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Editorial

The launch of the Army 21 Vision at the start of 1999 marks a new chapter in the SAF's development as we move towards the new millennium. In this and future issues of *POINTER*, the Army 21 Vision will be presented under three sub-themes: Positioning the Army for the New Millennium; Impact of Technology and Trends in Future Training and Logistics. We begin the first installment with the theme, 'Positioning the Army for the New Millennium'. The first article, *The Revolution in Military Affairs: Technological Solutions for Budget-Tight and Manpower-Scarce Armed Forces*, by Professor Lui Pao Chuen, Chief Defence Specialist, highlights the importance of innovation to counter the challenges posed by budget and manpower constraints. It also prescribes the need to realise the potential in information warfare, human resources and unconventional modes of operation. The second article, *Rising to Army 21 Adding Value, Holding Values*, by BG Desmond Kuek, posits a set of seven competing demands and command challenges to be reconciled to help achieve the Army 21 Vision.

Shifting the focus to the international scene is LTC Chee Vui Chung's *Proposed Reforms of the United Nations in the Post-Cold War Security Environment*. In it, LTC Chee opines that there is little hope for optimism that the proposed reforms for the UN will work because of problems and challenges which threaten to overwhelm the organisation.

British Interest in the Korean War (1950-53) by MAJ Seow Hwey Min identifies as the title suggests, Britain's concerns to maintain its reputation as a world power and its Cold War considerations which influenced its involvement alongside the US. The second article on the Korean War, *The Significance of the Korean War on the People's Liberation Army (PLA): An Analysis from 1950 - 60* by LTA (NS) Wong Tze Yung, analyses the impact of the Korean War on the PLA and goes on to suggest that the war was a critical event which set the wheels in motion for its modernisation.

Riding the Next Wave of Network-Centric Warfare by CPT Irvin Lim Fan Jau, explains how network-centric warfare will prevail in the new age of reduced naval platforms. The final article, by Mr Tan Puay Seng, *Technological Advancement and its Impact on the Human Factor in Infantry Combat*, looks at the vicious cycle of technological advancement: the infantryman carries a heavier psychological burden and faces increased danger as his efficiency improves.

On a final note, we would like to remind our readers of the CDF Essay Competition which ends on 31 December 1999. If you wish to participate, there is still time to do so.

1999 CDF Essay Competition Rules and Regulations

POINTER is pleased to announce the 13th Annual Chief of Defence Force Essay Competition. The competition aims to encourage SAF officers to conduct research on professional and military-related issues relevant to the SAF to enable our Officer Corps to move towards excellence.

Rules

1. The Competition is open to all SAF officers and Warrant Officers (Regulars, NUSAF, NSF, NSmen and Officer Cadets.)
2. Entries may be submitted as an individual or group effort, however the entries must be unpublished work.
3. The essays should be between 2,000 to 4,000 words, typewritten, double-spaced on A4-size paper with all pages numbered.
4. A separate cover sheet with the following details should be included: essay title, writer's/writers name(s), rank, Service status, unit, home address and contact number. The writer's/writers name(s) should not appear in the main essay. The essay title should be repeated on the first page of the essay.
5. All entries should include detailed endnotes and a bibliography.
6. The closing date of the competition is 31 December 1999. Entries which are not in compliance with any of the competition rules will be disqualified.
7. The essays will be assessed in confidence by an independent panel of judges. No appeals will be entertained. The results of the competition will be announced in May 2000.
8. The editorial board reserves the right to edit essays selected for publication.
9. For further information, please call the Editor at 799-7410 or Assistant Editor at 7997409.

Topics

10. Entries may be submitted on any of the following subjects:
 - Military strategy and tactics
 - Doctrinal development and concepts in the SAF context
 - Professionalism and leadership in the military
 - Military ethics, values and esprit de corps
 - Military campaigns or history and their relevance to the SAF
 - Personal experiences in combat operations or overseas training
 - Administration, rescue operations and decision-making during a crisis
 - Regional geopolitics and strategic issues
 - Military and defence technology

Prizes

11. Prizes will be awarded as follows:
 - First prize - \$1,500 and a plaque
 - Second prize - \$1,000 and a plaque

- Third prize - \$500 and a plaque
- 7 Merit Awards - \$300 each and a plaque
- 10 Commendation Awards - \$300 each

The Revolution in Military Affairs: Technological Solutions for Budget-Tight and Manpower-Scarce Armed Forces

by Professor Lui Pao Chuen

Events in the last 30 years that has shaped Military Developments.

Vietnam War and the US

In the 1960s, the two super powers, USA and USSR were locked in combat through their proxies in all the continents to defend and advance their respective political ideology. The success of Communism in Vietnam was viewed by the United States as the fall of the first domino with the rest of Southeast Asia going Red soon after. Hence the need to draw a line in the sand and throw in the entire might of the US military to prop-up the South Vietnamese Government. President Lyndon Johnson, escalated the war soon after he took office in 1963, after the assassination of President Kennedy. President Nixon who was elected in 1968 soon realized that the war in Vietnam could not be won and began peace negotiations. US troops were withdrawn in 1973. South Vietnam fell two years later in 1975. The US military was completely demoralised by their defeat in Vietnam. They had the most advanced weapons in the world. The world's first precision-guided munitions (PGMs) were used to bring down bridges to cut the Lines of Communication of North Vietnam. Helicopters became the work horse of the Army with a quantum jump of improvement in troop mobility. Airborne jammers and anti radiation missiles were fielded in the dedicated Wild Weasel Phantom jets to suppress the Russian made SA2 SAMs that North Vietnam had deployed to protect Hanoi and Haiphong. Agent Orange was used to defoliate jungles that gave cover to the Viet Congs. With the exception of nuclear weapons, nearly all the high-tech weapons in the arsenal of the US military were used in the Vietnam War. But, high-tech weapons were not enough, they had to deploy a large number of soldiers to secure the ground. To meet this need, they had to use the draft. Thousands of poorly trained and poorly motivated soldiers were sent to fight against an enemy that had been battle hardened since the 1950s against the French. To make things worse, college students were exempted from the draft creating resentment among the poorer educated youths. The war was also fought in US between the government and the public who opposed the war. Many lessons were drawn from the Vietnam War, of which I would like to mention only two. First, high-tech weapons cannot compensate for the lack of fighting spirit. Second, a war can be lost if the people back home do not support it. Hence, the vital need for winning the hearts and minds of the nation to support a war. The leadership of the US military began to re-construct their forces after the Vietnam War, scarred by the memories of what had gone terribly wrong there.

The Afghan War and the USSR

With the end of the Vietnam War and the election of Jimmy Carter as President in 1976, the US was pre-occupied with domestic issues of economic recession and inflation. There were few foreign policy initiatives with the most memorable being the signing of a peace treaty between Egypt and Israel in 1979 and the recognition of PRC in 1978. Carter sought to improve the relationship with USSR through various initiatives under detente. This encouraged Leonid Brezhnev to believe that the US had gone soft on Communism and took this window of opportunity to invade Afghanistan in 1979, to settle a potential threat to USSR's southern flank.

Though the USSR did not have to deal with the same degree of public resistance to the war in Afghanistan like the US during the Vietnam War, they faced the same problem of using poorly motivated and poorly trained conscripts. They too learnt the lesson that high-tech weapons were not sufficient to defeat battle-hardened and committed guerrillas.

With the end of the Afghan War, there can be no more doubt in the military that the fighting spirit is the main ingredient for victory. The lack of the fighting spirit cannot be compensated by the deployment of high-tech weapons.

Soviet Empire: The Beginning of the End

Meanwhile through the 1970s, the Soviet economic performance gradually worsened and widespread corruption and inefficiency were evident. A major change in leadership took place in 1982 with the death of Leonid Brezhnev, after an 18-year reign as the General Secretary of the Communist Party of the Soviet Union (CPSU). Yuri Andropov, who succeeded him, died two years later without doing anything memorable. The next General Secretary, Konstantin Chernenko, lasted one year before dying in March 1985. The lack of suitable successors created the way for Mikhail Gorbachev, who was then the youngest member of the Politburo, to take over the Communist Party.

He began a policy of *Glasnost* (openness) which provided a greater degree of freedom for politics. It also allowed the development of nationalism in Russia and the other states of the Soviet Union. In June 1988, Gorbachev announced the introduction of a two-tier legislature, elected by open elections at the first Extraordinary Party Conference since 1941. In the election to the new USSR Congress of People's Deputies, in March 1989 many reformist politicians, including Boris Yeltsin, were elected. In May 1989, the Congress elected Gorbachev Executive President of USSR. The events in the Soviet Union are fascinating during this period of rapid changes after 18 years of Brezhnev's stifling rule.

Coming back to Afghanistan, Gorbachev concluded that the war could not be won and began negotiations for withdrawal soon after he assumed power. The Soviet troops began their withdrawal in 1988, after suffering a similar humiliation, as the American troops, by an enemy armed with low-tech weapons but filled with an indomitable spirit.

President Ronald Reagan: The Winning of the Cold War

President Reagan took a completely different tack from his predecessor, Jimmy Carter. Instead of detente he went into the offensive to confront the Soviet Union which he called the evil *empire*. He reasoned that as the Soviet Union could not be defeated with arms without the US also suffering unacceptable losses, he would defeat them economically instead. The deterioration of the Soviet economy was apparent. They could not match the US in spending more money to build up their ORBAT nor counter the US in their military interventions in Latin America, Africa and the Middle East.

The two major initiatives of President Reagan to which the Soviets had no answer were the 600-ship Navy and the Strategic Defense Initiative (SDI). The 600-ship Navy would give the US Navy the capability of conducting war right into the backyard of the Soviet Union, the Barents Sea.

The SDI would give CONUS (Continental United States) an umbrella against Soviet strategic ballistic missiles giving the US the advantage to strike without the fear of retaliation. This would put an end to the strategic balance achieved by the MAD (Mutually Assure Destruction) strategy which had been in place since 1950s.

As the Soviets could not afford to match the Americans in spending on their version of SDI they tried to use diplomacy to eliminate this destabilizing weapon system. It projected the image of the US as a warmonger, escalating the arms race and militarising space to the world to pressurise the US to negotiate the termination of SDI. Though Reagan announced that SDI was for peace and the US would be willing to share the research findings with the USSR, he refused to negotiate the termination of the project.

Soon after Gorbachev came into power, he met Reagan at Geneva in Nov 1985. Though they did not reach an agreement on major arms control issues, the meeting was a landmark to signal the return to a less confrontational relationship between the two countries.

Besides ramming up the build-up of military power with large spending, Reagan also demonstrated his fighting spirit in the use of military power. Examples were the military occupation of Grenada in November 1982, the shooting down of Libyan fighters in a naval exercise in the Gulf of Sirte in March 1986, and the clash with Iran in 1987 in the Gulf to protect of Kuwait's petroleum tankers.

Gorbachev finally completed negotiations for the withdrawal of Soviet troops from Afghanistan in April 1988 and the agreement for the phase withdrawal of Soviet troops was signed by the USSR, the USA, Afghanistan and Pakistan. All Soviet troops pulled out of Afghanistan in February 1989.

Negotiation on arms control suffered a setback in October 1986 when Gorbachev failed to persuade Reagan to scale-down the US commitment to SDI in a 2-day meeting at Reykjavik, Iceland. A positive outcome of this meeting was the agreement to eliminate an entire class of ballistic missiles, the medium-range nuclear missiles from Europe by 1992.

In September 1987, the Intermediate Nuclear Forces (INF) treaty was signed by Gorbachev and Reagan. This treaty eliminated all stocks of medium-range and short-range nuclear missiles. The two leaders also agreed to pursue negotiations to reduce long-range nuclear weaponry by up to 50 percent under a new Strategic Arms Reduction Treaty (START).

In 1988, Bush was elected President succeeding Reagan. The first meeting between Gorbachev and Bush was in Dec 1989 at Valletta, Malta. They finalised the agreements on the monitoring of chemical weapons and the procedures for the verification of limits on strategic forces and nuclear tests.

The withdrawal by USSR in late 1989 and early 1990 from Eastern Europe opened the way for the reunification of Germany on 3 October 1990. This led to a further improvement in the US-Soviet relationship and US economic aid for East Europe.

A Treaty on Conventional Armed Forces in Europe (CFE) which provided for bilateral limits to be imposed on the number of non-nuclear weapons which would be allowed between the Atlantic Ocean and the Ural Mountains was also signed.

At the end of 1990, the Cold War was finally laid to rest with the USA, USSR and 32 other countries signing a charter, declaring the end of the post-war era of confrontation and division in Europe.

