

USI Gold Medal Essay Competition - 2008 Group 'A'

Principles of War - Need for Re-evaluation in Context of the Indian Experience*

Commander Ashwin Arvind**

Introduction

War is the 'management of violence' for some and 'a continuation of political transactions' for others.¹ Historically wars have been waged and conducted based on the Principles of War. These principles illustrated in the writings of Sun Tzu and later writers have stood the test of time. Various 'Revolutions in Military Affairs' have altered the importance of these principles, and added a few more, but the basic principles remain the same. Each nation with, its own experience of conflict and available military capability, has evolved its own set of principles. Indian principles of war are enumerated in the Joint Doctrine Indian Armed Forces, 2006. With the Indian Armed Forces evolving towards effective jointmanship, it is necessary to accept them as the Principles of War of the Country. They influence the conduct of joint operations at all levels, possibly varying in degree but not in relevance.² The Indian Air Force Doctrine has already modified these principles in October 2007 and added a few more.³ While these are justified by the authors of the Doctrine and may find agreement among the 'Air Warriors', it is necessary that the Principles of War address all dimensions and spectrum of conflict. The Navy, in their Maritime Doctrine, has enumerated each principle but has neither modified nor added to them.⁴ It however, mentions the emergence of five more in modern maritime thinking. The Army continues to enumerate the same eleven principles, as laid down in the Joint Doctrine.

This paper endeavours to collate all the enunciated Principles of War. It examines their relevance across the dimensions and spectrum of conflict that the Country is likely to face and suggests a set of principles that would stand the test in future. The principles are guidelines for the conduct of war. Clausewitz in his introduction to the principles of war stated, "These principles, though the result of long and continuous study of the history of war will not so much give complete instruction to Your Royal Highness, as they will stimulate and serve as a guide for your own reflections".⁵ The Principles of War do not apply only to the Armed Forces of the Country but across the Politico-Economic canvas of war waging. Therefore, a list of these principles would need to be relevant in the non-combat areas of conflict as well. They need to be examined for relevance in the aftermath of the technological advances which have contributed to the Revolution in Military Affairs (RMA) today. They also need to be examined against the background of increased well being of the Indian populace and the consequent reluctance to accept attrition, especially human casualties. This RMA, in the Indian context, is certainly not restricted to capability alone. It also encompasses the psyche of the people who handle and manage the technology at the disposal of India.

While most military minds agree that the conduct of war is governed by a set of principles, they are always reluctant to enumerate them. The great Marshal Foch in his book 'The Principles of War' 6 lists economy of force, freedom of action, free disposal of forces, security and 'etc'. One can conclude that he was in doubt as to how many there were. The first 'official' listing of the principles of war was done in 1924. The Field Service Regulations for the British Army listed them as objective, offensive, mobility, security, surprise, concentration, economy of force and cooperation. These are similar to those listed in the present day UK Joint Doctrine.⁷

The Principles of War as Enumerated by the Joint Doctrine. The Joint Doctrine of the Indian Armed Forces lists eleven well accepted principles of war. The 'Basic Doctrine of the Indian Air Force' has added the following to the list:

- (a) Deception and Surprise.
- (b) Flexibility and Managing Change.
- (c) Synergy, Synchronisation and Cooperation.
- (d) Generation and Sustenance of Favourable Asymmetry.

The Indian Navy 'Maritime Doctrine' mentions the emergence of five more principles related to modern maritime thinking :-

- (a) Seizing the Initiative.
- (b) Containment.
- (c) Defence in Depth.
- (d) Presence.
- (e) Stand Off Precision Attack.

National Aim and Interests

National Aim. To create an internal and external environment for unhindered economic progress and socio-political development to enable India to assume its rightful role in the emerging world order.⁸ It, therefore, flows that the threats to the nation's interests would be as much internal as these would be external. These threats would primarily thwart the achievement of this National Aim.

National Interests. The National interests are as under:-⁹

- (a) To preserve the sovereignty, unity and territorial integrity of India.
- (b) To maintain the democratic, secular and federal character of the Indian Republic.
- (c) To safeguard the nation's existing and emerging strategic, political, economic and military goals in consonance with the National Aim.
- (d) To ensure a secure and stable environment conducive to unhindered economic growth and well being of its people.
- (e) To attain its rightful place in the comity of nations by contributing towards international peace and security.

