

EFFECT-BASED OPERATIONS

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People do not change when you tell them that there is a better option.

They change when they conclude that they have no other option.

– Michael Mandelbaum

INTRODUCTION

Bertrand Russell once stated that “the point of philosophy is to start with something so simple as not to seem worth stating and to end with something so paradoxical that no one will believe it.” In a discussion on “effect-based operations” (EBO), the first part of the statement is indeed applicable but, hopefully, the reader will see merit in the philosophy as it unfolds.

Warfare, in simple terms, is an attempt at imposition of will, or at coercion. The damage caused by military means, and the nature and extent of the likely damage that could ensue, is intended to force the adversary to submit. This is a simplistic formulation but the general principle is valid. What is important is the defined objective of the adversaries and the extent to which the objectives are met by military action or a series of such actions. The war or conflict can end only when a set of objectives or altered objectives are met and conceded. Implicit in this statement is the appreciation that objectives do alter as the conflict continues. As there is both a tangible and psychological element involved in

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cessation of conflict, the effect of a mission(s) or of courses of action adopted is far more important than the actual damage caused. In a manner of speaking, damage is incidental to the “effect” it causes although the “effect” may be the result of the damage caused. Seen in this light, it can be argued that every mission launched is based on a desired effect that we hope will be perceived by the adversary in a desired fashion. The argument can be carried further by inferring that all military actions have always been ordered to create a desired outcome. Hence, the question: what is novel about EBO? There is no direct or easy answer. To begin with, there is limited empirical data to validate the concept. The possible applicability of EBO in different wars can and will be examined in this paper to facilitate understanding but it is a moot point if, so far, EBO was ever used to provide the major input in determining the manner in which the conflict should be prosecuted, and thereafter plans made on the basis of such determination. EBO remains a largely untried concept. However, planners have begun to appreciate the value of EBO as a valuable tool. This has come about as a result of the rapid increase in technology that heralded the revolution in military affairs (RMA), and the consequent distinct change in the nature and conduct of war. The concept shows promise but requires considerable support from many agencies of government.

In a RAND report dated 2001, sponsored by the Office of the US Secretary of State and the US Air Force (USAF), it is stated that towards the end of the Vietnam War “young USAF officers were appalled by the mindless use of air power in Vietnam.” Seen in the light of capabilities that are taken for granted today, at that time, the potential of air power was not much in evidence. The potential was understood but the technology available was insufficient. The technological possibilities were explored in earnest and RMA resulted. RMA is essentially based on greater air power capabilities, with emphasis on longer reach, stealth, speed, precision and lethality. As better use of air power became possible, concepts developed and were honed with still increasing air power

capabilities. Concepts like follow-on forces attack became feasible, a new air-land battle doctrine came into being, and soon the concept of parallel war was developed. The conduct of war altered very markedly starting from the 1991 Gulf War, and the process of change and heightened effectiveness has continued. Earlier, perforce, the antagonists engaged in attrition warfare, but far more options are now available. With ever greater use of space and the introduction of network-centric warfare (NCW), a still newer form of military revolution is being introduced. Technological progress is indeed accelerating and major transformations that will markedly alter military capabilities are on the anvil. EBO is now feasible and represents the natural progression.

The more effective use of weapon systems and the ability to hit targets throughout the length and breadth of the country increases the options available. The nature and conduct of war have also altered to stay in tune with present day realities. Conflict is now a multi-dimensional exercise involving not only the military but also diplomacy, politics, economic considerations, the media, and science and technology, etc. Indeed, the salience of military action has possibly reduced. Be that as it may, the nature of threats has changed markedly and so have the means to combat them. A multi-disciplinary approach is called for and EBO is the more efficient means of conducting warfare or as an approach to prosecuting conflict.

CONCEPT OF EBO

A good definition of EBO is as given in the RAND study referred to earlier. It states that “EBO are operations conceived and planned in a systems framework that considers the full range of direct, indirect and cascading effects, which may – with different degrees of probability – be achieved by the application of military, diplomatic, psychological, and economic instruments.” Another definition that is complementary in a fashion is as given in the article on “EBO and Counter Terrorism” in the Fall 2005 edition of the *Air and Space Power* journal. In the article, EBO is defined as a conceptual process “for obtaining a desired outcome or ‘effect’ on the enemy, through the synergistic, multiplicative, and cumulative application of the full range of

military and non-military capabilities.” Both the definitions taken together represent the essence of EBO.