With the end of the Cold War, both USA and USSR were less constrained by problems close to their backyards. The US marched into Panama on 23 December 1989 to capture General Manuel Noriega, its leader, for trial in US for drug trafficking. The condemnation of the US Security Council of the invasion of Panama was ignored by the US.

On the hand, the US expressed dismay and displeasure with USSR for Gorbachev's heavy-handed treatment of independence movements in Estonia, Latvia and Lithuania which were considered part of the USSR.

The Peace Dividend - Not for the Military

Two issues of top priority for the newly-appointed Bush government were containing the ballooning Federal budget deficit and the arms reduction negotiation with the Soviet Union. A reduction in arms would relieve pressure on the Federal budget. The bills for weapons ordered during the Reagan administration would have to be paid.

The 1980 defence budget based on FY94 dollars was around US\$250 billion. Reagan's arms race had rammed this level up by US\$20 billion per year to reach a peak of US\$370 billion in 1985 and remained at an average of \$350 billion till 1991.

With the end of the Cold War, the defence budget was scaled down to below US\$250 billion by 1994 and was to remain around that level in the foreseeable future. The impact on military spending was drastic. The estimated reduction in each category of spending between 1985 and 1994 was as follows:

Budget Categories	FY85	Reduction	Reduction	FY94
Military Personnel	\$88B	-21.8%	\$18B	\$70B
Operation & Maintenance	\$102B	-13.6%	\$14B	\$88B
Procurement	\$129B	-64.1%	\$83B	\$46B
RDT & E	\$45B	-7.1%	\$3B	\$42B
Other	\$14B	-5.9B	\$8B	\$6B
Total	\$378B		\$126B	\$252B

It can be seen that biggest cut would be for the procurement of new weapons system. This 64 percent cut would drastically affect not only the future force structure of the military but also the survival of many companies in the US defence industry.

Without the Soviet Union as an enemy, all the forces that had been developed to deal with the Soviet threat would now have a greatly diminished value. What good is an attack submarine if there are no SSBNs to hunt?

To achieve this level of budgetary reduction, a slimming exercise at a health club would not do. Muscles on the top of fat would have to be shedded. Reagan's goal of a 600-ship Navy was not achieved before it was scaled back to a more sustainable level. This had to be accompanied by a draw down on the number of officers and sailors recruited for the 600-ship Navy. This cutback on personnel would haunt the US Navy for 20 years.

Besides the US, other European countries also saw the requirement to invest in defence sharply reduced with the evaporation of the Soviet threat. A 30 percent cut in the defence budget became the order of the day. Similar to the US, the major budget cut would fall on capital procurement. With a reduction of some 50 percent of the budget for procurement , it became a challenge to the armament procurement agencies to stretch the dollar. Some efficiencies could be achieved with the adoption of commercial procurement practices. This was done. The US DoD tore up its books on managing acquisition and wrote new ones. The UK MOD had earlier employed Lord Peter Levene, the chairman of a company, United Scientific Instruments, to be the Chief Procurement Executive. The French Armament authority, DGA is presently headed by Mr Hemmer, former President of Peugeot.

The best commercial procurement practice could perhaps save 20 percent of the procurement budget. Further efficiencies must come from the creation of innovative ways of war fighting and to buy new systems to enable these new ways of war fighting.

The US Joint Chiefs of Staff with Admiral Owen as its spokesman pushed for the development of a system of systems for war fighting and to achieve Information Dominance for the US Armed Forces in its new role as the only super power and policeman of the world.

The reduction in defence budget in the West has created a window of opportunity for the countries that buy weapons from them. Advanced technological weapons that were hitherto not releasable were being offered for sale in order to sustain the defence industrial base. For countries which can benefit from the release of advanced defence technologies, there is an opportunity to acquire them and make their weapons superior to those on the market.

Lean Production: The Machine That Changed the World

RCP: Military Value Vs Book Value

As we all know the Relative Combat Power (RCP) of two forces cannot be measured by just counting physical assets. The value of a business is many times the value of its physical assets as indicated by its book value. The military value of a fighting unit, a tank battalion, a fighter squadron, a missile corvette squadron is many times the cost of the hardware it operates. The leverage is in the intangibles, i.e. the quality of its people, doctrine and relationships and confidence and trust between units. The intangible value of fighting units should increase with each level aggregation. For example, the military value of a brigade must be significantly more than the sum of the value of its constituent battalions. The synergy that can be achieved with the battalions fighting together is however offset by the time and staff resources needed by the Brigade Commander to plan and co-ordinate all the activities of the entire brigade.

Information technology has been used to support the staff- work of the brigade staff and has led to an improvement in the agility of a brigade. A computerised C2 System with an electronic map that shows own forces and enemy forces in realtime, a planning system that can test plans and an order dissemination and reporting system has been proven to be a very cost effective way to improve military value. A computerised C2 system was a real force multiplier for the military that first operationalised it. But the military value goes down when both contending forces are similarly equipped. The leverage would then depend on the staff who can use their system in a more innovative way.

Advances in information technology has however not changed the business of war fighting in the same degree as in other businesses like, banking, retailing, manufacturing and air travel.

There is much that we can learn from the world of business and apply to the business of war making besides just the exploitation of information technology to do business differently.

Learning from the Business World

There are countless examples in the business world in which a small company which came from no where, beating the giants of its industry in a relatively short time. Some modern examples are Toyota, Wal-Mart and Microsoft. Toyota makes cars, a prime product of the industrial age, which has changed the way we live. Wal-Mart is a retailer, using information age technology to sell products more effectively than its competitors. Microsoft makes software, a knowledge product of the information age which has become as ubiquitous as electricity and provided mankind with the power to do things more efficiently. Toyota is an example of how to succeed by daring to do things differently. The company pioneered the new production process commonly known as the Lean Production which found its way into aircraft companies like Lockheed Martin in the early 1990s.

Toyota's background

Toyota was founded in 1937 by Kiichiro Toyoda. Soon after its incorporation, the company was forced to build trucks for the war effort by the Japanese military government. After the end of World War II, the company struggled to build cars by the craft method i.e. handmade. At the end of 1949, the company had to retrench a quarter of its workforce because of recession and they could not sell their cars. The workers went on strike and returned to work only after Kiichiro Toyoda resigned. By 1950, 13 years after the company was formed, it had produced only 2,685 cars. At that time Ford was pushing out 7,000 cars a day from its Rouge Plant at Detroit, the most modern and efficient car-producing plant in the world.

In the spring of 1950, Eiji Toyoda, a nephew of Kiichiro spent three months at the Ford's Rouge Plant. He reported to HQ that he "thought there were some possibilities to improve the production system".

Mass production as perfected by Ford was obviously not a model for Toyota. To survive as a car producer, they had many problems to overcome. The main problems were:

- Tiny domestic market which required a wide range of vehicles.
- New labour law introduced by General McArthur restricted the sacking of workers.
- Lack of funds.
- Foreign competitors.

The Japanese government responded to foreign competitors by prohibiting direct foreign investment in the Japanese motor industry. Car imports were kept out with a high tariff barrier. The domestic car manufacturers resisted the government's move to merge them to make them more competitive against the "Big Three" car makers in US.

Toyota had the impossible task of trying to compete with the most efficient mass producers of cars in Detroit. Even if they had the capital to buy a modern car producing plant from US, they would not be able to compete with Detroit as they did not have the same economy of scale nor the same know-how in running plants.

Fortunately for Toyota, they did not have money to throw at the problem. To compete they have to find a different way to make cars and to beat the Americans. A tight budget is not necessarily a bad thing as it forces one to exercise one's mind to come up with innovations. Taiichi Ohno, the creative chief engineer of Toyota, was forced to innovate.

Ohno's Innovation in Car Making

Car bodies are made by welding some 300 metal parts stamped from sheet steel. Manufacturing begins with the "blanking" press to produce a stack of flat blanks from a roll of sheet steel. The blanks are then inserted into massive stamping presses which press them into 3-dimensional parts. The massive and expensive presses then in production were designed to meet the mass production needs of the "Big Three" car manufacturers in Detroit for maximum production rate. These presses could punch out a million parts a year operating at 12 strokes a minutes, 3 shifts a day.

But Toyota made only a few thousand cars a year. These presses could be retooled to make different parts but the changing of the massive dies would require specialist technicians more than one day to make the change. A couple of such presses would be sufficient to make all the parts for Toyota's cars. The only snag: after each production run of a few hours the presses would lie idle for 24 hours for retooling. What would the workers do during retooling? How to compete with Detroit with such low productivity?

Toyota's chief engineer Taiichi Ohno solved this problem with the design of new tools on rollers. He made tool changing so simple that it would need only 3 minutes. Now it would make economic sense to change tools after every few hours. The process of tool changing was so easy that the production workers could do it as part of their work.

Ohno discovered that making small batches of stampings cost less per part than large production lots. This was against conventional wisdom of economies of scale. He found that he could achieve a lower unit cost because he was carrying a smaller inventory cost and there was less wastage. An error of stamping would be detected as soon as the part was used and so large quantities of defective parts to be reworked or thrown away in mass production plants could not happen in Toyota.

This also led to the Just in Time Inventory system in which suppliers delivered components directly to the production line just in time for their assembly into the vehicles. In 1985 Toyota carried about two hours' worth of parts inventory in their factories.

The workers in Ohno's factory would have to be multi-skilled and highly motivated. If workers did not prevent problems from happening, the whole factory would come to a halt.

The lifetime employment of workers required by the new labour law imposed by the Americans made the hiring of each worker a deliberate act as they would become a member of the Toyota family for life. Investment in the continual training of workers would make sense as they would become an appreciating asset by learning and improving their contribution to the company over their lives.

In exchange for this iron rice bowl i.e. job security, the employees of Toyota had to agree to be flexible in work assignments and to be active in promoting the interests of the company by initiating improvements rather than merely doing what they were told to do. In mass production factories in the Detroit, the workers were not required to think. They were told to "leave their brains at the door" when they reported for work. In Toyota they were required to use their brains in their work.

It took Toyota more than 10 years to perfect Lean Production. Other Japanese car makers followed their success. In 1955, Japan made less than 1 percent of the cars in the world. 30 years later in 1985, Japan captured 28 percent of the world motor vehicle market.

The superiority of Lean Production can be seen in the following comparison table of productivity of General Motors and Toyota:

	GM	Toyota
Gross Assembly Hours	40.7	18.0
Net Assembly hours	31.0	16.0
Assembly Defects/100 cars	130	45
Inventories Parts	2 weeks	2 hours

Toyota took half as much time as GM to make a car with 35 percent less defects. The amount of inventory of parts carried by Toyota was less than 6 percent GM's.

Lesson on Lean Production

The lesson to draw from Toyota is not how to make cars more efficiently but daring to break away from conventional solutions to meet our operational requirements. The availability of technology is usually not a problem. We can buy technology or employ technologists to develop the technology needed. It is not the technology of weapon systems but the technology of motivating, organising forces and the boldness to do things differently from conventional practices that will create higher military value.

Our challenge is to dare to dream. We must dare to dream about doing things differently and be able to make the dream a reality. The following Dare to Dream cycle shows how dreams can be transformed into operating capabilities:

The Dare to Dream cycle is a learning cycle of thinking, doing and observing. One gets bolder with each cycle as each success will inspire greater successes.

TECHNOLOGICAL SOLUTION FOR BUDGET-TIGHT ARMED FORCES

Tight Budget is Not Necessarily Bad

A shortage of budget to build the forces needed for operational capabilities will challenge us to think of unconventional solutions. The challenge is not to create more operational capability with more money. Anybody can do that. Only an intelligent and daring armed force can create more operational capability with a small budget. Information technology has enabled businesses to achieve quantum jumps in their performance by giving them the means to create new ways to compete. The same could also be achieved in the business of war fighting.

Positive Example of Information War

The Israeli Airforce (IAF) in 1982 demonstrated how a high-tech war in the Information Age should be fought. Electronic jamming and deception denied the Syrian Airforce of a current Air Situation Picture whereas the IAF had a realtime Air Situation Picture. In every dog fight, the IAF had information dominance with the final score of 80 kills to one loss. The Syrian pilots were also psychologically defeated by their fear of the F-15s which had just been delivered and constituted only a small fraction of the IAF. It was the welding of information warfare systems with tactics that made such an astounding success possible.

Negative Example of Information War

The US Air Force in Desert Storm used an average of 11 tons of PGMs or 44 tons of bombs to destroy each target. In the first five days of the war when low-level tactics were employed to avoid medium-level SAMs, some 31 USAF and allied fighters were shot down. This worked out to be 6.2 losses per 1,000 strikes. The ban on flying below 12,000 feet to avoid shoulder launched SAMs and AAAs reduced aircraft attrition but it also reduced the effectiveness of PGMs as most of them did not have a clear line of sight to their targets.