Internal Threats

Terrorism. Home grown, and at times foreign trained subversive elements, are and will continue to be one of the biggest threats towards creating a conducive 'environment' in the Country. The threat is to the establishment and maintenance of peace and order within the country. Whilst the reasons for this threat are generally restricted to the socio-political realm of National affairs, the resolution of the conflict of interests would necessarily involve the use of force and other means. Conflicts in this realm are likely to be short, swift and in most cases against a canny and unseen adversary.

Sectarian Conflicts. The Country faces sectarian movements in many parts. These movements stem from perceived neglect of interests resulting in two types of demands. First is the demand for independence/autonomy. The second to carve out a new state for administrative purposes. Responses to these threats need to be resolved.

Sponsored Acts of Violence. Increasingly India faces acts of violence sponsored from outside the Country. These acts may or may not be supported by internal subversive elements. The magnitude of violence and the desired end state set them apart from the earlier threats. Response to such acts may include actions within and outside the borders.

Organised Crime. While the Armed Forces could easily dismiss this as a police function, the amalgamation of this with any of the above three would result in this affecting military operations in support of internal security. The nexus between organised crime and terrorism has resulted in catastrophic incidents of violence – most notable being the Mumbai blasts of 1992.

Communal and Ethnic Violence. The root of these conflicts lies in vast differences that exist in the idea of 'India' amongst various religious and ethnic groups of the Country. The response may not be use of force but rather the show of force. The Joint Doctrine mentions the principle of restraint in the chapter on operations other than war. This principle would apply at the forefront of any military response to such crises.¹⁰

External Threats

Territorial Integrity. The foremost threat to any nation is a threat to its territorial integrity. This could range in intensity from minor border incursions to full fledged war. The threats to India especially from Pakistan in the North and West, and China in the North East are likely to remain omnipresent. The issue of territory is as much driven by economics as by the 'ego' of a country. It cannot be overemphasised that loss of territory is intolerable both to us and our potential adversaries. This intolerance for loss of territory will be one of the prime reasons for escalation in the intensity and scale of conflict. The Armed Forces would, therefore, need to plan military operations around the central aim of 'no loss of territorial integrity'.

The Geo strategic location of India and her size entail that the threat to territorial integrity is likely to be restricted to operations launched and sustained on land. The idea of a seaborne / air launched operation for occupation of territory, in today's world of combat power parity, would be restricted to adversaries with small land masses or island territories. It, therefore, follows that maritime and air operations undertaken in the face of such a threat to the mainland would be subordinate to operations on land. This would have a corresponding effect on the principles governing such conflicts.

Threats to Economic Interests. The Indian Armed Forces are today working to 'catch up' with the Country's economic interests in terms of reach and sustenance. As the economic interests of the Country move away from sovereign territory, the capability required in defending these interests and the principles of war applicable would entail a change. The need of the hour is the critical capabilities in combat power and the ability to project legitimacy of one's actions. The increased presence of neutrals and non-combatants in these areas of operations would further affect the applicability of these principles.

Collateral Threats. With increased international cooperation and subsequent interlinking of interests, threats to one nation would result in collateral threats to another. This could be both economic and human. The economic interests of a country are likely to be threatened by conflict in another nation. In addition, the increasing number of Indian expatriates and the consequent humanitarian crisis that is likely to develop would affect the Country. The Armed Forces, especially the Navy and the Air Force, would need to mount operations to provide succour and for evacuation. The principles guiding such operations would be substantially different than those existing. Cooperation would be the prime factor, with transparency and media management, playing an important role.

Nature of Future Conflicts

Future conflicts are likely to be unpredictable due to diversity of threats, blurring of lines of responsibility between the political and military spectrum of conflict management, and the increasing effects and easy availability of new age weapons. In an era when nations were represented in war solely by their armies or navies,

the issue was decided by a single decisive battle, called the Entscheidungsschlacht by Karl von Clausewitz.¹¹ In today's scenario, the National power of a nation may not be reflected in its entirety in the Armed Forces. This is especially true in Asymmetric Warfare where the local populace and ideological supporters outside the nation are equal and effective contributors to combat power. We are now witnessing quite radical change in the global security system. Even the continued dominance of the nation state can no longer be taken for granted, with its power apparently leaking away to supranational, transnational and sectional organisations and interests.¹²

‘War is the continuation of state policy by other means’.¹³ While this statement does hold true for most situations, the rise of non state actors and the resultant spectrum of conflict means that future conflict need not be governed by the interest of a state. With the proliferation of lethal weapons, the intensity of a conflict with a non state actor would continue to fall within the ambit of armed conflict and war. Non state actors in the areas of conflict may include Non-Governmental Organisations (NGOs), International Organisations and private commercial interests.