In early 1990, USAF Col John Warden spoke of the enemy as a system and future wars as parallel wars that took into account the full ambit of national power. The beginning of the EBO thought process could be linked to Warden’s work. In June 2000, the US military concluded experiments on rapid decisive operations. The term is self-explanatory and naturally led on to the study of EBO in some detail. In simple terms, EBO theory suggests that ‘effects’ on the enemy are more important than the attainment or otherwise of military objectives or even mission objectives. In recent times, the validity of the concept has been brought home to us in a telling manner. Military successes, indeed military victories, in both Iraq and Afghanistan, were readily achieved, but the war is yet to be won. A similar situation obtained at the end of the Vietnam War. Militarily, the war was won in a convincing fashion but few would call the way the Vietnam War ended a successful conclusion. The Arab Israel War of 1967 is another example. From the Israeli point of view, it was a brilliant victory, lauded all over the world, but the problem that the war was intended to solve still defies a solution. There has been a near continuous Arab-Israeli conflict since then and the problem continues to pose a serious challenge. Can we call the conclusion of the 1967 War a success? There are bound to be differing opinions on that score. The point that must be made is that military victory by itself is insufficient and could even be irrelevant.

KOSOVO CONFLICT, MARCH 24 -JUNE 9, 1999

An example of a conflict where it is suggested that the war was unequivocally won is that of the Kosovo conflict of March to June 1999. An examination of this conflict is a good vehicle to understand EBO.

The war objective was clear and succinct: Milosovic must be made to accede to the North Atlantic Treaty Organisation’s (NATO’s) conditions. Towards the fulfillment of this objective, besides coercion and the use of the military, diplomacy, economic considerations, political aspects and the media played a part. The total ambit of power was used, as it should be when EBO is intended.

Diplomacy played a part in ensuring a hands-off approach by other countries even though there was no express UN sanction for the war. Other initiatives that merit mention are:

- Russia was successfully urged to convince Milosovic on the futility of continued resistance.
- Kosovo Albanians were used to hit targets inside Kosovo to increase the problems of Serbia.
- In spite of many NATO countries pulling different ways in terms of target selection and the manner of waging war, the inherent solidarity of NATO was successfully demonstrated. No major chinks in inherent unity came to light that Serbia could have exploited.
- Economically, sanctions were imposed and they were not seriously flouted by any NATO or other power.

Under the broad ambit of political aspects, the intention was to degrade Milosevic's command and control arrangements. At the same time, civilian targets were chosen for destruction with a view to destroy the infrastructure and threaten the very way of life of the Serbians. Implicit in the continued air attacks was the threat that the Serbians had more to lose if they were not to surrender.

The media built up and maintained the hype that it was a justified cause as the Albanians were being slaughtered. Also, the media emphasised the inevitability of defeat and the inadvisability of continuing the war and being subjected to consequent even greater destruction.

The military objectives were to degrade the Serbians' ability to resupply their forces, gain air supremacy and degrade enemy ability to continue the conflict. This was achieved by air attacks on strategic targets, infrastructure, fielded forces, industry, and command and control systems at both military and national levels. At the same time, to ensure continuance of NATO solidarity, it was essential to ensure minimum attrition of own forces. All this was achieved in large measure and it would not have been possible without the extant air power capability. RMA was effectively used.

Minimum attrition was achieved as the Allies operated above the danger

heights of Serbian air defences and only air power was used. Every war is unique and requires a unique solution. Although such an operation may not ever be repeated, the campaign brought to light the manner in which air power can be used to advantage. Be that as it may, the very obvious build-up of NATO ground forces for an inevitable attack was another significant coercive factor.

Undoubtedly, the Allies enjoyed tremendous superiority and there was never any doubt about the military victory. The Allied forces had overwhelming power, near inexhaustible economic strength, freedom to choose the time of attack and determine the pace of war. There was considerable flexibility in planning for war. The Allies had the time for detailed deliberations and, if required, examine or game plan the different courses of action that may be needed. They had reasonably good intelligence on targets, target systems, and their vulnerabilities. Intelligence was also able to provide near immediate information on results of a mission and its impact. This facilitated future planning. The enemy psychology was fairly well understood and the knowledge used effectively. In short, it was an unequal battle, with the Serbians totally on the defensive. Such asymmetry in capabilities and other advantages are unlikely to be ever available to most future protagonists.