The Americans had high resolution images from space. But these images belonged to the CIA and were not released to the ground commanders until it was too late. There was insufficient Battle Damage Assessment which resulted in multiple attacks on the same target. The air campaign became a war of massive use of force instead a war of precision. The aircraft most feared by the Iraqis was not the high-tech stealth fighter F-117 but the aged B-52s with a belly load of 100 dumb bombs. The CNN reports on TV of one bomb destroying one target was only propaganda to convince the Americans back home that they would win the war with high-tech weapons without spilling precious blood.

The lesson to be learnt from the Gulf War is the need to integrate resources and information across organisations as the cost of not using information would be very high as demonstrated by the USAF's score of 11 tons of PGMs or 44 tons of dumb bombs to destroy a target. No other country would have the luxury of time, quality and quantity of forces employed by the US in *Desert Storm*. Therefore try not to imitate what the Americans did in *Desert Storm*.

Information Vs Inventory

In the business world information has driven out inventory. *Just-In-Time* delivery of goods and services has achieved dramatic improvements in service level and reduction in costs. Toyota carries just two hours of parts in the factory. For the military, the greatest leverage of a balanced combination of information systems and guided weapons would be in the elimination of reserves. Maintaining reserves to cover lack of intelligence, uncertainties and the fog of war is the standard practice in the military. Following the doctrine of keeping one-third of the forces in reserve will result in having contact with 29 percent of the forces. If there is information dominance and a central reserve of highly mobile forces there is an excellent chance of increasing the forces in contact to more than 50 percent. Think how many more things you can do if you dare to go flat out with no reserves but trusting in the higher echelon to provide reinforcements when required with having to ask.

The investments necessary for victory in the information arena to achieve information dominance will enable successful manoeuvre warfare and destruction missions, with much smaller expenditure of weapons and losses than what was experienced by the Americans in Operation *Desert Storm*.

TECHNOLOGICAL SOLUTIONS FOR MANPOWER-TIGHT ARMED FORCES

- **Lean Production**

In mass production factories, workers are not required to use their brains. They are supposed to leave their brains at the door when they report for work. In *Lean Production*, every worker is expected to contribute ideas on how to improve the operation of their plant. *Lean Production* has displaced mass production in many factories around the world. With better educated soldiers there is greater scope for their development. We can expect significant savings in manpower substituting quantity with quality.

- **Automation**

A second technological solution is the greater use of automation. The US Navy has set a target of 95 sailors to crew the DD21 destroyer under development, a reduction of 305 from the current manning of 400 for a destroyer.

- **Manpower Savings**

But even if we introduce no new technology we can still achieve a significant reduction in manpower if we do not waste time. Another way to look at this issue is how to maximise the utilisation of our forces. If time is managed as tightly as money we would be able to detect all the waste that is going into waiting or doing things that add little to military value.

Tradition is the Greatest Obstacle to Change

Ohno of Toyota designed the tools for his presses to be changed in three minutes as compared to the 24 hours in other car producing factories. As the US Navy Smart Ship project team has found, the greatest obstacle to the reduction of manpower for ships was tradition. To reduce manning by doing things differently will require officers with daring. It is comforting to follow the footsteps of others. It is less risky. To build up a sustainable competitive advantage over your potential enemies, one has to learn continuously and dare to be a pioneer. One must dare to dream and have the perseverance and fortitude to fight for one's ideas and make one's dreams come true.

Professor Lui Pao Chuen graduated from the University of Singapore in 1965 with an Honours degree in Science. He also holds a Master in Operation Research from the United States Naval Postgraduate School. He was admitted a Fellow of the Institution of Electrical Engineers and Chartered Electrical Engineers in 1987 and appointed Adjunct Professor in the Engineering Faculty of NUS in 1990. Professor Lui has served government-linked companies and government organisations during his career. He was appointed Chief Defence Scientist in 1986 and was awarded the Public Administration Medal (Gold) in 1992.

This article was adapted from a lecture given by Professor Lui Pao Chuen on 13 May 1998 at the Singapore Command & Staff College.

Rising To Army 21: Adding Values, Holding Values

by **BG Desmond Kuek**

"The joy of a journey is not only in the destination, but more importantly, in the camaraderie of having walked it together."

In rising to the challenges of the Army in the 21st century, our focus remains the hearts and minds of our people¹. Army 21 is more a journey than a destination. A journey which we have to walk together. A journey we hope to begin today. There will be choices to be made and challenges to overcome. Decisions made - individually and collectively - will impact not only the course that is taken, but also the end state. Like any journey, there will be uncertainties and discomfort. Having a clear vision of where we want to go will keep us motivated, focused and directed.

MAPPING THE ARMY 21 ENVIRONMENT

The Army 21 environment will be dynamic. The external geopolitical scene is likely to continue to be unpredictable. The pace of technological change will increase, and we will lag behind if we are not prepared to fully embrace it; or suffer organisational indigestion if we cannot fully assimilate it.

The Army will be called upon to handle a greater variety and complexity of tasks. These include a spectrum of operations other than war. It will call for mental agility, and flexibility in our force structure, training and doctrine. We will need to be ready to do more with what we have, and be innovative to overcome our limited resources of manpower, money, time and training land.

Our people, whether regular or national serviceman, will be more discerning. Aspirations and expectations will be higher. We will need to manage them, and work towards strengthening our value system so that Army 21 can be a cohesive and committed force.

COMMAND CHALLENGES AND PARADIGMS

These environmental trends set the backdrop against which we must rise to meet the challenges of Army 21. Underlying the Army 21 plans are a set of competing demands and command challenges which have to be reconciled. I have listed seven:

- Moving Fast - Staying Firm
- Standardising the Individual - Individualising the Standards
- Taking Orders - Thinking Minds
- Inspiring the Best - Caring for the Rest
- Emphasising the Basics - Developing the Advanced
- Multi-tasking - Specialisation
- Effective Centralisation - Efficient Decentralisation

They are inherent tensions, with no easy answers. Finding the right balance and mix to these competing demands at the individual and organisational levels will shape our Army into the 21st century.

MOVING FAST - STAYING FIRM

The need to move fast to respond to changes in the operational environment, deal with domestic challenges and keep pace with technological advances is already well understood. We need to be a force that is

dynamic and daring in outlook, ever willing to change tack and move ahead at best speed. Moving fast, however, can cause great turbulence in the rank and file. Change always unsettles. If we are not careful, we could be like the proverbial rolling stone that gathers no moss. Proponents of the importance of standing firm would say that consolidation would allow the organisation to stabilise and create a better climate of confidence as people are given time to establish themselves.

Into the 21st century, we need to be able to moderate between the need to move fast and build a firm foundation at the same time.

A couple of illustrations will show that they can and must co-exist. Army 21 will require us to move fast to exploit information technology to the fullest. This will enable quicker work processes, flatter structures and greater situational awareness. It will allow us to achieve our mission more effectively and efficiently. However, we cannot protect our national sovereignty by fighting in cyberspace. Real power and deterrence still lies at the trigger end of a gun barrel, and to ensure that the Army's key mission components can still be fulfilled, we must stand firm and committed to operationalising the firepower and manoeuvre aspects of land warfare; and in strengthening the mental and physical toughness of our soldiers. The WOSE 21 study² is another example. We will need to move fast and boldly enough to attract and retain quality people in the face of a private sector pull. New initiatives are being studied but whatever these changes, we will need to stay firm in our emphasis on providing sufficient grounding in their route of advancement so that a professional corps can be built up and maintained.

Understanding the need to stay ahead of the competition, and of societal changes, gives us the imperative to move fast. Understanding the need for professionalism and discipline in the Army mandates us to stand firm on core issues and fundamentals which underpin our mission.

STANDARDISING THE INDIVIDUAL - INDIVIDUALISING THE STANDARDS

Armies all over the world have tended to standardise the individual, regardless of his/her background or potential. One good reason is that it is cost effective. In addition, if the assumption is that the base is reasonably homogeneous, then the other good reason is that it is also efficient. There are down-sides to this. The price to pay for standardisation can include an erosion of morale, loss of individual initiative, and our inability to optimise the innate potential of individuals. Also, for standards to be realistic in a large population base, they are usually pegged at a reasonable average rather than at an exceptional level. The danger is mediocrity.

On the other hand, to individualise standards is a bit of a contradiction in terms. What is the standard if we accept all kinds of individual yardsticks? Standards by definition imply some uniformity. To over-emphasise individuality may also compromise the secondary goal of National Service serving as an effective socialisation and nation-building tool.

Increasingly, we will need to be able to maximise the potential of each individual, without sacrificing system efficiency and effectiveness. The answer lies in making a distinction between the means and the ends. We must not compromise on high standards, but we should and must vary the methods used to achieve these standards. Allowing space for alternative approaches but not compromising standards and targets is the key for Army 21.

The Army 21 initiative for dual-tracking of our regular officers is an illustration of this challenge. We need not narrow ourselves to only one career development path for all, nor in defining the same measure of success for all. Clearly, we are better off with a variety of career development paths to suit the strengths and inclinations of different individuals, and allow our officers alternative specialist routes along which they can work their way towards realising their full potential and achieving their measure of success.

TAKING ORDERS - THINKING MINDS

We want both. We want obedience and discipline, and at the same time, strong initiative and a questioning mind. The challenge is how to nurture both at the same time.

Like all Armies, we will continue to value discipline and unquestioning obedience to orders. This is ostensibly to prepare against fear and fire in the battlefield; and because of the need to integrate individuals collectively as a team in a short time.

However, the battlefield of tomorrow will be increasingly sophisticated, and age-old methods may no longer be relevant or effective. We need to constantly challenge the methods that we may have grown accustomed to, and look for better ways to do things, even if the old methods still work. We are well placed to do so. Our manpower resource is increasingly better educated, our soldiers are increasingly and intelligently vocal, and this is a strength which should be harnessed in Army 21. A large National Service base also lends itself to a rich cross-pollination of ideas and practices from the private and commercial worlds.

Eventually we must strive towards a new paradigm on discipline: the discipline of the questioning mind. This is the only way to build a learning organisation and enhance the store of knowledge capital to ensure that Army 21 remains professionally competent and progressive.

We need therefore to continue to refine our training system to further enhance the process of understanding the intent and underlying considerations behind a task, and not only the how and what to do. It is more important to explain the "why" in a mission than to specify the "what". Subordinate commands who see a better way to do things have an equal responsibility to highlight this to the higher command. This is an ethic which must permeate peacetime training, staff work and operations.

INSPIRING THE BEST - CARING FOR THE REST

We need to inspire our best to give of their best; and at the same time also motivate and care for the others, including those who may fail while trying. To have a climate of innovation and a spirit of daring initiative, we need a command culture that accepts failure as part of the learning process.

Here we make a distinction between failure due to lack of effort, failure due to incompetence, and so-called "failure" due to innovative attempts to overcome an uncertain environment. Of the first, the saying goes that "the only way to avoid making a mistake is to do nothing - but that would be the ultimate mistake". As for failure due to incompetence, we should recognise that it is not only the individual's failure, but also our failure as commanders to anticipate and put in place support systems to better ensure his success. This is the framework of Mission-Demand-Support³ and the thrust of our "Care for Soldiers" emphasis.

The strength of Army 21 depends not only on the best and brightest to succeed. It depends on everyone to continue to try, to innovate, and to bring forth the best in their areas of work. The Officer 21 initiatives also aim to address this aspect. Only if we show care for our people, develop them to their maximum potential and allow them space to experiment and fail, can we expect them to be loyal and committed to adding value to the organisational cause.

EMPHASISING THE BASICS - DEVELOPING THE ADVANCED

Clearly we must do both. Often, the complaint is that there is not enough time, especially when the same people are caught between meeting the training requirements of a finite National Service training cycle, and supporting the demands of higher level exercises.

We have to figure out how best to achieve both requirements. Training simulation such as SIMLAB is one obvious way where higher level command exercises need not always steal unit commanders away from their

primary responsibility of supervising basic low level training. We should therefore do more along this vein. Yet in a way, the two requirements are complementary. In order to move on to advanced training, we must be proficient in basic skills and drills. Equally, higher level exercises should not gloss over soldiering skills and basic fieldcraft and tactics.

While we experiment with new technologies, better equipment and more advanced systems at the macro level, we must not believe that they can entirely make up for individual soldier competencies. Back to basics and strong leadership remain vital training needs which help to enhance individual survivability and force preservation. At the same time, a feeling of individual competence will serve to heighten the soldier's confidence in his own abilities and his perception of the effectiveness of the Army.