Range of Military Operations.¹⁴ The US Joint Doctrine describes it as Military Operations Other Than War (MOOTW). The Indian Joint Doctrine also enumerates MOOTW which includes operations to deter war and resolve conflict, and civil assistance. The doctrine also lists six additional principles of war applicable in such operations. These are:

- (a) Objective.
- (b) Unity of Effort.
- (c) Security.
- (d) Perseverance.
- (e) Restraint.
- (f) Transparency.

Technology and War. The effect of technology on war has been studied to a large extent by nearly every nation and her armed forces. Advancements in technology and the decreasing cycles of obsolescence has resulted in a RMA at an unprecedented scale. The Indian Armed Forces are grappling with this huge paradigm shift in the key areas of enhanced Battle Space Awareness and dimensions, increased effects of weapons and improved precision, shorter reaction times, proliferation and the war in the realm of cyberspace. The evolving doctrine and tactics are increasingly finding it difficult to keep pace with technological advancement. The principles of war would, therefore, also need to evolve to stay ahead of technology and future conflicts.

Arms Race and War. Not all arms races lead to war, as the biggest one in history, that between the USA and the USSR proves. Intention rather than capability matters. But runaway arms sales, erratic build-ups, sudden infusion of weapons into a tense region and surprise shifts in military balances all raise unpredictability and hence the risks of violence.¹⁵ The arms race that results in the excess production of arms and their consequent ease of availability to non-state actors would result in lethal combat power in the hands of the less responsible elements. Dealing with this threat would require the armed forces of a nation to operate in dense urban environments with the associated pitfalls of collateral damage. It would also result in the graduated application of force with emphasis on identification of potential threats in a low contrast environment.

TESTING THE PRINCIPLES OF WAR FOR RELEVANCE AND ACCEPTABILITY

Existing Principles

Selection and Maintenance of Aim. The aim at each level of war differs from the one above and below. At the National-Strategic level it would necessarily be biased towards the politico-diplomatic end state desirable. At the tactical level, it could be something as simple as capture of a hill feature. While the selection of an aim is relevant in any future conflict, the relevance of maintenance of this aim is arguable, especially at the tactical level of war. In the increased tempo of tomorrow's war, the scenario is likely to change at every instance. New capability, intelligence or improved battlefield transparency after the commencement of combat action may need a review of the aim at every step. This is especially so in low intensity conflicts of short duration. The question of, ‘What can be achieved?’ must be asked at each step. It, therefore, follows that the ‘selection of an aim’ is relevant and applicable at every level of war but the ‘maintenance’ of it is not relevant at the tactical level. However, as a principle of war it still holds good and would also be applicable in the future.

Offensive Action. Offensive action can be defined as ‘the ability to seize the initiative through bold and swift action with an aim to unsettle the enemy's coherent thought process and consequently his reactions’.¹⁶ In a conflict between nation states, seizing the initiative would mean pre-empting the enemy. This would sometimes lead to an unwanted escalation of the situation. However, very few armed forces in the world possess the ability to absorb the first blow and react effectively thereafter. This is especially true in today's scenario of increased lethality of weapons which could deliver a devastating first blow. In Low Intensity Conflicts (LIC) and Asymmetric Warfare, the ability to take offensive action would at most times rest with the weaker of the two sides. The greater power would be restricted by the requirements of showing restraint and bringing legitimacy to its actions. The aim of the greater power in an Asymmetric War would always be to create conditions of peace. The freedom to bring the enemy to battle at a place and time of one's choosing would wrest the initiative back from the adversary. The principle of ‘offensive action’ therefore needs to be replaced with ‘freedom of action’.¹⁷ This would mean the ability to resort to an action of choosing and the time of choosing.

