naval Base. |
| Nov 1924   | - British Conservative government reactivates building Programme. |
| 1926       | - Plans for Naval Base reduced to “Truncated Red Scheme”. |
| Jun 1929   | - British Labour government slows down construction of Naval Base. |
| Oct 1929   | - Wall Street Stock Market crash leads to the Great Depression (1929-32) |
| Sep 1931   | - Japan invades Manchuria. |
| Mar 1932   | - UK abandons “Ten-Year Rule” which assumed it would not fight any great war for ten years. The rule was in force since 1919. |
| Jan 1933   | - Hitler comes to power in Germany |
| Mar 1933   | - Japan gives notice of withdrawal from League of Nations. |
| Oct 1933   | - Germany gives notice of withdrawals from League of Nations. |
| 1935-6     | - Italy defies League of Nations by invading and annexing Abyssinia. |
| 7 Mar 1936 | - Germany re-militarises the Rhineland. |
| 25 Nov 1936| - Japan signs Anti-Comintern Pact with Germany. |
| 7 Jul 1937 | - Japan invades China. |
| 14 Feb 1938| - Singapore Naval Base officially opened. |
| 4 Mar 1938 | - Committee of Imperial Defence recommends extension of period before relief to 70 days. |
| 13 Mar     | - Germany annexes Austria. |
| 15 Mar 1939| - Germany annexes Czechoslovakia in violation of 1938 Munich Agreement.  
| May-Jun    | - Period before relief extended to 90 days. UK will send 7 capital ships if Italy is neutral or neutralised, 4 if it is simultaneously at war with Germany, Italy and Japan and 2 if the US was an active ally on its side. |
| 3 Sep      | - World War II breaks out in Europe. Period before relief doubled to 180 days. |
| May-Jun 1940| - France and the Netherlands fall to German blitzkrieg. Singapore Strategy suspended indefinitely. |
| 22 Sep 1940| - Japan occupies Northern Indochina. |
| 27 Sep 1940| - Japan signs Tripartite Pact with Germany and Italy |
| 22 Jun 1941| - Germany invades USSR. |
| 24 Jul 1941| - Japan begins to occupy Southern Indochina. |
| 17 Oct 1941| - General Tojo becomes Prime Minister of Japan. |
| 2 Dec 1941 | - Force Z arrives in Singapore. |
| 7-8 Dec 1941| - Japan attacks Kota Bahru about forty minutes before Pearl Harbour. |
| 1942 15th Feb| - Singapore surrenders. |
Appendix 2: The Opening Blows

Legend
- River
- All-Weather Road
- Trail
- Railway
- Airbase
- Town
- Major Town
- Land Battle
- Air Raid

THAILAND
- SADAQ
- CHANGLUM
- ASUN
- JITRA
- Alor Star
- Kho

MALAYA
- GURUN
- Sungei Patani
- GRIK
- KUALA KANGSAR
- Ipoh
- Perak River
- Slim River
- Patani
- Singora

SOUTH CHINA SEA
- Kuala Trengganu
- Kuala Lipis
- Kuantan
- Force Z

Map showing locations such as Kuala Trengganu, Kuala Lipis, Kuala Kangsar, GRIK, GURUN, Sungei Patani, Alor Star, Kho, SADAQ, CHANGLUM, ASUN, JITRA, Butterworth, and others.
<table>
<thead>
<tr>
<th>Dates (1941)</th>
<th>Main Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Dec</td>
<td>Malaya Command mobilises Volunteer Forces in preparation for invasion.</td>
</tr>
<tr>
<td>2 Dec</td>
<td>Force Z arrives in Singapore.</td>
</tr>
<tr>
<td>5 Dec</td>
<td>British COS authorises Brooke-Popham to launch Operation Matador on his own authority. Malaya Command put on highest level of alert. HMS Repulse sails to Darwin on goodwill tour.</td>
</tr>
<tr>
<td>6 Dec</td>
<td>British aircraft spots Japanese convoys off Cape Cambodia. Percival orders 11th Indian Div to standby for Ops Matador.</td>
</tr>
<tr>
<td>7 Dec</td>
<td>Brooke-Popham informs London of decision not to launch Matador. Orders Malaya Command to postpone Matador until further notice. 11th Indian Div remains at Alor Star railway station.</td>
</tr>
<tr>
<td>9 Dec</td>
<td><strong>East Coast:</strong> Takumi Detachment defeats 8th Indian Brigade at Kota Bahru and takes airbases intact. 8th Indian Brigade withdraws towards Kuala Lipis <strong>Trunk Road:</strong> Saeki Detachment ambushed at Sadao.</td>
</tr>
<tr>
<td>10 Dec</td>
<td>Force Z sunk off Kuantan. RAF Far East pulls back to Singapore after losing half its strength. <strong>Interior Road:</strong> Ando Detachment beats Krohcol to The Ledge. Pushes Korhcol back into Malaya.</td>
</tr>
<tr>
<td>11 Dec</td>
<td><strong>Trunk Road:</strong> Saeki Detachment scatters defenders at Asun.</td>
</tr>
<tr>
<td>12 Dec</td>
<td><strong>Trunk Road:</strong> Two Japanese regiments reach and attack main British position at Jitra. <strong>Interior Road:</strong> Krohcol forced to retreat to Kroh.</td>
</tr>
<tr>
<td>13 Dec</td>
<td><strong>Trunk Road:</strong> 11th Indian Div withdraws from Jitra with losses exceeding one brigade.</td>
</tr>
<tr>
<td>14 Dec</td>
<td><strong>Interior Road:</strong> Krohcol withdraws from Kroh.</td>
</tr>
<tr>
<td>15 Dec</td>
<td><strong>Trunk Road:</strong> Japanese attack British position at Gurun, scattering 6th Indian Brigade.</td>
</tr>
</tbody>
</table>
Appendix 3: Battle for Central Malaya