The Kosovo conflict is often quoted as an example of the successful use of the EBO theory. If the conduct and the progress of the conflict was well thought out before the war started, and adequate contingency planning was also carried out to cater for situations that do not pan out as per plan, then, as the stated objective of getting Milosovic to surrender was achieved, it can be averred that the system of EBO was validated. The contingency planning referred to concerns not only the military but all the other non-military aspects discussed earlier. This point is being reiterated as there is a general tendency to fit the results to what should have been the planning process.

Another issue that bears examination is the choice of the objective. Was it far too limited? No value judgements are intended, but it is a moot point as to whether the results achieved were good enough. What was the purpose of starting the conflict? Was it regime change, or a better life for the Albanians or the independence of Kosovo from Serbia? Interestingly, although the ground forces were not used to get

Milosovic to surrender, NATO ground troops moved into Kosovo immediately thereafter to maintain the peace and are still there. Surely, the long stay was not part of the plan or the contingency plan. Hence, the question must be asked as to whether the choice of objective was correct and adequate. There are no easy answers but an analysis will help better use of EBO in the future.

CONFLICT IN LEBANON, JULY 12-AUGUST 14, 2006

The problems in the correct determination of the objective was brought home in telling fashion in the conduct of the recent Lebanon conflict, as seen through Israeli eyes. Militarily, the Israeli operations were very successful, but the 'war' was far from won. The objectives of the war were probably far too ambitious if the intention was to decimate the Hezbollah once and for all. Again, may be, enough intelligence on Hezbollah positions, plans, capabilities and psychology was not available. More importantly, the adverse impact of not meeting the objectives on the proverbial Israeli invincibility was not fully considered. Again, diplomatic moves that delayed the ceasefire turned out to be unhelpful. It is true that all this is being stated with the benefit of hindsight, but the point must be made that planning for EBO, if attempted, has to take into account all these issues and more.

As in the case of the Kosovo conflict, the military superiority of the Allies/Israelis was beyond question. When such a situation does not obtain, use of EBO theory in the planning of operations becomes far more difficult. Possibly the most difficult issue is to decide on the objectives desired.

CHOICE OF OBJECTIVES

It will be simplistic to suggest that the objectives must first be established and then the plan or plans can be worked out to achieve the objectives. The danger in this approach lies in the fact that it takes for granted that the chosen objectives can and will be achieved. War is at least a two-sided game and seldom, if ever, can such assurances be given or assumed. In the light of recent conflicts, there is no need to belabour this point any further. The argument takes on added importance when two nearly evenly matched protagonists are involved. Yet, the

intention of the adversaries must be to “end the war” in a better position than when it started. In some cases, even a stalemate situation could be acceptable. If a stalemate does not result or cannot be ensured, the losing side will attempt to cut its losses and then try and get ready for another battle.

The term “end the war” as used above refers to only the active use of militaries. In today’s world, where globalisation effects are becoming more pronounced and competition is becoming stronger and continuous, individual national interests will always be in near continuous conflict, the often repeated phrase that borders are becoming irrelevant notwithstanding. Self-interest has to be the guiding concern, but the concept of self-interest is equally applicable to our adversaries. The approach to such conflicts has to be multi-dimensional and highly nuanced. The work of all organs of government impinges on national security in one form or the other although the backing of an adequate military power is essential in international relations even if its use is limited in time and space.

As conflict, in the broader sense, is continuous, the prosecution of conflict is also continuous. The study and gradual implementation of the EBO system will be helpful; particularly so when deterrence or coercion has not had the desired effect and use of armed forces is contemplated. All organs of government must work together to fashion the objectives to be met. The feasibility and probability of different approaches have to be considered before the objectives are finalised. At the same time, the probability of failure or partial failure, and action to be taken under such or similar eventualities should be studied beforehand and contingency plans formulated. The suggestion may seem overly theoretical and

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time consuming but it can be compressed in time, particularly if the planning process has been proper and updated regularly. The military objectives selected may remain unaltered throughout the military conflict but what is more likely is that they would have to be altered in the light of actual circumstances or situations. Similarly, the diplomatic and

economic initiatives will probably be in a state of continuous flux. Change in objectives may be required and, in time sensitive situations, the existence of a planning system with real-time inputs will be needed.

