

AIR POWER: A RESPONSE OPTION TO COUNTER THE CHALLENGES OF SUB-CONVENTIONAL WARFARE DYNAMICS

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Abstract - Sub-conventional warfare refers to the grey region of the spectrum of conflict. Since inception the face of the sub-conventional warfare remains in a continuous transition due to the changing dynamics of technology, interests of state/non state actors, global/regional political status etc.

The unique characteristics of airpower such as height speed and reach empowered by flexibility, mobility and precision enables Air Forces to counter sub-conventional elements with an asymmetric advantage. Hence it requires timely reviewing of roles and missions ultimately lead to techniques and tactics with differing capabilities in dissimilar situations. Air power is offensive in nature. Conventional applications of air power can be improvised in dealing with sub-conventional elements such as surveillance and reconnaissance, providing bird eye view for decision makers, tactical air mobility and air strikes.

Usually sub-conventional elements emerge as a small group of insurgents commonly untrained and inexperienced, which later develops and expands up to near conventional forces by winning the popular support where they dominate. Nipping it in the bud is the best approach to eliminate such armed elements, paralyzing militarily where their roots are not deepened enough to withstand longer and heftier military encounters. For the betterment of the safety and security of the nation, at times command elements might need to take crucial decisions to launch kinetic air operations even with inevitable minute un-intentional damages. Air power strategy should be in line with overall strategy. Triumph of airpower against sub-conventional elements depends upon three main rudiments. They are Intelligence, technology and joint operational effort. This study proposes an option in designing airpower strategy in countering sub-conventional warfare challenges.

Keywords- Airpower, Intelligence, Technology, Joint Operations

I. SUB-CONVENTIONAL WARFARE

Sub-conventional warfare refers to the grey region of the spectrum of conflict. Basically any kind of armed encounter other than conventional warfare can be classified as sub-conventional warfare. However due to the broader and vague demarcation of this band of

Warfare it is practically difficult to provide a single definition which suits the full diversity of scenarios. No matter which term it goes by - civil disobedience, counter-insurgency, guerrilla warfare, insurgency, insurrection, internal security, revolutionary warfare, small wars, subversion, low intensity conflict, terrorism in the first decade of the 21st century is predominantly sub-conventional conflict (Kanwal, 2008). In this study author refers to the conflicts beyond organized violence and below direct military intervention of a state, with the will of challenging national interests define by the particular state as sub-conventional encounters.

Irregular warfare is nothing new; it has been documented from rebellions in ancient times through to its prevalence in modern-day conflicts. Throughout this period, the methods of fighting have been broad, including guerrilla warfare, insurgency and terrorism (Glasson, 2014). From inception the face of the sub-conventional warfare remains in a continuous transition due to the changing dynamics of technology, interests of state/non state actors, global/regional political status etc. Hence it requires continuous study in dealing successfully with the armed uprisings in different forms. Sub-conventional warfare has become latest phenomenon of the spectrum of conflict across the globe, forcing the militaries to be on the ball for the ever transforming scenarios. Following figures shows an increment of terror attacks from past up to now which indeed force us to predict the complexity of future conflict situations.

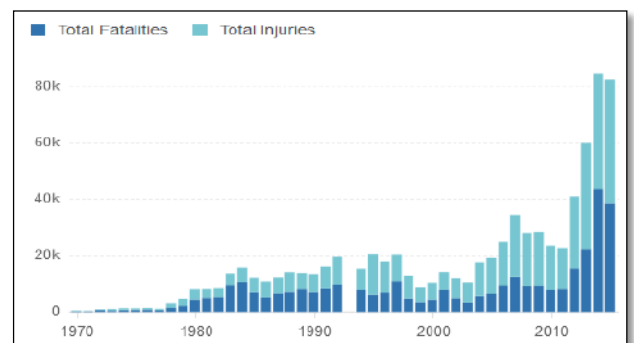


Figure 1: Global Fatalities and Injuries from Terrorist attacks

Source: National Consortium for the Study of Terrorism and Responses to Terrorism