MULTI-TASKING - SPECIALISATION

The need for organisational flexibility and the reality of our resource constraints require us to have people who can be multi-tasked. Yet advanced technology, more complicated operations, and limited training time require us to specialise.

This is a time and resource allocation issue. We could solve it if we had more people or more time - but we do not have the luxury of either. The issue is not new - we have had to face up to it in our two- year training syllabus where we know that not everything can be done to the same level of proficiency given the time constraints. What is new however is that creative training can increase the potential for multi-tasking by better optimising training time and resources. What is also new is the need to re-examine the way we allocate manpower resources. Use of technology alone cannot be the criteria for allocation. Besides asking who needs to use technology, we will now also need to ask who has the widest scope of work and needs to be most versatile? Who operates most usually under an environment of uncertainty? These then should be the vocations which need to be allocated the best resource.

As an example, a storeman may now need to be computer literate to operate IT-dependent systems. Infantry, guards or mechanised infantry vocations may turn out to be the most demanding as their operational environment would likely be fluid, requiring very responsive minds. On the other hand, other tasks, traditionally considered more technologically advanced, but also more routine in nature, could well be undertaken instead by people who demonstrate less aptitude for flexibility of mind and spirit.

EFFECTIVE CENTRALISATION - EFFICIENT DECENTRALISATION

Finally, Army 21 will compel us to consider the optimal degree of decentralisation given the requirements in the future. We have as far as possible advocated centralised planning and decentralised execution. This promotes initiative, empowers people to take on larger responsibilities, and also avoids clumsy work structures and information overload at the central decision body.

We will however be forced to challenge the conventional, and challenged to do more. The information wave will change the way we organise ourselves and the work flows which we have been accustomed. With networking, the information required for decision making would be available on demand by anyone with access. We will see networked systems with multiple decision nodes, and this will present viable alternatives to the traditionally more hierarchical system in meeting the challenges of tomorrow. In such an environment, re-centralisation may instead turn out to be more efficient especially if resource numbers are a constraint. We are already seeing the application of this with more zonal workshops and central storehouses. Decentralisation may well turn out to be more effective if better manpower quality and new decision tools through IT allow us to entrust decision-making to the lowest level capable.

CONCLUSION

To conclude, the Army 21 journey is not just about new technologies, work processes or organisational systems. It is more importantly about people. It is about how we, individually and collectively, understand

the competing challenges, so that we can better value add to the entire process of change in building Army 21.

How much more can we empower our subordinates given the information-rich and dynamic environment of the future? How can we develop our people both deeper and broader in their short time with us? How do we build on basics while also pushing new frontiers in training and technology? How do we create the conditions for success, yet allow space for failure? How do we inculcate the discipline of a questioning mind while keeping people within ranks and boundaries? How do we maximise individual creativity and potential without sacrificing system efficiency and effectiveness? Where do we move fast to add greater value, where should we stand firm and hold on to old values?

The seven command challenges I have highlighted are intended to provoke thought, not so much to prescribe solutions. The answers we will have to search out in our journey together, tweaking our responses in the face of uncertainty and fluidity, adding value at each stage of the way.

In this sea of change, what we must hold on to as we passage from the 20th to the 21st century remains our core values. Loyalty to country, leadership, discipline, professionalism, fighting spirit, ethics and care for soldiers - these are crucial to anchor us as we steer a decisive course towards realising the vision of Army 21.

Endnote

1 This speech was delivered on 8 April 1999 at the WY 99 Army Workplan Seminar.

2 This study reviews the current structure of the Warrant Officers, Specialists and Enlistees (WOSE) Corps to provide an enriching and rewarding career that is commensurate with the Army 21 Vision.

3 The Mission-Demand-Support framework: Mission - to define the mission and the goals to be achieved; Demand - to demand from the soldiers/units the required standards in order to achieve the stated mission; Support - to provide soldiers/units with the necessary and appropriate support in terms of knowledge, expertise and resources.

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Proposed Reforms for the UN in the Post-Cold War Security Environment

by LTC Chee Vui Chung

***After a brief post-Cold War honeymoon, the UN is once again suffering from the inability to enforce its decisions in critical situations, this time without the excuses of the ... Cold War.*¹**

There has never been a lack of ideas on how to improve the United Nations (UN).² Following the abating of East-West tensions, the UN is under greater scrutiny as to its continued relevance and effectiveness. Two reasons account for this examination: firstly, the post-Cold War era is vastly different from the period of US-Soviet stand-off; and secondly, it hardly resembles the post-World War II period for which the UN Charter was principally designed for.

This essay argues that there is little basis for optimism that the proposed reforms of the UN will make the world organisation more effective. First, it contends that the proposed reforms are so fraught with problems that they may not progress far. Second, the essay argues that there are new challenges which threaten to distract and possibly overwhelm the UN. Finally, it posits that the UN has to be successful in both reforms and meeting new challenges in order to remain effective.

REFORMING THE UN

Reforms proposed for the improvement of the UN fall into two general categories. There is the *administrative* category that aims to improve the *efficiency* of the UN as an international corporation and includes proposals such as the restructuring the Security Council, making the Council's decision-making process more transparent, improving the UN's financial management and the enhancement of coordination between the UN and other world bodies such as the International Monetary Fund (IMF) and the World Bank. The second group of *operational* reforms target at the *effectiveness* of the UN as a world organisation and contains ideas such as greater use of preventive diplomacy, improving the UN peacekeeping operations including the safety of UN peacekeepers, the setting up a UN Force and the promotion of global development.

Well intended though these reforms may be, their progress is limited. To maintain brevity, the subsequent discussion aims at illustrating the difficulty in reforming the UN, highlighting one "efficiency" proposal - the improvement to the Security Council - and one "effectiveness" proposal - the promotion of preventive diplomacy.

The UN Security Council

One main criticism of the Security Council is its poor representation of the world community.³ Suggestions for the reform of the Security Council include long-term ones advocating changes to the permanent membership, and short-term improvements entailing longer and more frequent terms on the council for more aspiring and influential countries.⁴ Anti-West fears were rekindled by the collapse of the Soviet Union which has left the Security Council with a composition that is not only sympathetic to the interests of the West, but also without a counter-balance to American predominance. Japan and Germany reckon that their international influence in decision-making is in no way commensurate with their funding of the organisation's activities. They are embittered by the continuing membership of France and Great Britain whose international influence have waned significantly since 1945.⁵ It is unlikely for these two World War II victors to relinquish their historical status as permanent members and interests to, say, a European representative.⁶

The admission of Japan and Germany to permanent membership would be seen as unduly increasing the influence of the "North", creating a necessity to balance with the elevation of regional powers from the "South" such as India, Brazil, Nigeria, Egypt and South Africa.⁷ Even without considering the issue of North-South balance, these powers already believe that they deserve greater say in the council's decision-making.⁸ Additionally, countries such as Canada, Australia and New Zealand that contribute troops regularly to all UN operations feel left out of decisions that affect their soldiers. The clamour for changes is likely to remain impasse as each major structural reform threatens to open another Pandora's box.⁹

Another controversial issue is the council's veto system. Although the exercise of vetoes having been drastically reduced since the implosion of the Soviet Union, dissatisfaction has mounted over the combination of military predominance and practical procedural control of the Security Council in the hands of a few, especially the US. As the sole superpower, the US has become more suspect in non-western eyes.¹⁰ On the other hand, any proposal to lessen the impact of the veto is likely to be vetoed in the first place.¹¹ It had been a conscious decision of the World War II victors to avoid being subjected to major power collective coercion. The veto provision was an absolute requirement for American participation in the UN in 1945.¹² If the provision is rescinded, it is not unthinkable for at least one permanent member to leave the UN. Should the US opt out, which is not unlikely, a UN without the underpinning influence of the remaining superpower could meet the same fate as its short-lived predecessor, the League of Nations.

Preventive Diplomacy

While it is true that "when diplomacy fails, it fails visibly; where it succeeds, the causes for success are often imperceptible"¹³, the achievements of preventive diplomacy are, on balance, hardly laudable. Diplomats did not save Kuwait from Saddam Hussein's adventurism; neither did it force the Iraqi invaders out. They did not prevent the "killing fields" of Cambodia or the ethnic slaughter in Rwanda. It was marginal, perhaps even counter-productive in the Balkan war. Currently, diplomacy is still trying to bring peace and reunification to the Korea peninsula. Once countries or major groups within countries are determined to seek political solutions through the use of force, external diplomacy is usually helpless. Diplomacy has a place only when warring has ended in exhausted deadlock, as in the Middle East, Cambodia, Angola and now in the Balkans.¹⁴

In the context of *An Agenda for Peace*, preventive diplomacy is one of the four thrusts that together "offer a coherent contribution towards securing peace". As a concept "to prevent disputes from arising ... to prevent existing disputes from escalating into conflicts and to limit the spread of the latter when they occur", preventive diplomacy holds great promise.¹⁵ Although the adage goes that prevention is better than cure, such an alluring concept is unfortunately riddled with difficulties in implementation. How does the UN keep watch when the origins of violent conflicts range from ethno-nationalism to boundaries to resource disputes in more than 100 countries? What type of surveillance system is needed to monitor them? Will the UN be empowered to set it up and thereafter be able to sustain it? The UN is already seen by many countries as too intrusive and under the influence of the powerful countries. Since the UN operates on the premise that the disputants have to invite, if not acquiesce to UN intervention, it is difficult to see how much preventive diplomacy can abort conflicts.¹⁶

Two critical ingredients for successful preventive diplomacy are a clarity of purpose and a coherent strategy.¹⁷ The decision-making process of the Security Council depends largely on its dominant members. With the US having an overwhelming say, the clarity of purpose of the Security Council is almost synonymous with that of American articulation. So long as balancing between American interests and maintaining a moral foundation for policy in the absence of direct threat to US strategic interests remains the central dilemma of US foreign policy, clarity of purpose will be an illusive goal for the US and, by extension, for the Security Council. This muddling is not peculiar to the Americans as Bosnia demonstrates similar ambiguity among the European nations. UN representatives need unequivocal support of members states, but member states invariably speak with different voices, and mediation efforts lack unity and strategic coherence.¹⁸

NEW CHALLENGES CONFRONTING THE UN

Recent debacles particularly in Bosnia, Somalia and Rwanda have cast doubts about the UN as an effective mechanism for the post-Cold War era. Is the UN, conceived during the close of World War II, still relevant in a drastically different geopolitical era? Inter alia, three main issues stand out: the new world disorder; the UN-US relations; and the shift in existing paradigms on international relations concepts.¹⁹

The New World *Disorder*

The international political structure is under severe duress which threatens to make the UN's mission of maintaining and promoting world peace and security an almost impossible task. Firstly, there is an unprecedented upsurge in intra-state conflicts on a global scale. After Cambodia, Afghanistan, Haiti, and the "triple crisis of Somalia/Bosnia/Rwanda"²⁰, it is evident that the key challenge to international stability in the post-Cold War era is the phenomenon of internal conflicts in which authority implodes, ethnic and religious conflicts erupt, many lives are lost, and millions flee across international borders. Brutal expressions of historical grievances and ethno-nationalism are accompanied by communal violence and civil wars of a scale not envisioned by the framers of the UN Charter.

Intra-state rather than inter-state wars now constitute virtually all armed conflicts and claim more than 1,000 lives annually.²¹ There is much international law to govern conflict between states, but much is left unsaid about the conduct of internal wars and domestic violence.²² Civil wars are seldom purely a domestic affair and have the tendency to quickly spill across borders. The consequent refugee flow and economic disruption have international repercussions. Such conflicts often have more than two warring parties.²³ Negotiations are more complicated and unpredictable; cease-fires and agreements less stable.