Legend:
- River
- All-Weather Road
- Trail
- Railway
- Airbase
- Town
- Major Town
- Land Battle
- Air Raid
<table>
<thead>
<tr>
<th>Date</th>
<th>Main Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>28 Dec 1941</td>
<td><strong>West Coast</strong>: Roseforce lands behind Japanese lines and attacks convoy at Trong. <strong>Trunk Road (Ipoh-Kampar-Kuala Lumpur)</strong>: 12th Indian Brigade ends two weeks of effective rearguard engagements by withdrawing behind Kampar position.</td>
</tr>
<tr>
<td>29 Dec</td>
<td>East Coast: Takumi Detachment runs into 22nd Indian Brigade patrols north of Kuantan. <strong>Trunk Road</strong>: Strong Japanese probes repulsed by British artillery.</td>
</tr>
<tr>
<td>30 Dec</td>
<td>East Coast: Takumi Detachment catch 22nd Indian Brigade in midst of re-deployment south of Kuantan River. Perak Flotilla sunk by Japanese aircraft.</td>
</tr>
<tr>
<td>31 Dec</td>
<td><strong>East Coast</strong>: 2 companies of 2/18 Royal Garhwalis cut off north of Kuantan River. <strong>Trunk Road</strong>: Japanese 41st Inf Regiment assists Kampar position. 42nd Inf Regiment attempts unsuccessful flanking through swamp.</td>
</tr>
<tr>
<td>1 Jan 1942</td>
<td><strong>Trunk Road</strong>: Japanese 41st Inf Regiment holds Kampar position. 42nd Inf Regiment attempts unsuccessful flanking through swamp. <strong>West Coast</strong>: 11th Inf Regiment lands behind Br lines at Utan Melitang. The Independent Coy attacks it unsuccessfully. <strong>Trunk Road</strong>: 28th Indian Brigade (Gurkhas) redeploys 2 battalions from Sahum to Tapah to cover possible general retreat.</td>
</tr>
<tr>
<td>2 Jan</td>
<td><strong>Trunk Road</strong>: 41st Inf Regiment held at Kampar. 42nd Inf Regiment bogged down in swamps. <strong>West Coast</strong>: Perak Flotilla mostly sunk by Japanese aircraft. 4th Imp Guards Battalion floats down Perak River and lands near Telok Anson. 12th Indian Brigade ordered to Telok Anson to contain situation. BG Paris orders general Br withdrawal.</td>
</tr>
<tr>
<td>3 Jan</td>
<td><strong>Trunk Road</strong>: 11th Indian Div abandons Kampar. Percival orders it to hold north of Kuala Kubu junction until 14th Jan to allow 8th and 22nd Indian Brigades (9th Indian Div) to withdraw. 12th and 22nd Indian Brigades deployed at Trolak-Slim River, 15th Brigade at Tg Malim. <strong>East Coast</strong>: 2 companies of 2/12 Frontier Force cut off as 22nd Indian Brigade withdraws toward Jerantut. Loses Kuantan airbase to Takumi Detachment 7 days ahead of Percival’s schedule (10th Jan).</td>
</tr>
<tr>
<td>6 Jan</td>
<td><strong>Trunk Road</strong>: Japanese tank-led attack scatters 12th and 28th Indian Brigades in a 6-hour morning blitz dubbed the Battle of Slim River.</td>
</tr>
</tbody>
</table>
Appendix 4: Battle for Southern Malaya