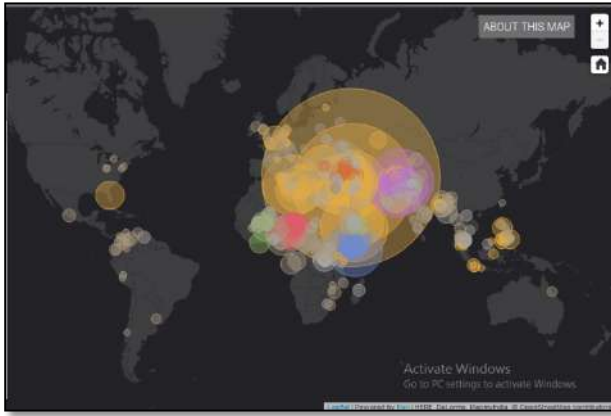


Figure 2: Terrorist Attacks in 2016

Source: <https://storymaps.esri.com/stories/terrorist-attacks>

In addition to fourth dimension, the air, has brought speed, flexibility and dynamism to the modern battlefield while “unconventional war” has meant a non-linear battlefield with no front and no rear, with soldiers without uniforms targeting combatants and non-combatants alike without observing Marquess of Queensbury’s rules of gentlemanly conduct (Ikram, 2002). The unique characteristics of airpower such as height speed and reach empowered by flexibility, mobility and precision enables Air Forces to counter sub-conventional elements with asymmetric advantage. Hence it requires timely reviewing of roles and missions ultimately lead to techniques and tactics with differing capabilities in dissimilar situations. Usually these actors emerge as a small group of insurgents commonly untrained and inexperienced, which later develops and expands up to near conventional forces by winning the popular support where they dominate. Further in such scenarios the insurgents develop ties with extraterritorial elements in non-state and state nature in order to fulfill logistic needs, to acquire training and technological support and to exert politico-diplomatic pressure on the targeted state.

II.ROLE OF AIR POWER IN SUB CONVENTIONAL WARFARE

Air power is offensive in nature. Conventional applications of air power can be improvised in dealing with sub-conventional elements. Since one size does not fit for all, undertaking of this exercise is challenging than it appears. This paper proposes an option for a strategic module in countering such elements. Air power provides essential asymmetric advantage in sub-conventional warfare. Outward show and the true capabilities of the sub conventional actors may vary from element-to-element. The state of affairs becomes multifaceted when these elements are supported by other state and non-state actors. Sri Lanka experienced such a complex situation when Liberation Tigers of Tamil Elam (LTTE) terrorists were supported by neighboring sub-state actor under the patronage of several state actors as well as globally spread number of non-state actors whom mounted a coordinated and combined threat.

A. Surveillance and Reconnaissance

Aerial reconnaissance can play a major role along with ground and naval intelligence in detecting and tracking of insurgents/terrorists movements, activities, operating bases, hideouts, supply routes etc. Aerial photography and footages from manned or unmanned platforms would be utilized in this effort as experienced by Sri Lanka Air Force (SLAF) during anti-terrorism humanitarian operations conducted during 2006-2009. However aid of sophisticated technology is needed in detecting and tracking of terrorists/ insurgents activities happening under thick jungle canopies and other terrain limitations which is beyond the traditional line of sight. If not modern terrorists/ insurgents who usually establish effective intelligence network which is capable of providing information regarding surveillance and reconnaissance upon them would make the entire aerial effort futile. Further these records can be utilized in generating post attack damage assessment reports.

B. Bird eye view for decision makers

Aerial view provides decision makers a better understanding of the real-time situation and air power provides speedy options in dealing with the hostilities. These characteristics of airpower enable the command and control elements to monitor larger territories with fewer troops. Better informed special operations teams, ground intelligence agents, ground force commanders etc with aerial perspective have the advantage of making quicker and better decision in winning the situations. This attempt was tested by SLAF in anti-terrorism operations against LTTE during 2006-2009 which became a success.