In such an unstructured conflict environment, there is limited relevance for the rational actor model that characterises much of UN's conflict management and diplomacy.²⁴ Although the idea of collective security could be applied to intra-state activity, the UN Charter was designed principally to prevent re-occurrences of World War II characterised by the invasion of one state by another. Will the UN be able to operate effectively in intra-state conflicts where the consent of warring parties is likely to be less than that found in traditional operations? Or where consent evaporates after the parties have agreed to stop fighting but find that elections or other events no longer go their way?²⁵ The UN is woefully ill-equipped to deal with conflicts existing within international borders. The stark reality is that the UN does not have the resources to meet all crises. It is possible to "subcontract" the resolution of such issues to regional organisations.²⁶ Such farming-out, while it has its potential, is not as straight-forward as it seems. Regional organisations have the obvious advantage of understanding the context and issues better. However, regional states are often viewed by belligerents as acting with vested interests. More critically, it is not clear, especially from the recent experiences in Bosnia and Cambodia, that the effectiveness of regional attempts in resolving internal conflicts is better than the UN's. Moreover, many member states have ethnic skeletons in their own cupboards and are generally reluctant to face these issues, or to create new legal criteria and precedence of international intervention.²⁷

Secondly, the world is increasingly being fractured along a North-South divide caused by the "politics of financial commitment".²⁸ With economics displacing military power as the main determinant of global order, a new economic conflict pitting the industrialised North against the unindustrialised South is smouldering in the ashes of the Cold War. The South's so-called Group of 77 (G77)²⁹ insists that the onus for fundamental global economic restructuring lies with the North, identified primarily as the Group of Seven (G7).³⁰ Fearing monopoly of the UN by the economically-strong North, the South maintains that the "UN ought not to be commandeered into an assistance brigade that delivers its gifts by coercion".³¹ The UN has thus far failed to realise one of the goals of the founding governments which is "to employ international machinery for the promotion of the economic and social advancement of all peoples." The UN's Economic and Social Council (ECOSOC) is seen as inept and has failed to exert an influential role in coordinating with the Bretton Woods institutions to synergise efforts to realise effective global economic development. Much needs to be done in order that the twin vision of the "agenda for peace" and the agenda for development goes beyond mere

rhetoric. Meanwhile, the dangers of economic disputes and the threats of trade wars replacing armed confrontation are looming ahead.

Thirdly, the international polity is being subjected to both fragmentation and integration. States, such as the former Yugoslavia and the USSR, have broken up. This demise of the "political device of federalism"³² could potentially claim Canada, Great Britain or even China as the next candidates. States are also being created from fusion of smaller ones. Examples are Yemen³³, Germany and, possibly, a reunified Korea in the future. Such fission and fusion have often been destabilising to the new states themselves as well as to their immediate region.

UN-US Relations

*[US] Congress' retreat from its previous devotion to world community is by far the greatest threat to the hope of a revived United Nations.*³⁴

Abba Eban

The US, the sole superpower, exercises considerable influence on the UN. The deterrent or response to major acts of aggression depends largely on the military might of the US and its allies. The determining factor for their response in a given situation will be their interest and concern, particularly those of the US.³⁵ The Security Council failed to act decisively in Georgia as it is in Russia's "backyard" where Washington has no substantial interest. That the Americans continue to possess tremendous political and diplomatic clout is beyond doubt. The recent refusal by the US to support [Boutros Boutros-Ghali] for a second term in office as UN Secretary-General underscored the influence the US has over the UN and the world.

The relations between the UN and the US is a function of American domestic politics. The Republicans have traditionally not been fans of the UN.³⁶ The Clinton administration's commitment to reversing previous Republican policies towards the UN have been negated by a Congress that is dominated by Republicans. The "financial stick" has been a frequent tool used to bend the UN to American demands. In October 1993, Congress decided to withhold 10 percent of its regular contribution to UN until the Secretary-General appointed an Inspector General to eliminate corruption. President Clinton was also informed by Congress that the US share of future peacekeeping bills would be reduced from 31.7 to 25 percent.³⁷ The latter sent ripples throughout the world as other governments considered the possible repercussions of a higher peacekeeping bill on their economies.

The UN is also a hostage to the ebb and flow of American public opinion. Few countries are spared the backlash of public opinion when casualties are incurred in conflicts where there is no vital or national interest at stake.³⁸ Ironically, it is in the US, the world champion of democracy and human rights, that the furore of unjustified deaths is given maximum expression. "What precisely is the moral or political justification ... for sending a young man ... to die [?]"³⁹ As the American nation suffers from "compassion fatigue"⁴⁰, their politicians are paralysed by the inability to resolve the perpetual dilemma of the "conflict between the moral imperative to act and the need to identify a national interest which can mobilise domestic support".⁴¹ More inaction can be expected from a US suffering from "donor fatigue"⁴² which is well-illustrated by its lack of response to Rwanda.⁴³

US leadership remains the sine qua non of meaningful UN actions, particularly those involving large military forces. UN field operations are becoming more frequent⁴⁴ and tend to be larger in size.⁴⁵ These increases, although by no means predictive, could be indicative of the general trend for UN peacekeeping operations. If this is true, peacekeeping will be adversely affected by the promulgation of US Presidential Policy Directive 25 which dictates stringent criteria for any US operational involvement.⁴⁶ Thomas Weiss opined that this development, besides marking "an abrupt change in US policy", was "part of a historical pattern of US volte-face" and that "Washington has washed its hands off responsibility and abandoned the mantle of leadership". Of possibly further-reaching effects on the UN is Washington's refusal to approve any new UN operations, with or without US soldiers, unless other restrictive criteria are satisfied.⁴⁷ New operations will

be hard put to satisfy these conditions. So long as the US continues to see the UN as instrument of its national policies, the future augurs poorly for the world organisation.

Shifting Paradigms

Interpretation of concepts governing diplomacy are shifting or changing with corresponding effects on the conduct of international relations. Three of these are now discussed: national sovereignty, collective security and state-centrism.⁴⁸

The notion of national sovereignty is no longer sacrosanct. When UN members agreed to bind themselves in various ways for the common good, they emphasized their national sovereignty as well as prohibited intervention in matters considered the domestic jurisdiction of any state. They perceived the UN not as an embryonic world government but as an international corporation with nation-states as shareholders.⁴⁹ Strong as these sentiments are even today, global forces are weakening the traditional authority of the sovereign state in ways unforeseen in 1945. If European currency is traded in the middle of the night in East Asian markets, is it still European currency?⁵⁰ Is a single government able to cope with threats to its national interest which may come in the form of global environmental degradation or international drug trafficking? Can beleaguered governments handle these matters when authority and influence in many spheres are being located outside the country either in regional or transnational centres?⁵¹ The only chance UN members have in dealing with these transnational problems is to work out solutions within the framework of effective international structures. Countries have "real sovereignty" when they are able to influence outcomes, nationally and internationally. This ability has declined in recent times even in such countries as Britain, France, India and Argentina.

A conceptual and operational leap must be made to strike a balance between national sovereignty and the needs for effective UN security operations in the post-Cold War era.⁵² An important first step would be a direct confrontation with the meaning of "consent" when there is no sovereign or legal government such as in "failed" states, or when the authority is still being contested such as frequently in "emerging" states. Another challenge for the UN is to help governments understand a political paradox, which is that the only purpose of intrusion, as in UN humanitarian intervention, is to help them recover their real sovereignty. The latter being seen as regaining their capacity to influence their own fate and to conduct their own affairs peacefully.⁵³

The concept of collective security is "premised on an assumption that all nations have an equal interest in opposing specific acts of aggression and are willing to incur identical risks in opposing them".⁵⁴ Experience has cast doubts on this assumption. First, national loyalty is not transferable to any notion of world community and, despite their rhetoric and theatrics, states have placed and will continue to place their national interests above others.⁵⁵ Second, what is aggression for one could be self-defence for another and national liberation for a third. Third, nations do not react in the same way towards adversaries and allies. Finally, it is unrealistic to expect statesmen to surrender their discretionary response on such critical issues as the use of their country's armed forces. ⁵⁶ Collective security runs the risk of not reflecting the realpolitik of contemporary international state behaviour. That Saddam Hussein remains firmly in power in Iraq questions the capacity of the UN as an instrument of collective security.⁵⁷ The truth could well be that there are no collective solutions to individual crises.⁵⁸

The UN is a state-centric security system where states are the principal actors. The institutional foundations upon which multilateral responses to the issues of international security have been based are now being questioned. Joseph Nye suggests that the "distribution of power in world politics has become like a layer cake". At the top unipolar military level, states are the principal actors. At the economic middle layer, international institutions and groupings of state actors exercise predominance. At the bottom where there is a "profusion of power" is where transnational interdependence blurs the distinction between domestic and foreign policies. This results in non-state actors such as political parties, non-government organisations (NGOs) and other national forces important arbiters of international policy. Samuel Huntington, in an alternate vision, argues that the state will lose pride of place as the determinative actor in global relations.

He sees much larger groupings centred around cultural identity as providing the decisive criteria around which masses of human populations will organise themselves.⁵⁹

The UN continues to approach peace almost exclusively as involving relations among states which distort the view of how peace is negotiated and sustained. The Somalia experience for example, suggests that the UN as an inter-government body, is frequently at a disadvantage in dealing with irregular forces and insurgents. If state-centrism is suspect as a model governing relations between the UN and member-states, what should be their *modus vivendi*? How do non-state actors fit in? The role of non-state intermediaries in internal armed conflicts may be heightened in the post-Cold War period.⁶⁰ Many non-government actors such as clans and international organisations (for example, the International Committee of the Red Cross) have an important role to play in the mitigation and management of armed conflicts. The ineffective "long-reach" of the UN could also spell a greater role for regional organisations. However, as previously indicated, such involvement by regional organisations are not without hitches and would require more than innovative approaches to be effective.

CONCLUSION

The challenges facing the UN in the post-Cold War era will be fundamentally different from those encountered during the post-Second World War and the subsequent US-Soviet stand-off. The end of the latter has raised expectations of the UN, just as it has unleashed the violence and instability which the UN is trying to cope. There is a need for a serious appraisal by the UN not only of itself as an effective organisation but, more importantly, as a global security system able to adapt to changing and evolving international environment. Any skewed approach that emphasises UN organisational reforms alone will fall short. An earnest contemplation of new challenges affecting the UN as an international security system as well as improvements to specific parts of its administration or operations are *both* needed to rejuvenate the UN.

Endnotes

1 Brian Urquhart, "The UN and International Security after the Cold War", *United Nations, Divided World*, edited by Adam Roberts and Benedict Kingsbury (Oxford: Clarendon Press, 1995), 82.

2 Ideas for reform have come from a wide group of people such as diplomats, politicians, governments, academics and even UN officials themselves. See Boutros Boutros-Ghali, *An Agenda for Peace: Preventive Diplomacy, Peacemaking and Peacekeeping (Report of the Secretary-General 31 January 1992)* (New York: United Nations Department of Public Information, 1995); Yasushi Akashi, "The Limits of UN Diplomacy and the Future of Conflict Mediation", *Survival*, Vol. 37, No. 4, Winter 1995-96, 83-98; Gareth Evans, *The Future of the United Nations: An Australian Perspective*, The Evatt Memorial Lecture given at the United Nations Association of Australia Conference, National Press Club, 1 September 1995; Paul Kennedy and Bruce Russett. "Reforming the United Nations", *Foreign Affairs*, September/October 1995, 56-71; and Adam Robert, "From San Francisco to Sarajevo: The UN and the Use of Force", *Survival*, Vol. 37, No. 4, Winter 1995-96, 7-26.

3 For example, Ingvar Carlsson has argues that "[i]t is not reasonable to suggest that the five winners of the Second World War, with the assistance of 10 additional, rotating member states, comprise a representative, legitimate, or authoritative voice for a UN membership of 185." See Ingvar Carlsson, "The UN at 50: A Time to Reform", *Foreign Policy*, No. 100, Fall 1995, 6.

4 Thomas G. Weiss, David P. Forsythe, and Roger A. Coate, *The United Nations and Changing World Politics* (Boulder, Colorado: Westview Press, 1994), 93.

5 Another cause for their dissatisfaction is that the UN Charter in Articles 53, 77 and 107 still made reference to the "enemy" states of Japan, Germany and Italy.

6 Kennedy and Russett, *op. cit.*, 61.

7 *Ibid.*, 61.

8 Weiss, Forsythe and Coate, *op. cit.*, 39.

9 For example: Who should be included as new permanent members? Should the new permanent members be granted veto powers too? Should economic power be the basis of election? Why should economic powers whose constitutions impede overseas military involvement be given a permanent seat? Should there be three permanent European members? Should Britain and France still remain as permanent members since they are no longer the great powers they once were? Should the number of non-permanent members be increased to reflect the growth in UN membership? Should the representation be on a regional basis to better reflect and represent interests?

10 Edwin M. Smith, "Collective Security and Collective Defence: Changing Conceptions and Institutions", *The United Nations in a New World Order*, edited by Edwin M. Smith and Michael G. Schechter (California: The Keck Centre for International and Strategic Studies, Claremont McKenna College, 1994), 22.

11 Proposals include limiting the range of areas in which veto can be used, allowing its use only when a permanent member's "supreme national interest" is affected, instituting a system of weighted voting that would allow the council to override a veto, and increasing the number of negative votes needed to veto a resolution. See Weiss, Forsythe, and Coate, *op. cit.*, 94.