Legend
- River
- All-Weather Road
- Trail
- Airbase
- Town
- Major Town
- Land Battle
- Air Raid
<table>
<thead>
<tr>
<th>Date</th>
<th>Main Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 Jan</td>
<td><strong>Trunk Road</strong> (Gemas-Ayer Hitam-Johore Bahru): Australians ambush Mukaide Detachment at Gemencheh.</td>
</tr>
<tr>
<td>15 Jan</td>
<td><strong>Trunk Road</strong>: Australians destroy Japanese tanks and repulse infantry at Gemas. Yamashita calls off Mersing landing.</td>
</tr>
<tr>
<td></td>
<td><strong>West Coast</strong>: Imperial Guards Div crosses Muar River and overwhelms 45th Indian Brigade. BG Duncan fails to report severity of Japanese breakthrough to MG Bennet. 1/4th Battalion, Imp Guards Div lands southwest of Batu Pahat and conceals itself. MG Bennet sends 2/29th Battalion Australian Imperial Force (AIF) from Trunk Road to West Coast.</td>
</tr>
<tr>
<td>16 Jan</td>
<td><strong>Trunk Road</strong>: Australian and Indian troops edge back towards Batu Anam.</td>
</tr>
<tr>
<td></td>
<td><strong>West Coast</strong>: Percival sends 2/19th AIF from Jemaluang (East Coast).</td>
</tr>
<tr>
<td>17 Jan</td>
<td><strong>West Coast</strong>: Australians destroy 8 Japanese tanks at Bakri. Repulses several infantry attacks.</td>
</tr>
<tr>
<td>18 Jan</td>
<td><strong>West Coast</strong>: 6/15th Indian Brigade ordered to Batu Pahat. Japanese column captures high ground at Bt Payong.</td>
</tr>
<tr>
<td>19 Jan</td>
<td><strong>Trunk Road</strong>: 9th Indian Div and 27th Australian Brigade withdraw south through Segamat.</td>
</tr>
<tr>
<td>20 Jan</td>
<td><strong>West Coast</strong>: Japanese column captures Parit Sulong bridge. Bakri units attempt breakout towards Bt Pelandok.</td>
</tr>
<tr>
<td></td>
<td><strong>Trunk Road</strong>: 27th Australian Brigade deployed at Yong Peng. 9th Indian Div leapfrog brigades down railway from Labis.</td>
</tr>
<tr>
<td>21 Jan</td>
<td><strong>West Coast</strong>: BG Duke (53rd Br Brigade) fails to attack Bt Payong as ordered. Bakri units fight southwards while holding off pursuing Japanese tanks. 6/15th Indian Brigade ordered to hold Batu Pahat. Fails to clear 1/4th Imp Guards.</td>
</tr>
<tr>
<td></td>
<td><strong>East Coast (Endau-Mersing-Kota Tinggi)</strong>: 22nd Australian Brigade repulses Japanese attacks at Mersing.</td>
</tr>
<tr>
<td>22 Jan</td>
<td><strong>West Coast</strong>: BG Duke cancels attempt to capture Bt Payong. Bakri units fail to capture Parit Sulong bridge. LTC Anderson orders destruction of all heavy equipment and retreat through swampland. Many POWs subsequently massacred.</td>
</tr>
<tr>
<td></td>
<td><strong>Railway (Labis-Kluang-Layang-Layang-Johore Bahru)</strong>: 22nd Indian Brigade at Kluang, 8th Indian Brigade at Rengam.</td>
</tr>
<tr>
<td>24 Jan</td>
<td><strong>West Coast</strong>: 53rd Br Brigade deploys to Benut and 5/Norfolk enters Batu Pahat by southern route. 1/4th Imp Guards attacks 6/Norfolk at Rengit (en route Batu Pahat).</td>
</tr>
<tr>
<td></td>
<td><strong>East Coast</strong>: 22nd Australian Brigade withdraws from Mersing towards Jemaluang.</td>
</tr>
<tr>
<td>25 Jan</td>
<td><strong>Trunk Road</strong>: 2/30th AIF and 2/Loyals ambushes Japanese before withdrawing south as planned.</td>
</tr>
<tr>
<td></td>
<td><strong>West Coast</strong>: Units at Batu Pahat withdraw down coast road with help from river gunboat Dragonfly.</td>
</tr>
<tr>
<td>26 Jan</td>
<td><strong>West Coast</strong>: Batu Pahat units encounter strong Japanese road block at Senggarang. Relief column from 53rd Br Brigade wiped out.</td>
</tr>
<tr>
<td>27 Jan</td>
<td>**BG Challen (6/15th Indian Brigade) orders heavy equipment destroyed. Men split into two columns. One headed for Benut and was later captured. The other reached Rengit and is evacuated by sea.</td>
</tr>
<tr>
<td></td>
<td><strong>East Coast</strong>: 2/18th AIF ambushes and pulverises Japanese battalion near Joo Lye-Nithsdale Estate.</td>
</tr>
<tr>
<td>28 Jan</td>
<td><strong>Railway</strong>: Bridge at Layang-Layang prematurely blown, cutting off 22nd Indian Brigade to the north.</td>
</tr>
<tr>
<td>31 Jan</td>
<td>Malaya Command completes withdrawal into Singapore.</td>
</tr>
</tbody>
</table>
Appendix 5: Battle for Singapore