C. Tactical air mobility

Tactical air mobility by fixed wing and heli platforms enables concentrating required forces to required positions in shortest possible time allowing the states to telescope the impact of hostilities in a shorter time. Mobilization of troops by the means of ground and sea takes a lengthier time with compared to air. Being able to deploy required category of troops at shortest possible time is more effective. It enables mobilization of specialized troops in bolstering the impact of attacks initially and later other police, medical, food assistance in relieving affected civilians which aid in winning the favor of populace.

D. Aerial Strikes

Air strikes on insurgents/terrorists are the last option available which can be executed under the political will when the situation is escalated. Employing air power alone or in support of ground / naval forces would minimize the damages and commitment of ground / naval troops. It is controversial that how ethical and legal to employ offensive force such as air power against a segment of state populace in such situation. However taxpaying citizenry expects security and safety by maintaining legal armed forces against any threat which might arise extra-territorially or territorially.

One major tactic of insurgents / terrorists is blending with civil population which demands surgical accuracy in strike. Precision Guided Munitions (PGMs) would be an added advantage in meeting higher accuracy for such operations. Sound intelligence and real time target updates along with developed pilot skills would provide better results even without PGMs. Precision aerial strike which eliminated LTTE terrorist leader Thamil Selvam with non-precision aerial bombardment is a classic example for such operation.

III.OVERALL STRATEGY

“War, once declared, must be waged offensively, aggressively. The enemy must not be fended off, but smitten down”

-Admiral Alfred Thayer Mahan-

Unlike conventional wars, sub-conventional conflicts tends to protract for a longer periods. Sometimes even for decades without seeing a clear end. Classic examples are Al-Qaida, ISIS, Mujehideens, Naxalites etc. Naturally these actors emerge as a small group of insurgents usually untrained and inexperienced, which later develops and expands up to near conventional force by winning the popular support where they dominate. Further in such scenarios the insurgents develop ties with extraterritorial elements in non-state and state nature in order to fulfil logistic needs, to acquire training and technological support and to exert politico-diplomatic pressure on the government. Successful insurgencies tend to have external political, diplomatic and military support, including for training and logistics, sanctuary in the supporting nation, and the ability to control some territory (Kanwal, 2008). LTTE terrorists started from a small untrained armed group and developed in to a near conventional force with separate armed units for ground, naval, special and air operations, with the blessings of neighbouring sub-state actor and state actors mediated by internationally spread non state actors.

In many cases there is a political end state that particular group of terrorists / insurgents might wish to achieve by unleashing the terror on public which indeed demand the quick attention and speedy response by the targeted state. Therefore it is a paramount importance that sub conventional battles are fought with holistic approach covering military, politico-diplomatic and socio-economic factors alike.

Nipping it in the bud is the best approach to eliminate such armed elements, paralysing militarily where their roots are not deepened enough to withstand longer and heftier military encounters. Hence full intervention and genuine politico-military effort at early stages would provide more likelihoods of terminating the dispute. Provided that global, regional and domestic political affairs are dealt by the government and required liberty is given to the

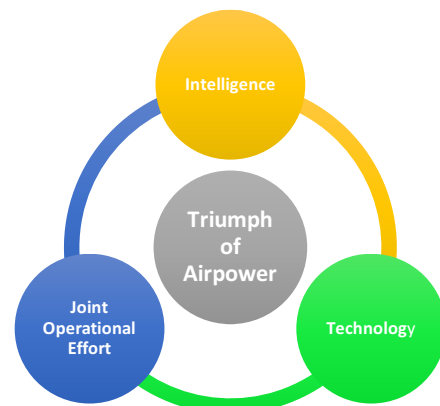
military components, will support in delivering an effective, efficient, stable and accelerated end state to the conflict.

National media also have a great role to play in manoeuvring the populace in favor of national will since modern sub-conventional elements sought the support of different breeds of media which are capable of moving the calculus in favor of their course by misleading the common public.