Economy of Effort. “Limited war emphasises the principle of economy of force. Under limited war, the open ended objective of doing all possible injury to the enemy is ruled out. Each application of military power must be tailored to a specific military objective based, in turn, on specific political objectives”.¹⁸ The idea of economy of

effort finds instant popularity. This could mean lesser body bags at one end to lesser financial outflow at the other. Across the board, military leaders to political masters and economists would wholeheartedly back an option with this as the central theme. Economy of effort may be defined as the efficient use of all means physical, moral and material, towards winning a war. Of all the principles, it is the most difficult to apply, because of its close dependence on the ever changing conditions of war.¹⁹

Concentration of Force. The wars of tomorrow would increasingly move away from attrition based warfare to effects based warfare (EBO). In short, the combat power of a nation must be able to create the desired and necessary effects to create an environment that would lead to achievement of the desired end state. With current and future enhancements in weapon ranges the ability to concentrate military force in a place and time of choosing would be irrelevant. The end effect of a thousand riflemen can today be achieved by a single weapon. Weapons of today are designed for pinpoint accuracy and minimum collateral damage. It, therefore, follows that it is not the concentration of force but the concentration of massed effects at a place and time of choosing that would win a war. The big battle to settle the war as propounded by Mahan is a thing of the past. Tomorrow it will be the ability to create concentrated effect at the decisive point against the enemy that would win the war.

Flexibility. Flexibility has been defined as ‘the capacity to adapt, to change a previously appropriate, but now inappropriate response, because of a change in environmental priorities or contingencies, or in a perceived goal’.²⁰ The application of flexibility at the tactical level can be best illustrated by the ‘swing role capability’ of modern fighters. The ability of these machines to change colours for a new mission in-flight provides it inherent flexibility. However, at the strategic and operational levels of war, flexibility is much more than capability. Flexibility would entail the ability to incorporate plans for every projected scenario and essentially flexibility in the thought process of the military minds. Flexibility in capability has been made virtually omnipresent by technology. Capability to meet different and changing scenarios exists with almost all weapon and delivery platforms. Land forces can much more easily and effectively adapt to changing situations and terrain due to enhanced abilities made possible through technology. Air mobile forces can move from the tactical to the strategic requirements of a campaign within hours. Navies can shift gear from a peaceful mission to power projection and its use with complete ease. In the days of yore, it was courage, determination and resilience which won battles. Today in the fast moving or mobile battle, the requirement is more for improvisation, the ability to produce original solutions at the spur of the moment.²¹ It therefore follows that it is the originality of thought and improvisation that would lead to flexibility at every stage.

Surprise. Surprise has been highlighted as a principle of war by nearly every nation. However, it has been labelled the neglected principle.²² Surprise can be defined as that which results from going against an enemy at a time and/or place in a manner for which he is unprepared. It is not necessary that the enemy be taken unaware, but only that he becomes aware too late to react effectively.²³ Increased battlefield transparency has made the achievement of surprise virtually impossible. Many commentators on war have written off surprise as untenable due to technological advancements. However, despite all these advancements, nations have managed to achieve surprise at every level of war. Technology, rather than being a limiting factor, can in fact be an element of surprise. The sudden and unexpected introduction of a new technology/capability can achieve surprise. Doctrinal surprise can be achieved by the adoption of original and different courses of action in an otherwise mundane scenario. Security of own assets and information is essential for the achievement of surprise. Deception plans incorporated at every level of war is another major contributor to the successful achievement of surprise. It, therefore, follows that despite technological advances, surprise can still be achieved at every level of war. It must be understood that an average human mind is paralysed when faced with the unexpected. It is this ‘shock effect’ that surprise seeks to achieve.

Intelligence. Intelligence is primarily information of the enemy, his capabilities, plans and psyche. This is crucial to the development of own plans. Intelligence signifies the unknown and discovery. With the enhancement in surveillance means, a stream of intelligence has started flowing into operations rooms at all levels. What is difficult today is not the gathering of intelligence but the sorting out process to analyse information and provide intelligent assessments to the user. The emphasis of the modern day sensor centric intelligence gathering has been on quantity rather than quality. This leads to errors in reporting and missing out on vital information due to information overload. Thus, there is always an element of suspicion attached to ‘intelligent’ intelligence reports. This mindset needs to be changed and the first step towards this would be change in terminology. The Indian Navy used this to good effect when it renamed sorties of ships for routine exercises from ‘exercise programmes’ to ‘deployment programmes’. It, therefore, follows that intelligence is vital at all levels of war and has stood the test of time as a principle of war. However, it needs to be renamed as “information” for the focus to be shifted to the finished product rather than the gathering process.