Dispositions, 22nd Brigade, 10 p.m. 8th February

Source: The Japanese Thrust, Australia in the War of 1939-1945
Bulim line, 9th February

Source: The Japanese Thrust, Australia in the War of 1939-1945
Causeway sector, 8 p.m. 9th February

Source: *The Japanese Thrust, Australia in the War of 1939-1945*
<table>
<thead>
<tr>
<th>Date (1942)</th>
<th>Main Events</th>
</tr>
</thead>
</table>
| 7 Feb       | **East**: Imp Guards Div launches feint attack on Pulau Ubin.  
              **West**: 5<sup>th</sup> and 18<sup>th</sup> Div cross Straits of Johore to attack 22<sup>nd</sup> Aus Brigade. |
| 8 Feb       | **West**: 22 Aus Brigade retreats to Ama Keng village in disarray instead of fighting to the death on the beaches as ordered. MG Bennet sends Australian reserves (2 Battalions plus a company). Percival sends badly depleted 12<sup>th</sup> and 15<sup>th</sup> Indian Brigades. Defenders fall back to Kranji-Jurong line. |
| 9 Feb       | **Causeway**: BG Maxwell (27<sup>th</sup> Aus Brigade) makes unauthorised partial withdrawal to cover left flank. Imp Guards Div sends one battalion across at Kranji.  
              **West**: 5<sup>th</sup> and 18<sup>th</sup> Div cross Straits of Johore to attack 22<sup>nd</sup> Aus Brigade. Percival sends badly depleted 12<sup>th</sup> and 15<sup>th</sup> Indian Brigades. Defenders fall back to Kranji-Jurong line. |
| 10 Feb      | **Causeway**: BG Maxwell (27<sup>th</sup> Aus Brigade) makes unauthorised partial withdrawal to cover left flank. Imp Guards Div sends one battalion across at Kranji.  
              **West**: 5<sup>th</sup> and 18<sup>th</sup> Div cross Straits of Johore to attack 22<sup>nd</sup> Aus Brigade. Percival sends badly depleted 12<sup>th</sup> and 15<sup>th</sup> Indian Brigades. Defenders fall back to Kranji-Jurong line. |
| 11 Feb      | **West**: BG Taylor (22 Aus Brigade) misinterprets Percival’s warning order to prepare fallback positions on Reformatory (Clementi) Road as an Ops order to retreat. Other units withdraw as they discover open flank. Percival orders counterattack to reoccupy Kranji-Jurong line. Sends Tomforce, assembled from different brigades of 18<sup>th</sup> Br Div, to defend Bt Timah. 5<sup>th</sup> and 18<sup>th</sup> Div pre-empt counter-attack and occupy Kranji-Jurong Line. 50 Tanks push 12<sup>th</sup> Indian Brigade from Chua Chu Kang to Dairy Farm Estate.  
              **Japanese**: Take Bt Timah. Missed opportunity to drive straight into city. Tomforce’s full-scale attack on Japanese at Bt Timah fails. Retreats towards Chinese High School. 27<sup>th</sup> Aus Brigade scattered in retreat from Bt Panjang. |
| 12 Feb      | Percival orders defenders into final perimeter around city area. Loses supply dumps and reservoirs around Bt Timah.  
              **Japanese**: Take Bt Timah. Missed opportunity to drive straight into city. Tomforce’s full-scale attack on Japanese at Bt Timah fails. Retreats towards Chinese High School. 27<sup>th</sup> Aus Brigade scattered in retreat from Bt Panjang. |
| 13 Feb      | Most units withdrawn to final perimeter. Losses severe.  
              MG Bennet orders all Australian units into all-round defence around Tanglin Barracks. Emergency effort to restore water supply. Percival calls conference at Fort Canning. Senior commanders urge surrender. Percival refuses.  
              **Japanese**: Take Bt Timah. Missed opportunity to drive straight into city. Tomforce’s full-scale attack on Japanese at Bt Timah fails. Retreats towards Chinese High School. 27<sup>th</sup> Aus Brigade scattered in retreat from Bt Panjang. |
| 14 Feb      | Percival agrees. Churchill sends permission to surrender through Wavell.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support. |
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.  
              **Japanese**: Take 1<sup>st</sup> Malay Battalion at Pasir Panjang Ridge. Bennet refuses permission for Australians to fire in support.