E. Air power Strategy

Air power strategy should be in line with overall strategy. Triumph of airpower against sub-conventional elements depends upon three main rudiments. They are Intelligence, technology and joint operational effort.

Figure: Rudiments of Air Power in Sub-conventional warfare



Source: By Author

It is an interdependent and integrated effort rather than autonomous operations carried out by individual agencies. Sound ground/naval intelligence assisted by technology would facilitate air forces to deliver required air power against insurgents/terrorists on ground or on territorial waters. Air forces/air arms are bound to secure third dimension over land and over sea of the particular state. Maximum attrition with nil unintentional damages for a quicker end would be the mission.

Manned/Unmanned platforms can be utilized in coordination with ground/naval troops, intelligence units, and command and control elements. Aerial surveillance and reconnaissance will enhance the sensing quality and capacity of the intelligence sources. Aptitude of monitoring larger territories using fewer units is one of the greatest advantages. Inputs of aerial photography and footages would greatly aid in defining the territorial pattern of the terrorists / insurgents which is essential for the initiation of ground strategy.

“Of what use is decisive victory in battle if we bleed to death as a result of it?”

-Sir Winston Churchill-

Use of offensive airpower whenever possible would prevent needless damages to ground / naval troops. In the modern era of warfare, the Israelis have been the pioneers in the use of air and space assets to prosecute campaigns against non-state actors like Hamas and Hezbollah, even without committing ground forces (Ghose, 2010). Eliminating leadership, training centres, hideouts and supply depots could hamper large scale manoeuvres of insurgents/terrorists as experienced during last anti-terrorism humanitarian operations conducted by SLAF against LTTE. Especially eliminating leadership would have significant impact on change of course of the entire movement. Nevertheless aggressive use of airpower would exert both somatic and psychosomatic pressure on insurgents/terrorists.

Available air assets would be utilized for strike, surveillance and reconnaissance, air mobility and other supporting operations. Further rigorous training can style pilots behind machines to deliver munitions with precision. Entire training process should include counter unconventional warfare strategies, techniques and tactics. Further especial training sessions focused on counter sub-conventional warfare operations should carryout in joint environment.

In intensified situations air defense threats by Short Range Air Defence Systems (SHORADS) becomes a highly likely phenomenon. Liberty of employing air assets over intended targets would be affected by the confirmed /assumed Air Defence capabilities of the terrorists/insurgents. LTTE managed to shot down several Heli/ fixed wing aircraft and badly damaged two fighters using shoulder fired Surface to Air Missiles and anti aircraft guns. Protection of air assets need to be strengthened since limited air assets available would be more vulnerable and more decisive. Base dependency is another limitation which would be able make air force on knees if not properly protected like "Achilles foot". Hence bases where air assets depend need to safeguard with maximum effort. Attack on own air assets would do great psychological damage apart from the physical damage upon own forces. Recent example from sub-conventional warfare is the LTTE attack on Sri Lanka Air Force Base Anuradhapura in June 2007 which destroyed/disabled more than a dozen platforms including key manned and unmanned reconnaissance platforms which incapacitated SLAF in surveillance and reconnaissance for a limited period.

F. Sanctuaries

Transnational sanctuaries play a key role in favor of terrorists/insurgents from onset with or without the consent of the particular. In the Greek Civil War (1946-1949), the Communist rebels enjoyed the use of sanctuaries in Albania, Yugoslavia, and Bulgaria (Ghose, 2010). Presence of kin state phenomenon paves way to more luxurious sanctuaries. Maritime nations find it more challenging to protect maritime borders than land borders. LTTE used to smuggle their needs through the

means of sea using floating armories and from Tamilnadu. One assumption is that LTTE managed to smuggle heavy weapons and aircraft those they used during the conflict were by sea routes. Hence maritime air operations shall play a great role in support of naval operations against insurgency/terrorism.