Security. Security encompasses physical security of assets both military and otherwise and more importantly, in the future, security of information. No strategy is complete without the defence of one’s own knowledge assets against enemy attack. For the sword of knowledge cuts both ways. It can be used as an offensive action. It can destroy an opponent even before his first lunge. But it can also cut off the very hand that wields it.²⁴ Information warfare and the inherent nonlinear power of knowledge entail strict measures to protect it and use it to one’s advantage. Therefore, in the future security would include information and cyber security.

Cooperation. The Indian Air Force in their doctrine enumerates the principle as cooperation, synergy and synchronisation. The Navy with an increasing number of multi lateral engagements is moving towards multi-national cooperative engagement capability. Cooperation in the future would entail the abilities of interoperability with friendly forces from other nations against a common threat or towards a common mission. This does not in any way imply ‘alliances’ but rather ‘arrangements’, regional and UN sponsored. In the future asymmetric or what the western world calls Fourth Generation Warfare (4GW), the threat would not be restricted by international borders and ‘passport control’. The armed forces of nations fighting such a war would need to

cooperate in ensuring that borders are not the finishing lines for pursuit but rather the starting lines for cooperative war. Cooperation signifies the 'ability to operate alongside each other' but future demands 'synergy', which can best be described as 'the ability to operate together'. This synergy would include the armed forces of the nations involved, and the political establishments. Insurgents do not aim to win battles in isolation. They are always aimed at undermining the political will of a nation to continue with the conflict. Bloodshed and sensationalism take priority over military victories. Synergy between the military and political, both between nations and within the country is the call of the day.

Administration. Administering war is about sound and responsive logistics. This aspect of war is much neglected. General Montgomery said, "Make a sound plan and make certain that what you want to do is possible and that you have the necessary resources to do it. And do one or two things really properly, and don't try to do five or six things all of which are starved for lack of resources and which will probably all produce no results".²⁵ This may indicate that logistics governs the war, however, that would be too simplistic a deduction. Logistics must be integral to the planning and execution of war. The plan must include logistics and in certain conditions be led by it; but it would be, at nearly all other times, for the logistician to find the resources to support the plan. It is not a turf war between the military operations planner and logistician but rather the meshing together of the two, with each helping the other realise his aim. Logistics brings into its ambit the civilian support systems of a nation, and integrating them into the logistics chain is the challenge that every logistician faces. It would also involve integrated logistics between the three Services, each with its unique logistics requirements. Logistics will also need to transcend boundaries, international and national, civilian and military, and urgent and planned. Seamless logistics is essential to achieve this. In the joint wars of the future integrated logistics would be the key to victory.

Maintenance of Morale. Morale is a direct reflection of the state of training, discipline and satisfaction levels of an armed force. Knowing 'what' you are doing and 'why' you are doing it is equally essential. An action that is perceived to be unnecessary or illegitimate tends to lower morale. Inaction in the face of provocation is also a reason for fall in morale. In the face to face and trench to trench warfare of yore, morale was extremely important. Maintaining morale through a long drawn out attrition war preoccupies the minds of every military leader. Morale reflects the response to the call for charge at a decisive point in the battle. In the wars of the future, where the enemy would be largely unseen and the effects generated would be largely unfelt, morale would continue to retain importance but the maintenance of it would be a command function rather than a principle of war. Maintenance of morale would be relegated to being a largely peacetime function in the battlefields of tomorrow. What would be more immediate and essential would be dealing with the large amounts of information that would be available to the lower echelons of command and war fighting. This would be due to increased battlefield awareness and transparency, increased availability of information sources and the speed of flow of information. Managing this flow of information and its effects on the minds of the soldier and thus morale would be paramount. It, therefore, follows that apparent legitimacy in action, managing information flow to lower levels and clarity in decisions imposed would be the key to morale. Maintenance of morale may be relegated to essentially being a vital command function and not a principle of war.

Having studied the existing pronounced principles of war and suggested changes to a few, the next part would be to look at adding a few to the list. The additions would be based on two requirements. First, that the principles are principles of 'war' and not 'battle'. They need to be applicable to all levels of war from the political to the tactical. Secondly, they must endure and stand the test of future wars.