12 Eban, *op. cit.*, 43.

13 Christoph Bertram, "Multilateral Diplomacy and Conflict Resolution", *Survival*, Vol. 37, No. 4, Winter 1995-96, 67.

14 This section draws its argument from *Ibid.*, p. 66. Bertram puts forth three reasons why this is so: it is not the outside power that controls events inside a country; efforts by governments to resolve conflicts beyond their border and not directly impacting on them rarely receive priority; and, governments do not think in worst-case basis and its instinct is to wait and see in the hope that the crisis may dissolve on its own or not come their way.

15 The three others are peacemaking, peacekeeping and post-conflict peace-building. See Boutros Boutros-Ghali, *An Agenda for Peace: Preventive Diplomacy, Peacemaking and Peacekeeping - Report of the Secretary-General, 31 January 1992* (New York: United Nations Department of Public Information, 1995), 45-6.

16 C. B. Rau, "United Nations at 50", *The Round Table* (1996), 337, 33.

17 Bertram mentioned the recipe for successful diplomacy, which this author feels is equally applicable for preventive diplomacy, as including timeliness (not to be confused with early involvement), sense of urgency, clarity of purpose, the involvement of an encompassing institution (to which this author differs in opinion) and leverage. See Bertram, *op. cit.*, pp. 73-77. Yasushi Akashi contributes two other factors for success: "consensus by member-states for the UN approach, and the parties must be willing to cooperate with the UN's efforts." See Akashi, *op. cit.*, 87.

18 As an example, while officials and some states were trying to persuade parties to accept the Vance-Owen plan proposed by the UN-EU to help resolve the conflict in the former Yugoslavia, the US derailed the process when it indicated that it did not support it. See Saadia Touval, "Why the UN Fails", *Foreign Affairs*, September/October 1994, 53.

19 The selection of only three issues is to maintain focus and brevity, and not out of neglect for other no less important aspects such as non-military threats to security, the legality of humanitarian intervention and use of force, the role of the Bretton Woods Institutions *vis-a-vis* the UN, the role of regional organisations and non-governmental organisations etc.

20 See Paul Kennedy and Bruce Russett, *op. cit.*, 62.

21 In early 1988, only 1 in 5 UN operations was an intra-state conflict. Since then, 13 out of 21 have been of that kind. Only 2 out of 11 operations established since January 1992 are inter-state. Currently, more than two-thirds of peacekeeping operations are related to domestic conflicts.

22 Thomas G. Weiss, "The United Nations and Civil Wars at the Dawn of the Twenty-First Century", *The United Nations and Civil Wars*, edited by Thomas G. Weiss (Boulder, London: Lynne Rienner Publishers, 1995), 195.

23 For example, Cambodia had 4, Bosnia-Herzegovina has 3 within and at least two, Croatia and Serb outside.

24 Weiss, *op. cit.*, 196.

25 Weiss, Forsythe and Coate, *op. cit.*, 90.

26 Examples of regional organisations are as Association of Southeast Asian Nations (ASEAN), Organisation of Africa Unity and the League of Arab States.

27 Urquhart, *op. cit.*, 87.

28 Roderic Alley, "The United Nations and Asia-Pacific: An Overview", *The Pacific Review*, Vol. 7, No. 3, 245.

29 The G77 is an assemblage exceeding 120 and containing sub-affiliations of interest and regions bonded by one a compelling interest to protect themselves from the economic dominance of the G7.

30 G7 comprises the US, Britain, France, Germany, Japan, Canada and Italy.

31 The comments of former UN Under-secretary for Africa, Abdulrahim Abby Farah as cited by Alley, *op. cit.*, 256.

32 Coral Bell, *The United Nations and Crisis Management* edited by Coral Bell (Canberra: Strategic and Defence Studies Centre, Australian National University, 1994), 4.

33 As an indication of such political frailty, Yemen experienced a civil war in mid-1994.

34 Abba Eban represented Israel at the UN from 1948-1959 while serving concurrently as ambassador to the US (1950-50). He was Foreign Minister from 1966-1974. See Abba Eban, "The UN Idea Revisited", *Foreign Affairs*, September/October 1995, 55.

35 Terry Terriff and James F. Keely, "The United Nations, Conflict Management and Spheres of Interest", *International Peacekeeping*, Vol. 2, No. 4, Winter 1995, 26-530.

36 The UN is widely regarded by the international community, particularly in the US, as being bureaucratically overblown, overly expensive to run and weakened by personnel many of whole are not welcomed in their own countries.

37 Mats R. Berdal, "Fateful Encounter: The United States and UN Peacekeeping", *Survival*, Vol. 36, No. 1, Spring 1994, 34. At the same time, a proposed \$175 million contingency fund to cover immediate peacekeeping costs was cancelled following a complete collapse of congressional support for a continuing US role in Somalia. In addition, Congress also cancelled the payment of the fourth of five special payments planned by President Bush to covering existing arrears.

38 Total casualties for UN peacekeeping missions from 1945-1995 stood at 1 194. Statistically, it is about 1 Blue Helmet death for every fortnight for 50 years of peacekeeping operations.

39 Bell, *op. cit.*, 20.

40 Weiss, *op. cit.*, 191.

41 Berdal, *op. cit.*, 37.

42 See Kennedy and Russett, *op. cit.*, 62.

43 Weiss, *op. cit.*, 209-210.

44 More peacekeeping operations were initiated from the six years from 1987 than the previous forty years. 20 UN field operations were initiated from 1988 and there are currently 39 in effect with 16 underway.

45 For example, there are more than 30 000 each in Somalia and the former Yugoslavia.

46 It came into effect in May 1994 after a year of fierce interagency feuding and ill-fated military operations in Somalia and Haiti, and waffling about the former Yugoslavia. PPD 25 spells out strict guidelines to be considered before the US agrees to participate in any operation: US interests, the availability of troops and funds, the necessity for US participation, congressional approval, a clear date for US withdrawal, and appropriate command and control arrangements.

47 The crisis must represent a threat to international peace and security, gross abuses of human rights, a violent overthrow of a democratically elected government. Any proposed intervention must involve clear objectives, the availability of troops and funding, and most importantly - the consent of the parties and a realistic exit strategy.

48 This restrictive selection is again to maintain brevity and focus.

49 Kennedy and Russett, *op. cit.*, 59.

50 The helplessness of Southeast Asian countries recently when their currencies plummeted amply underscored this point.

51 This section draws heavily from *Ibid*, 59-60.

52 Weiss, Forsythe and Coate, *op. cit.*, 90.

53 Kennedy and Russett, *op. cit.*, 68.

54 Eban, *op. cit.*, 40.

55 US PPD 25 is an excellent example.

56 Abba Eban, *op. cit.*, 46-7.

57 Urquhart, *op. cit.*, p. 85. For further arguments on collective security, see Mark T. Clark, "The Trouble with Collective Security", *Orbis*, Spring 1995, 237-258.

58 Eban, *op. cit.*, 46-7, 50.

59 See a summary of the views of Joseph Nye and Samuel Huntington in Smith, "Collective Security and Collective Defence: Changing Conceptions and Institutions", *The United Nations in a New World Order*, *op. cit.*, 18-21.

60 Weiss, Forsythe and Coate, *op. cit.*, 87.

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British Interests in the Korean War (1950-53)

by MAJ Seow Hwye Min

To examine British interests in the war, it is necessary to look beyond Korea as an entity in itself. Indeed, it has been suggested that Korea had no direct military or economic significance for Britain.¹ Clearly, British participation in the war, and the crisis it constituted, can only be explained by other British interests beyond a simple reckoning of Korea's value to Britain.

Peter Lowe notes that, 'For Great Britain, the war constituted both a consolidation of, and a threat to, the development of the Anglo-American relationship as this has evolved since 1946-47'.² Although the Anglo-American relationship was a critical focus of British foreign policy thinking, the alliance was not an end in itself - it was the crucial means by which Britain hoped to retain her status at the 'top table'. In this respect, there is a need to examine how Britain's perception, and re-definition, of her world role during the war reinforced, and was in turn, influenced by the development over this period.

British foreign policy planning during the war was also dominated by her Cold War concerns. The Korean War heightened the sense of threat from the Soviet Union and emphasised Britain's vulnerability and lack of resources. These concerns led to further recognition of British dependence on American military assistance but also contributed to a divergence between the American and British approaches to the war, and consequent strains on the Anglo-American relationship. Indeed, by the end of the war, Britain had started to look independently towards détente as a policy.

This essay will identify and elaborate on British interests which were at stake in the Korean War. The essay will be presented in two main sections. The first section will focus on the two key areas of interests - Britain's status as a world power and her Cold War concerns. The second section will examine in detail British interests in the context of the key events in the war.

BRITAIN AS A WORLD POWER

The Special Relationship

In the aftermath of the WW II, it was not immediately obvious that Britain would cease to be a world power.³ By 1950 however, economic difficulties, particularly the economic crisis and devaluation of the sterling in 1949, and the perceived menace of a Soviet threat had forced London to abandon hope of Britain emerging as the third world power.

The 1949 economic crisis proved that American loans assistance was critical for British economic recovery. However, it was not simply the British economy which was at stake. There was a continued belief that Britain still had responsibilities as a world power, and that these had to be maintained even if it meant economic dependence on America. As early as 1946, Keynes had argued that the American loan was 'primarily required to meet the political and military expenditure overseas ... The main consequence of the failure of the loan, must, therefore, be a large-scale withdrawal on our part from international responsibilities'.⁴

If Britain's strategic security and position in the world were to be maintained, then it would have to be through sustaining the 'special' Anglo-American relationship. Thus, whilst the Attlee government had always been deeply committed to fostering close co-operation with the US, there was now a more explicit recognition of the realities of the difference in power. This led to abandoning the rather wishful thinking, which had characterised British strategic planning in the immediate post-war years, that the reliance on America would only be temporary. As Bartlett noted, 'Britain began to move from a policy of rebuilding British influence with ad hoc American assistance towards a longer term and more comprehensive reliance upon the United States'.⁵ It became a clear British interest to play the role of a faithful ally and a reliable partner.

At the same time, there was hope that Britain's position in the world could be sustained by exerting British influence on US policy making, thereby utilising US might to further British interests and policy - 'power by proxy'.⁶ Britain believed that the Americans, who were relatively inexperienced in world affairs, would be willing to listen to British experience.⁷ But this approach assumed to an extent the unanimity of British and US interests - an assumption which proved to be too optimistic, not just in Asia but also in other parts of the world.

The Korean War served to accentuate British dependence, and the limited degree - if at all - that Britain could publicly contradict American policy if the alliance was not to be jeopardised. Disagreements over the war were not merely anomalies in the development of the Anglo-American relationship; they were symptomatic of a general strain in the relationship between 1950-1953. In the Middle East for example, British political and economic pre-eminence - crucial for a continued world role for Britain - could not be achieved without some measure of American support. However, Washington was apt to think that the British had not adjusted sufficiently to the realities of Arab nationalism and the decline in British power and influence. Both Truman and Eisenhower emphasised the need to conciliate emerging nationalist movements in Iran and Egypt rather than support Britain's position. Britain came to the realisation, over this period, that the 'special relationship' was not as 'special' as they had hoped for, or indeed, as they had perceived it to be.

Beyond the Alliance

Whilst it was recognised that dependence on America was inevitable, London still held hope that the Commonwealth could have substantial political and economic roles to play in maintaining Britain's world position.⁸ Furthermore, despite India's independence, Britain had not abandoned hopes of an Indian contribution to Middle East defence in the event of war.⁹ India therefore assumed a significant position in British foreign policy planning and her support of communist China complicated British relations with America.¹⁰

British economic and colonial interests in Asia also resulted in considerable differences of opinions with Washington with respect to their China policies. There were significant British economic interests in China, and the situation in Malaya, where a communist insurgency had broken out in 1948, could only be worsened by conflict with Beijing. Furthermore, Hong Kong was a permanent hostage to China¹¹, and the Cabinet was particularly concerned that US actions might provoke Chinese retaliation against Hong Kong.¹²

These interests contributed to a fundamental difference between Washington and London in the way in which they perceived communist China. Whilst Washington was apt to see only a monolithic communist threat controlled centrally from Moscow¹³, there were doubts in London as to how far the Russians and Chinese were pursuing a joint strategy. Britain was careful to distinguish between Moscow and Beijing, to the extent that China was seen to be an 'important counterpoise to Russia in Asia and the Far East'.¹⁴ Attlee was particularly critical of the American mistake in seeing China as an instrument of the Soviet Union.

Whilst both Britain and the US were wary of the 'domino' effect of communist insurgencies¹⁵, London favoured a 'containment by inclusion' approach, in contrast to Washington's refusal to deal with Beijing. Britain had already recognised communist China in January 1950, and was keen to seek rapprochement with her.¹⁶ The intention was that by satisfying these demands, communist China might be persuaded to become a stable and peaceful member of the international community, and at the same time be weaned away from its dependence on Moscow - which was, in the Foreign office's view, the consequence of US hostility towards Beijing.