G. Realizing the inevitable

One trend of modern sub-conventional warfare which terrorists/insurgents prefer to follow is to blend with the public and conduct operations behind the veil, which renders the direct military action against them. This is one of the key challenges in employing airpower in kinetic operations. However it is to be realized that even after careful planning with real-time intelligence and delivering the munitions with ultimate precision, un-intentional damages would be inevitable. For the betterment of the safety and security of the nation, at times command elements might need to take crucial decisions to launch kinetic air operations even with minute un-intentional damages.

IV. RUDIMENTS OF THE TRUMP OF AIR POWER

Rudiments of trump of air power in sub-conventional warfare are as follows.

- Intelligence
- Technology
- Joint Operational Effort

Nexus between these three factors is vital. These three are inter related and mutually inter dependent.

Figure: Connection between rudiments



Source: Author

G. Intelligence

Intelligence plays the vital role in peacetime. In war time intelligence lies at the heart of effective military operations, although it cannot compensate for poor tactical execution (Ghose, 2010). Sound ground/naval intelligence will be the first and foremost elements to be sensed about forming up of insurgents/terrorists movements. The intelligent questions to ask and answer are those that help identify the enemy's nodes, processes, webs, intersections, and unions that produce, transport, or control combat power. Smart enemies will attempt to

hide and defend these (Ikram, 2002). At the preliminary stage of the materializing most probably there would not be any air power requirement. Nevertheless whenever situation escalates, involvement of air power is essential. In intensified conditions air surveillance and reconnaissance can provide information to intelligence agencies which are gathered through UAVs and manned platforms.

Different intelligent agencies operating on the same cause territorially and extra-territorially needs to be integrated. Proper combination of Human Intelligence (HUMINT), Electronic Intelligence (ELINT) and Signal Intelligence (SIGINT) would provide better and real-time output for the strike forces to hunt down key hostile players and their grips which can greatly alter the cause of the conflict.

In Essence, airpower is targeting; targeting is intelligence; and intelligence is analysing the effects of air operations (Ikram, 2002). Battle Management Command and Control Center (BMCC) which was activated during anti-terrorism humanitarian operations against LTTE by SLAF is one of the classic examples for such institutions. Acting as ears and eyes which painted the targets for aerial strikes it played the pivotal role in integrating information and actions to achieve high operational success.

Proposed agencies are as follows in forming up for Intelligence Management and Air Operations Coordination Command and Control Center (IMAOC).

- a. Air intelligence
 - b. Ground intelligence
 - c. Naval intelligence
 - d. State intelligence
 - e. Air assets
 - f. Ground troops
 - g. Naval assets
 - h. Police
 - i. Boarder control
 - j. Coast guards
 - k. Riot control units
 - l. Command and control elements
- } Intelligence Services
- } Civil state agencies

Figure: Proposed Intelligence Management and Air Operations Coordination Command and Control Center.



Source: By Author

Basic concept of this structure is that centralized command and decentralized execution. Real-time data link with aerial, ground and naval forces in coordination with command and control elements, such an institute can become the anchor point of network centric operations, dwindling the time between sensing to shooting which leads to operational success. Nevertheless airpower's unique characteristics require centralized control by airmen to have the full use of it.

“Air warfare cannot be separated into little packets; it knows no boundaries on land and sea other than those imposed by the radius of action of the aircraft; it is a unity and demands unity of command”.

-Air Marshal Arthur Tedder -

Further airpower is too expensive, being vulnerable to far cheaper and primitive anti-aircraft weapons and total dependence for its success rests on strategic and tactical intelligence. Intelligence need to assist in force protection.

H. Technology

Pace of the advancement of technology had marked ever high. Technology and airpower are integrally and synergistically related. Rapid advances in science and technology ensured that airpower has accuracy, speed and is difficult in countering, making it also more decisive in unconventional wars, unconventional warriors not having the resources to afford counter-measures or avoid being manipulated into providing conventional targets (Ikram, 2002). In order provide better ELINT and SIGINT it requires sophisticated equipment onboard which conduct surveillance and reconnaissance. Developed inputs from high resolution infrared images, high grade FLIR and thermal imagery and real-time footages would be able to locate and track mobile elements of insurgents/terrorists and pave way to strike forces to embark upon with precision. Conventional Information, surveillance, target

acquisition, and reconnaissance (ISTAR) platforms could be utilized for a better outcome.