Emerging Principles

Media Engagement. The people thinking hardest about warfare in the future know that some of the most important combat of tomorrow will take place on the media battlefield.²⁶ War today has moved from the distant battlefield to the living rooms of the nation. Kargil was fought as much in the mountainous terrain of Kashmir as in the eyeball luring coverage on television. Embedded journalists and war reporting is not new. What is new, is their relative independence and lesser degree of reliance on the military for information and reporting or communication channels for transfer and subsequent broadcast of this information. Cellular phones, PCs, copying machines, fax, video cameras and digital networks permit the exchange of vast volumes of voice, data and graphic material through multiple, redundant and decentralised channels, often out of easy reach of government and military censors.²⁷ In the evolution of the media and war, the most dramatic shift in paradigm has been after the arrival of television. Television is about the visual. A picture says a thousand words. A visual on television is stale much before it is analysed, explained or even talked about. It therefore follows, that a TV reporter is already looking for his next 'enduring image' even as he captures the present one. The effect of the media and in particular 'Live' television on opinion is a gain. Managing the media and ensuring its use to one's own advantage is an important aspect of war. But, is it a principle of war? The role of the media in the Kargil war and the Gulf wars is well known. It forced the forces and nations involved to undertake two hitherto forbidden activities. First were the regular media briefings, at every level of operation, to ensure legitimacy. Second was releasing footage of operations undertaken to counter claims of indiscriminate targeting and indicate restraint in operations. The Commander of tomorrow would spend more time briefing the media than fighting the war.

Legitimacy and Restraint. The Indian Joint Doctrine lists these as principles to be applied to Operations Other Than War (OOTW).²⁸ However, these operations in the conflict avoidance world of tomorrow are likely to be primary missions of a nation's forces. The need to acquire 'legitimacy' both within and outside the country would be vital for operations in the future. The lack of this would result in the exertion of international pressure on own freedom of action. In addition, the ability to apply force with discrimination and 'restraint' would be vital in operations mounted for internal security and against non state actors.

Tempo. Tempo is best defined as 'the ability to stay ahead of the enemy in time, thinking and capability. This

would encompass the elements of initiative, speed of movement, thought and decision making and the ability to meet needs'.²⁹ Tempo is not speed. Although speed is important in the future short and swift battle, it is tempo that needs to take precedence. Speed and Manoeuvre are composite parts of tempo. Technology does improve tempo, but it is realistic training in peacetime, diligent planning and original thinking that would eventually achieve it. High tempo is not the aim, but higher tempo than the enemy is what is desired. The culture of an organisation, its structuring, hierarchy, freedom of thought and action within it and its adaptability to change are all contributors to effective tempo building. 'Tempo' is also greatly influenced by those 'who we are fighting'.

Recommendation

It is recommended that 'Legitimacy and Restraint', and 'Tempo' may be added to the existing list of eleven Principles of War as it is believed that they would pass the tests of relevance and acceptance across all the levels, dimensions and spectrum of future wars.

Conclusion

The Principles of War are constantly evolving. Some principles have stood the test of time and technology. Some have been modified and replaced. There is no doubt that war in all its forms would continue to be governed and guided by principles. The aim of a re-evaluation cannot be to replace one set of principles with another. The aim has to be to analyse the relevance of those existing, discard or modify them as required and add a few to make them more contemporary. Principles of War would continue to remain susceptible to technology, new ideas and new environment. It may not be possible to write a set of enduring principles. Similarly, it is not possible to set a shelf life for the principles of war. The Principles of War must also not be purely military in relevance and application. They must apply across the continuum of conflict from the national – strategic to the tactical. Mao Tse Tung's first law of war was 'to preserve oneself and destroy the enemy'.³⁰ In the war of the future, it may well be 'to preserve peace and deny the enemy the opportunity for war'.³¹ The principles that would apply in the conflict avoidance world of tomorrow are sure to be different. Warfare in the future would be more political than military, more trade than diplomacy and more short than lengthy. Notwithstanding the nature of war and the boom of technology, even if we have robots fighting our wars, the key to every victory will continue to be the people and their ability to use brain power to correctly apply the Principles of War.

*This is an edited version of the essay which won the First Prize in Group 'A':
Open to all Officers.

****Commander Ashwin Arvind** is presently serving at the Defence Services Staff College, Wellington.

Journal of the United Service Institution of India, Vol. CXXXIX, No. 575, January-March 2009.