COLD WAR CONCERNS

The second key area of British interests was her Cold War concerns. The ultimate threat to British security was a Soviet attack against British territorial integrity - either a conventional attack across Europe or an atomic weapons attack. In the event of war, Britain would need buffer zones against Soviet conventional forces as well as key bases to launch nuclear attacks against the Soviets. Europe and the Middle East were thus vital strategic areas.

In contrast, Korea was relatively insignificant. It was therefore feared that the invasion was a Soviet feint to divert Western resources. Britain was keen to minimise Western commitment, and worked hard to seek a settlement which would bring the fighting to an end, thus 'liquidating a costly military commitment in an area of little strategic importance'.¹⁷

As Churchill warned in November 1950, 'the United Nations should avoid by every means in their power becoming entangled inextricably in a war with China .. the sooner the Far Eastern diversion ... can be brought into something like a static condition and stabilised, the better it will be ... For it is in Europe that the world cause will be decided ... it is there that the mortal danger lies'.¹⁸

The Soviet Threat

At the same time, London recognised that there were wider implications to the invasion. The Korean War was seen as part of a pattern of Soviet behaviour in aggressively extending Soviet influence. The Korean War was a proxy war in which ideological differences were at stake, and Soviet aggression had to be met to reassure other nations struggling with communist insurgencies. Korea therefore became a test case for Western commitment and resolve.

The North Korean invasion also heightened the sense of threat from the Soviet Union, and led to the recognition, in both London and Washington, of the need for re-armament and an integrated defence structure in Europe with a unified command.¹⁹ In particular, the American military commitment to Europe became vital for countering what was perceived to be an overwhelmingly superior Soviet threat. Britain was anxious that the US should increase its troops and material commitments to Europe, and satisfaction of American demands was the price to pay for this commitment. The Korean War was thus a crucial impetus which led to the creation of an integrated NATO command as well as German re-armament.²⁰ In addition, to address American complaints that Britain was not putting sufficient commitment into the European Defence Community, London eventually committed four divisions for permanent deployment in Europe.²¹

Fear of Escalations

As the war progressed however, American action in Korea threatened to escalate the conflict. London became increasingly concerned with the possibility of an escalated conflict which Britain was not ready for, and which she might inevitably be embroiled in even though no British strategic interests were involved.

In any such escalation, Britain would have had no option but to go along with the US despite the consequences.²² At best, a prolonged conflict with China would strain Western and British resources at the expense of more urgent interests in Europe and the Middle East, and provide 'opportunities for those who were anxious to make trouble in Austria and Berlin'.²³ At worst, a global conflict - if the Soviets were to enter the conflict on China's side - would be potentially fatal for Britain, as she was in no shape for a global war. British Minister of War John Strachey expressed a common sentiment in a memorandum on 2 January 1951, when he expressed concern about 'recent American policies that threaten to involve us in early and general war'. If such a war occurred in 1951 or 1952, he pointed out, it would be 'almost certainly fatal, in the most literal sense of that term, to this country,' and no 'degree of rearmament which is humanly possible to achieve in two years [could] alter this situation fundamentally'.²⁴

Furthermore, Britain would be in the frontline of any global conflict. As Attlee complained in December 1950, if the US became involved in a war with Russia, Europe would be the first to suffer.²⁵ Britain had lost her veto over the employment of atomic weapons in 1948.²⁶ In addition, Britain had also agreed in 1948 to station American B-29 bombers in Britain, without any formal agreement governing their operational use. In theory, US B-29 bombers could launch atomic attacks from US air bases in Britain without prior consent from the British. In the event of war, the Soviet Union was thus likely to launch pre-emptive strikes against these US airfields.

Hence, it was no longer a matter of committing the US to British security, but of restraining the indiscriminate use of US power. The dilemma laid in the extent to which Britain could oppose American action without endangering the American commitment to Europe. Threat of American withdrawal from Europe could not be taken lightly, and more often than not, British attempts at moderation could only be pushed so far. Britain could not afford a serious quarrel with the US which might jeopardise American military commitment to Europe.

THE KOREAN WAR

With these key British interests in mind, this section will examine in detail British interests in the context of key events in the war.

Invasion and Intervention

The Korean War began on 25 June 1950 when North Korean troops crossed the 38th parallel in an attempt to unify the peninsula under the communist regime. On that same day, a Foreign Office memorandum pointed out that Britain only shared 'to a slight extent the American interest in the retention of a non-communist foothold in the N.E. Asian mainland opposite to Japan, now that China has fallen to the Communists'.²⁷ This was to become a central theme of British policy over the next three years - Korea was not in itself an area of great significance for British economic or strategic interest, but American involvement necessitated British support. As Attlee stated, 'We'll have to support the Yanks'.²⁸ The crucial issue was how the Western commitment could be quickly liquidated in favour of more urgent commitments elsewhere.

At the same time, London recognised that there were wider implications to British interests in other parts of the world. There was no doubt in London that Moscow had instigated the North Korean action²⁹, and that the fall of South Korea would lead to the West finding itself in retreat everywhere. On 26 June the Foreign Office urged that 'all possible action should ... be taken to prevent the aggressors from attaining their objective, both in order to safeguard the future of the United Nations Organisation, and to deter the Soviet Union from attempting aggression elsewhere (e.g. in Persia)'.³⁰ Accordingly, the British Cabinet agreed on 27 June that it was the clear duty of the British government to help the South Koreans, even though this would impose a serious additional strain on the British economy.³¹

Two brigades, with supporting arms, were eventually sent to Korea³², against the advice of the Chiefs of Staff who were concerned about British military commitments elsewhere in Europe, the Middle East, Malaya and in Hong Kong.³³

In part, this commitment was driven by the need to satisfy an explicit American request for support³⁴ - for, as Sir Oliver Franks³⁵ warned, the consequence of a negative decision on committing troops to Korea would be to 'seriously impair the long term relationship'.³⁶ - but it was also hoped that British contribution to the military effort would enable Britain to insist on closer Anglo-American consultation on Far Eastern policy, particularly with regard to possible use of nuclear weapons. Kenneth Younger, the Minister of State at the Foreign Office, noted that British troop contribution would enhance prospects for British influence over policies regarding Korea.³⁷ In effect, the troops 'represented the British stake in the global poker game that was the deep Cold War'.³⁸

At the same time, in line with Britain's desire to minimise western commitment, London favoured an indirect approach towards the Soviets. It was felt that since it was not proven that North Korea was acting on direct orders from Moscow, there was advantage in isolating the conflict and allowing the Soviets to back down without 'losing face'. The Foreign Office was thus keen to keep up the public pretence that the Soviet Union was not involved, in the hope that this might make it possible for Moscow to curb North Korea. It was assessed that Moscow might not have anticipated US military intervention³⁹ and would not want to find itself entangled directly with the US. Thus, with careful handling, and by preventing the US from over-reacting, the Soviet Union might be persuaded to co-operate in bringing the war to an end. However, British attempts to seek a settlement with Moscow, based on concessions to China regarding Taiwan and the UN seat, were quickly and unequivocally quashed by the US.⁴⁰

Rollback

On 15 September 1950, MacArthur's landing at Inchon outflanked the North Korean Army (NKPA), captured Seoul and cut the NKPA's supply routes. With the NKPA in full retreat, the opportunity to reunite the Korean peninsula by crossing the 38th parallel and eliminating the North Korean 'rollback', became extremely attractive.

The danger of either a Soviet or Chinese intervention was obvious. The Chiefs of Staff warned that rollback would be intolerable to the Chinese, and that China was likely to intervene. On 2 October, the Indian Ambassador to China, Panikkar, was also given a warning by the Chinese Foreign Minister, Chou Enlai, and informed that if UN forces other than South Korean crossed the border, China would intervene.

However, there were domestic political advantages to rollback in both Washington and London. Public support for the war was high and there was political capital to be gained if overwhelming success could be achieved. Furthermore, in view of the US's clear intentions to go ahead in the face of what she considered a communist bluff, London thought it unwise to risk damaging the Anglo-American relationship by calling a halt to the successful military operations on the strength of a verbal warning conveyed through an unreliable intermediary.⁴¹ British endorsement was given for continued military operations beyond the border, on the understanding that only South Korean forces would be deployed in the northern provinces near the Yalu river, in order to avoid alarming Beijing and Moscow by the deployment of American forces in such sensitive areas. On 7 October, the General Assembly passed the UN resolution on the unification of Korea and two days later the first American troops crossed the 38th parallel.

Chinese Intervention

On 20 October, Pyongyang fell, and MacArthur ordered his troops - American as well as South Korean - to advance towards the Yalu. This triggered the Chinese intervention, and although Washington queried MacArthur regarding the use of American troops - in contradiction to his military directive - they did not stop him. The British became increasingly concerned about the insubordination of MacArthur and the limited control which even Washington had on him.⁴²

The Chinese intervention ended the general consensus which had thus far existed in Britain with regard to her policy in Korea, and generated heated debates on how far Britain should support the US policy. The Chiefs of Staff assessed that faced with this Chinese threat, MacArthur would likely resort to bombing Manchuria in order to drive them back to the border. A Soviet source in Beijing had warned Panikkar that if Manchuria was bombed, the Russian air force would come to the assistance of China, thus opening up the possibility of global war. Britain took this warning seriously and strongly urged for a halt to military operations and the creation of a demilitarised zone. MacArthur rejected any such proposals and the American administration, believing that political proposals should only be put forward from a position of strength, was not prepared to halt his advance. Again, Britain refrained from pressing her case. Since American proposals for 'hot pursuit' of Chinese aircraft into China had already been rejected by Britain for fear of provoking China into open war, London did not want to risk a further quarrel with Washington.

MacArthur launched his final offensive on 24 November. This time, fierce Chinese counter-attacks drove the UN forces back, and during December, forced them into a headlong retreat back to the 38th Parallel.

In a press conference on 30 November 1950, President Truman stated that use of the atomic bomb in Korea had 'always been [under] active consideration' and implied that the decision on its employment rested in the hands of the field commander.⁴³ This precipitated in Westminster a 'mood of near panic'⁴⁴, as London contemplated the risk of not only being embroiled in a major war in the Far East but also the possibility of a global war. Attlee immediately flew to Washington for a face-to-face meeting with his counterpart, where he proposed a series of political concessions to China and a cease-fire around the 38th parallel. The Americans dismissed the notion of concessions. Acheson warned that America could not deploy her resources against a Soviet threat in Europe unless America's allies gave full support to the American policy in East Asia.⁴⁵ Attlee's attempt to secure an American agreement to consult Britain before employing atomic weapons also

failed to materialise. Thus, Attlee's achievements during the visit were extremely limited, and showed again that America could, and did, go about her own way of conducting the war.

The US also demanded that a resolution be forced through the General Assembly condemning Chinese aggression. The Foreign Office was alarmed that such a resolution would give MacArthur a justification for extending the air war into China, thus escalating the war.

At the same time, it was clear that to vote against the Americans would do irreparable harm to the 'special' relationship. As a Foreign Office minute noted on 28 November, Britain was 'faced with a choice between a serious split in Anglo-American relations, or joining reluctantly in a war which would divide the Commonwealth, dissipate Western resources and weaken our defences without any corresponding gains'.⁴⁶

There was a split within the Cabinet itself on this issue, with several ministers advocating strongly that it was time to be firm with Washington and for a show of independence. Others argued that Britain had to remain a faithful ally. In particular, the Chancellor of the Exchequer warned that Britain could not afford to antagonise the US due to the economic consequences.⁴⁷

Acheson also warned that a British failure to condemn China in the UN debate would jeopardise American commitments to NATO, as a wave of isolationism would sweep America.⁴⁸ Although this was possibly an exaggeration in order to bring Britain back into line, London could not afford not to take the threat seriously.⁴⁹ It was eventually agreed that Britain would support the resolution, and this was passed in the General Assembly on 1 February.