PGMs would assist in attacking targets with minimal unintentional damage while accomplishing superior results. Sophisticated and secured data links required for the upgrading of network centric operational capability is essential which expand the effectiveness of data transferring as well as enhances the security against cyber threats.

Unlike in past most of the technology is accessible to individuals through internet. Further modern insurgents/terrorists use improvisation to have non-traditional but effective results. For an example, modern quad rotors which have long range and higher operational ceiling armed with sufficient explosives can be utilized to fulfil a hazardous purpose. An insurgent/terrorist with technical background would create equipment using the material available at local and online markets which can affect Electronic Warfare (EW) capability of forces. On Sept 11 in New York, an unconventional enemy crafted a commercial aircraft into unconventional airpower and made a major impact on conventional forces, conventional forces miserably failing to protect against unconventional means (Ikram, 2002). Hence it needs to be appreciate, technically advanced and militarily proficient adversaries in future sub-conventional warfare situations.

Further cyber-attacks would hamper most digital based network centric operating systems used by forces which can lead to operational inefficiency if not properly guarded. Therefore always being technologically ahead is to be considered as one of the prime objectives. Since the technology is un-confinable, while taking the advantage of it, need to prepare adverse effects of the same by the hostile usage of it simultaneously.

I. Joint Operational Effort

This is the most vital among the rudiments since it is the delivering segment of the entire process. Inability to hold ground is one of the key limitations of airpower which require surface elements to complete the mission. Airpower can blow the door of its hinges allowing the soldiers to go in and engage. Unlike in conventional warfare it is difficult to predict what component of the military / non-military would serve better in differing sub conventional warfare situations. Also different stages of the conflicts will demand different components and different application of forces. The object of force application determines the form of force control. Destroying an enemy's will to resist only by air attack does not remain a vision anymore, which was proved in Afghanistan and so on.

Hence in most occurrences synergistic approach would successfully cater the demand of elusive and unpredictable nature of sub-conventional elements. Armed services along with other state agencies such as

intelligence agencies, police, coast guards, boarder control etc should integrated and deliver the outcome through centralized command. It would permit delivering algorithms of air power in dealing with insurgents/terrorists. Airpower, when integrated with ground power and naval power, can bring a fight to its culminating point (Ikram, 2002).

Joint training exercises needs to be carried out frequently to build the cohesiveness of the agencies. Wherewithal of facing different scenarios should foresee and exercises should be planned accordingly to be better prepared for the ever transforming modern sub conventional warfare demands. The fundamentals of joint operations need to be slot in to the basic, advanced and continuation trainings. Afterwards the art of joint operations would be mastered through continuous joint operational training in different scenarios.

V.RECOMMENDATIONS

1. To establish an institute for the management of strategic and tactical intelligence and execution of effective conduct of air operations in combination with agencies mentioned in Para IV. A. This center needs to be active irrespective peace/conflict.
2. Conduct separate research and development programs in view of countering sub-conventional conflict situations. Strategies, techniques and tactics can be formulated and tested. One of the key objectives should be being technologically ahead.
3. Slot in sub-conventional warfare segment in to the syllabi of basic, advanced and continuation trainings and conduct joint training exercise regularly in coordination with research and development outcomes to build the cohesiveness, understanding and trust among different elements.

VI.CONCLUSION

Diversity of sub-conventional warfare situations is countless. The nature of sub-conventional warfare is that no situation or opponent is likely to be the same. Overall pattern of terrorists/ insurgents change with objectives, ideologies, believes, place, time, topography, capability, capacity, opportunity etc. Therefore formulating the best suited version of the strategic framework should be done with updated details of the terrorists/insurgents in accordance with competencies and capacity of own troops and equipment. However the proposed strategic option would be utilized as the basic layout for the overall design. Nipping it in the bud will do minimal damages to all parties and will pave way to an accelerated end state.

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