It must be emphasised that the selected objectives should be based on the desired end state and be assessed as feasible. Thereafter, as the conflict is under way, more information will become available and the objectives may have to be revised. The conflict should be prosecuted along these new lines. However, an overly optimistic view of our capabilities, bordering on adventurism, is avoidable and a highly conservative view is probably worse. Rationality in determining objectives is needed but it can be empirically shown that in war, an offensive approach generally yields better results. The manner of use of the armed forces by India during the 1999 Kargil conflict and thereafter during Operation Parakaram in 2001-2002 should be examined in this light. The important point to address is as to whether the end state could and should have been better from both military and non-military points of view. The lessons that may be learnt could help in our use of EBO in the future.

NATURE OF EBO

By its very nature, EBO calls for a fresh look at the manner in which we employ and use armed forces. The quest (of EBO) should be for means that will get the desired results in the most cost-effective manner, as efficiently as possible and in the shortest possible time.

With globalisation, a war anywhere in the world has an impact on most other places. Hence, unless the superpower is involved, a war in the conventional sense, per force, is likely to be limited in terms of area, objectives, time and geographical coverage. International pressures will intervene to try and stop the combat at the earliest. If we want a little more time to gain the desired ends, our diplomacy has to be more effective. Such limited sub-conventional wars have dynamics

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of their own, the most important of which is the need to achieve results quickly and end the war. The losing side is unlikely to easily accept ending the war at a disadvantage. Hence, the ability to affect escalation control if not escalation dominance is a very significant factor. Such escalation control or dominance is not easy to come by but it is essential that the point is carefully considered in the planning process where EBO considerations are to be applied. Possibly, escalation control will be facilitated if the objectives are limited and do not markedly alter the status quo. It is also opined that aerospace power must be the military option of choice to ensure that escalation is controlled. Non-military means can also play a significant role in controlling or limiting escalation. A comprehensive strategy is required.

In time sensitive operations, attrition warfare has to give way to parallel war where the entire country of the adversary is under threat and the options available in choosing targets and target systems increase manifold. Such an approach will also have beneficial psychological effects that could shorten the conflict, particularly if the command and control set-up and civilian infrastructure of the adversary are systematically attacked. There is also a growing international abhorrence of collateral damage. Hence, air power should be the instrument of choice because of its characteristics of ubiquity, speed, reach, precision and lethality. However, it bears mention that precision attacks are a double-edged weapon. They certainly are very impressive, even awe inspiring, but the novelty wears off rapidly. They are soon also viewed as 'safe' by the civilian population as there is little collateral damage and one just has to stay a little away from the likely targets. The shock and awe effect is reduced and so is the psychological impact. All these considerations have to be taken into account whilst planning for conflict on the basis of EBO.

By definition, EBO relies on both direct and indirect effects. One very good example of the impact of an indirect effect was the result of the air attack on the

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Government House in Dhaka in December 1971. Some damage did accrue to the Government House, but far more importantly, the attack led to the near immediate surrender

by East Pakistan forces and the consequent birth of Bangladesh. It is true that the result was probably beyond the expectations of the planners and commanders, but the attack exemplifies EBO in action. Such possibilities do occur in war and commanders must be astute to seize them. A surrender may not result in every case but a greater effect than the damage caused or a cascading series of effects is the essence of EBO.

EBO techniques can be usefully employed in counter-terrorism operations or fourth generation warfare. It is in the nature of such warfare that the terrorists are at some advantage. The initiative largely lies with them. They defy the normal tenets of warfare amongst nations and have altered the nature of war. The war is now an ongoing phenomenon, and what is worse, the terrorists are honing their skills and becoming more adept at asymmetric warfare. They can now operate in small, near autonomous bands, less affected by logistics, and can operate outside national boundaries as well. Terms such as “state sponsored terrorism” and activities of “non-state actors” are now in common use. War and crime, including ‘white collar’ crime are becoming inter-related. Possibly, a studied and more imaginative formulation of a strategy for counter-terrorism has to be adopted. The armed forces could also be used more effectively.

Terrorism can no longer be fought at the tactical or operational level although such actions have to be part of the overall ambit of counter-terrorism operations. The operations have to be planned at the strategic, diplomatic, economic and political levels. As a number of agencies are involved, EBO tenets can be used to advantage. Counter-terrorism operations cannot be restrictive and have to encompass many organs of government. A more integrated approach is required but it is not easy to do so. The large number of agencies that have to contribute to the overall plan will have multiple perspectives, differing goals, and even a reluctance to accept another point of view, leave alone many diverse points of view. Unless the differences are narrowed, uncertainties will abound and it will be difficult to bring about

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coordinated activities that are time specific. Only training, exercising together, and the build-up of mutual confidence will help. EBO can provide the necessary framework for greater understanding and integration. It is suggested that the armed forces should take the lead to bring about the desired integration.

APPLICABILITY OF EBO IN INDIAN CONTEXT

The philosophy of EBO has not really taken root in our planning processes but the armed forces can take the lead in propagating the concept. EBO is result oriented and favours an integrated approach. It follows that the effectiveness of our armed forces should increase with the use of EBO as the planning tool.

The armed forces should be able to adopt the EBO planning process readily as EBO operates in the strategic domain. The broad strategy can be discussed based on requirements and capabilities, and formalised. The strategic objectives must include what is required and, probably more importantly, situations that must be avoided. Thereafter, there should be little differences in fashioning the operational and tactical utilisation of the armed forces.

The primary aim of the armed forces is to deter or coerce. Deterrence and coercion is a function of how the adversary perceives our capability and the resolve to use it. The impact will diminish once armed forces are used but, for escalation control, it is important that we continue to deter or coerce the enemy. At all stages, the enemy must perceive the pervasive threat of military action, particularly the potential of air power.

As conflict amongst nations is near continuous even though it can take many forms, including non-military considerations, an organisation is needed to constantly monitor the results of actions taken and fashion multi-disciplinary

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responses. Such an organisation is not likely to take shape without much deliberations and effort but it is essential to the practice of EBO. The aim must be to use all available assets to formulate and then meet defined objectives with the use of synergistic and well orchestrated actions at multiple levels.

If EBO is to be used for contingency planning by the armed forces, the adversary must be viewed as a complex adaptive system. Possibly, the enemy systems should then be studied to establish their centres of gravity and how to target them. This will be a painstaking exercise but should prove rewarding. The post-war scene must be kept in view and attempts made to seek alternatives to direct attacks. In any case, attrition must be contained. In deciding courses of action, “ends” should take priority over “means”. It will be seen that the system of contingency planning advocated is far more complex and of a higher order. Once again, the planning process will be incomplete without the establishment of an organisation for continuous appraisal of results and the charter to formulate responses to changed situations. The inherent flexibility of air power can be used to advantage.

INHERENT LIMITATIONS TO ADOPTING EBO IN INDIA

Use of EBO requires a different set of norms and organisation. Plain inertia will delay the process of acceptance of the concept. The fact that it is a largely untried system implies that the converts will be few and far between. Many limitations will be mentioned. To begin with, the system requires detailed knowledge of the adversary/possible adversaries, including their psychology and the manner in which they are likely to react. Much more sophisticated intelligence apparatus is called for, with infrastructure for real-time analysis and dissemination. The intelligence requirements are not on a one time basis or even periodical but, preferably, there should be a system of near continuous collection, collation, analysis, assessment and dissemination of information. This is certainly desired on high priority aspects. It is a tall order.

Intelligence information about the adversaries can never be complete. There will always be uncertainties and we have to learn to plan and execute missions in spite of the ‘unknowns’ in war. What is probably even more important is that there is bound to be an increasing need to operate in an environment of uncertainties that can take many forms. We have to learn to live with the

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situation. A responsive mind that can use information intelligently, and quick, may be even instinctive, decision-making qualities are prerequisites. Training for the purpose is required at all levels of the military hierarchy or government.

Acceptance of any new idea faces many challenges. In the case of EBO, the novelty is coupled with some stringent limitations that have to be overcome. The recommended course of action is to examine the concept more fully, note the obvious advantages and work towards progressively greater use of EBO as the limitations are addressed and greater acceptance occurs.

CONCLUSION

EBO is a logical process that views the enemy as a system. It is a new approach to planning and prosecution of conflict by multi-disciplinary organs of government operating in unison and, thereby, using the potential of the different organs both optimally and synergistically. The importance of looking at the end of war situation should help tailor our responses more realistically, with due emphasis on non-lethal means of achieving our objectives.

The planning process will certainly gain by adopting EBO. It has validity throughout the spectrum of conflict and is the cost-effective means of achieving results. Although it will take some years for the full ambit of EBO to be introduced, the introduction of even a limited scope EBO system will highlight, in a rational manner, the areas that require greater attention in terms of equipment, training, information gathering, etc. The obvious follow-on corollary is that EBO will also aid better force structure planning. The concept of EBO is no longer premature but demands immediate attention. Some modifications to the system will be required to suit individual needs but that should not detract from the general acceptance of a useful concept.