By then the immediate military crisis had passed. Chinese forces, faced with a UN offensive towards the Han River and suffering from increasing logistics problems, began to withdraw towards the 38th parallel. Concerned about possible Chinese air attacks against UN forces, the Americans pressed for British agreement in advance to air reprisals on Chinese air bases in Manchuria. Once again, Britain had to give in to the American demands, even though she failed to secure an American agreement to consult Britain prior to such attacks. This was partly due to the American pressure and worry about the consequences of a strong wave of anti-British feeling in the US; but it was also partly due to apprehensions that the Americans might demand a similar right in the Middle East.⁵⁰

Negotiations

By May 1951, two further offensives by the Chinese had been repulsed with heavy casualties and in June, UN troops re-crossed the 38th parallel. This time, however, a sustained advance into North Korea was ruled out, for fear of pushing the Chinese into a corner, possible Soviet intervention⁵¹, and excessive casualties.⁵² The American administration therefore became reconciled to accepting a cease-fire around the 38th parallel.⁵³ Diplomatic feelers were sent out to Beijing through the Russian ambassador at the UN, and on 2 July, China agreed to American proposals for armistice talks. On 10 July 1951, official talks began at Kaesong.

By this stage, the Attlee government, bogged down by domestic problems and a crisis in the Middle East, was anxious for any settlement which would allow the West, and particularly Britain, to extricate themselves from the commitments in the East. Unfortunately, the talks quickly became bogged down in bitter wrangling, and Britain became apprehensive about the options which were being considered by America in the event that the talks failed.⁵⁴ As Acheson later recalled, British enthusiasm for the war 'had reached an irreducible minimum'⁵⁵, but again, Britain lacked any real leverage to alter American plans.

In October 1951, the Conservatives returned to power, and Churchill, as the author of the 'special relationship', was even more anxious that Korea did not become an issue which threatened the Anglo-American relationship. In particular, Churchill had neither sympathies for communist China, nor considered it a real threat. He therefore saw no need to fall out with Washington over China.

Eden⁵⁶, however, continued to emphasise the importance of restraining Washington. America had decided to seek some security by threatening the Chinese with direct retaliation if they broke the armistice. Accordingly, a warning statement was drawn up, which was to be issued to the Chinese on completion of the negotiations.⁵⁷ Britain was concerned with the initial American draft which included measures such as air strikes into Manchuria and a naval blockade of the Chinese coast. Eden was wary that these actions might provoke retaliation against Hong Kong, but realised that even if Britain did not agree to the statement, Washington was likely to act unilaterally anyway, thus depriving London of the right to consultation. In the event however, the Americans were eventually persuaded to revise the wording to be 'firm without being provocative'.⁵⁸

Impasse

In the spring of 1952, the armistice talk reached a new impasse over the issue of the repatriation of prisoners of war (POWs). Under Article 118 of the 1949 Geneva Conventions, all POWs would *beautomatically* repatriated to the country on whose side they fought for at the end of hostilities. The Americans favoured 'voluntary repatriation' instead - ostensibly for humanitarian reasons, but in reality, due to political and ideological factors. Washington, with the assistance of the Kuomintang, had enjoyed some success in re-indoctrinating Chinese POWs, whom they intended to repatriate to Taiwan. A huge propaganda victory would be attained if there were a large number of Chinese and Korean POWs who refused repatriation to China and North Korea. The Chinese were naturally against voluntary repatriation. Britain was reluctant to breach the Geneva Conventions⁵⁹, and also feared reprisals against British and Commonwealth prisoners. Furthermore, Britain had no similar interest in strengthening Taiwan's hand.

Ultimately, Churchill and Eden were influenced not only by the desire to maintain good relations with Washington, but also by their own experience of the Yalta agreement of 1945.⁶⁰ Eden, in particular, stated that while the legal grounds for voluntary repatriation might be poor, this did not make him 'like the idea of sending those poor devils back to death or worse'.⁶¹ As a result, the Foreign office's views were swept aside, and Britain supported the American policy on POWs.⁶² This issue continued to hinder prospects of a settlement and it was only after the death of Stalin on 5 March 1953, that a compromise, was reached.⁶³ This finally resolved the impasse over the armistice.

Whilst the dispute over the POWs continued, the Americans had embarked on another course of action which triggered British concerns. On 23 June 1952, the UN Command launched a series of air attacks against the North Korean hydro-electric system. These raids represented an intensification of air warfare by the Americans, designed to force the communists to come to terms. The attacks were carried out without prior consultation with the British, and caused great fury within Britain, as it risked escalation of war and endangered prospects of a compromise with the Chinese.⁶⁴

Armistice

On 5 November 1952, Eisenhower was elected President, but this did not signal an end to Anglo-American differences, as was initially hoped for by Churchill. Britain continued to advocate a policy of restraint as the Americans contemplated further moves to pressurise Beijing. Talks between Churchill and Eisenhower in Washington failed to result in any consensus, and Churchill was moved to conclude that Britain needed to reassert her position in the 'special relationship', and that this could only be achieved by reducing the financial dependence on the US. This was eventually to lead to an independent British policy to reduce Cold War tensions - *détente*.

In February 1953, President Eisenhower contemplated the use of tactical atomic weapons. The Chiefs of Staff warned that 'from the military point of view - the dropping of an atomic bomb on North Korea would be unsound. The effects of such action would be world-wide, and might well be very damaging. Moreover it would probably provoke a global war.'⁶⁵ Fortunately, whether Eisenhower would in fact have employed atomic weapons in Korea will remain an open question, as the death of Stalin precipitated the long-desired breakthrough in the POW issue, and paved the way for the signing of an armistice agreement on 27 July 1953.

CONCLUSION

Callum MacDonald asserts that 'There is no evidence that British pressure prevented the Americans from adopting any course which they might otherwise have taken in the Far East - British diplomacy was frustrated by the realities of power'.⁶⁶ This seems unnecessarily harsh. The extensive consultations between Washington and London indicate that America valued Britain as her strongest and most dependable ally, and that British concerns were taken into consideration, even if not necessarily acted upon. Britain did come up against the realities of power, but by that stage, British interests were already based on a recognition of her dependence on the 'special relationship'.

British interests at stake in the Korean War were predicated on the desire for a continued world role and the threats of the Cold War, rather than on any direct strategic or economic interests in Korea per se. Central to both these key areas of British interests was the importance of the Anglo-American alliance. The 'special relationship' was the key to Britain's continued status and role as a world power, and American military commitment to Europe was the linchpin of a viable defence against the perceived Soviet menace. It was the desire to maintain this relationship, as much as the need to counter the perceived Soviet threat, which persuaded Britain to intervene alongside the Americans.

Nonetheless, American and British interests in Asia, and in other parts of the world, were far from identical, especially with respect to how they viewed the communist threat. Britain's interests were threatened by the aggressive American policy in Asia, which were at odds with British Commonwealth interests. More critically, it threatened to embroil Britain in an escalated conflict that she did not desire and could not afford.

British interests rested on restraining and moderating American policy.⁶⁷ The dilemma was that there was a limit to how much Britain could oppose the US, if she desired to maintain the Anglo-American alliance so crucial to her vital interests. It also became increasingly clear over this period, that the inequalities of power within the 'special relationship' meant that the US could, and did, very publicly go her own way without regard to British concerns or policy. In this sense, British interests were best served by a policy of public support for American policy and private moderation - a role which she performed with great energy, even if not always, with conspicuous success.

Endnote

1 M.L. Dockrill, 'The Foreign Office, Anglo-American relations and the Korean War, June 1950-June 1951', *International Affairs*, 1986, p. 459.

2 Peter Lowe, 'The Significance of the Korean War in Anglo-American Relations, 1950-53', in *British Foreign Policy: 1945-56*, edited by Michael Dockrill and John Young, (Hong Kong: Macmillan Press, 1989), p. 126.

3 As Foreign Secretary Bevin's statement to the House of Commons in May 1947 revealed, 'His Majesty's Government do not accept the view ... that we have ceased to be a Great Power ...', Hansard's Parliamentary Debates, Fifth Series, House of Commons, Vol. 437, 16 May 1947. Cited in John Baylis, *Anglo-American Defence Relations: 1939-1984*, (London: Macmillan, 1984), p. 32.

4 Cited in C. J. Bartlett, *British Foreign Policy In The Twentieth Century*, (London: Macmillan, 1989), p. 72.

5 Ibid. p. 82.

6 Alex Danchev, *On Specialness: Essays in Anglo-American Relations*, (London: Macmillan, 1998), p. 126.

7 A sentiment well illustrated in a 1944 Foreign Office paper on relations with the United States, which states, 'If we go about our business in the right way we can help to steer this unwieldy barge, the United States of America, into the right harbour. If we don't, it is likely to continue to wallow in the ocean, an isolated menace to navigation. FO 371/38523, PRO, 21 March 1994. Cited in Robin Renwick, *Fighting With Allies: America and Britain in Peace and War*, (London: Macmillan Press, 1996), p. ix.

8 Geoffrey Goodwin notes that for both the Labour and Conservative parties, the transformation of Empire into Commonwealth held the prospect of the retention of channels of influence which would enable Britain to retain her role as a world power more effectively. Geoffrey Goodwill, 'British Foreign Policy Since 1945: The Long Odyssey to Europe', in *Constraints and Adjustments in British Foreign Policy*, ed. by Michael Leafier, (London: George Allen & Unwind Ltd, 1972), p. 42.

9 Calm Macdonald, *Korea: The War before Vietnam*, (London: Macmillan Press, 1986), and p. 42.

10 Due to the limitation on the length of this essay, this aspect will not be covered in detail. See, for example, Anita Indoor Singh, *The Limits of British Influence: South Asia and the Anglo-American Relationship, 1947-56*, (London: Pinter Publishers, 1993), pp. 73-110, for a comprehensive account of how Britain's relationship with India complicated her relationship with the US.

11 Ritchie Owendale notes that, 'Hong Kong became for Britain, the Berlin of Asia. As Attlee told the Cabinet on 26 May 1949, failure to meet the threat to the security of Hong Kong would seriously damage British prestige in Asia, and any common front against communism in the area would crumble. The Prime Minister insisted that the aim of British policy should be to find a basis on which a communist government in China could acquiesce in Britain's remaining in Hong Kong.' Ritchie Owendale, 'Britain and the Cold War in Asia', in *The Foreign Policy of the British Labour Government, 1945-1951*, ed. by Ritchie Owendale, (Leicester: Leicester University Press, 1984), p. 130.

12 Cabinet Minutes. CAB 128/17, 27 June 1950. Cited in Robin Renwick, *Op Cit.*, p. 109.

13 A view which was encouraged by the signature of the Sino-Soviet pact in February 1950, and the recognition by both communist powers of Ho Chih Minh's Democratic Republic of Vietnam. Callum MacDonald, *Britain and the Korean War*, (Oxford: Basil Blackwell Ltd, 1990), p. 15.

14 Cited in M.L. Dockrill, *Op Cit.*, p. 466.

15 Malcolm MacDonald, the Commissioner General in southeast Asia, enunciated, in December 1949, what became known later as the domino theory: if Indo-China were lost, Siam and Burma would shortly follow, and international communism would be on the borders of Malaya. Ritchie Owendale, *Op Cit.*, p. 125.

16 Particularly the satisfaction of Peking's claims on Taiwan, the new regime's entry into the United Nations in place of Chiang Kai-shek's discredited regime and full Western diplomatic recognition of the new China.

17 Foreign Office message to Washington. Cited in ML Duckbill, *Op Cit.*, and p. 463.

18 Cited in Robin Renwick, *Op Cit.*, p. 113.

19 John Baylis, *Op Cit.*, p. 59.

20 In September 1950, the US stated that it was prepared to send additional US forces to Europe, provided its proposal for the creation of an integrated NATO command which included German troops was accepted. The Attlee government was forced to accept this proposal in spite of reservations over German re-armament, as the price to pay for American commitment to Europe and American support for British rearmament.

21 See John Baylis, *Op Cit.*, pp. 62-65, for an account of Britain's ambivalence with regard to the European Defence Community in the period 1950-1954.

22 Cabinet minutes, 29 November 1950. Cited in Callum MacDonald, *Korea: The War Before Vietnam*, *Op Cit.*, p. 75.

23 Cabinet minutes, 13 Nov 1950. Cited in Ritchie Owendale, *Op Cit.*, p. 136.

24 Strachey to Bevin, 2 January 1951, FO 800/517, PRO. Cited in William Stueck, 'The Korean War as International History', *Diplomatic History*, 1987, p. 304.

25 Foreign Office memorandum. Cited in Callum MacDonald, *Korea: The War Before Vietnam*, *Op Cit.*, p. 75.

26 See John Baylis, *Op Cit.*, pp. 18-19, pp. 30-33 and pp. 41-43, for an account of Anglo-American agreements on atomic energy and weapons during and after World War II, particularly how Britain was coerced into accepting the *modus vivendi* whereby she lost her power of veto.

27 Foreign Office minute, 25 June 1950, FO 371/84059, PRO. Cited in M.L. Dockrill, *Op Cit.*, p. 459.

28 Kenneth Harris, *Attlee*, (London: Wiedenfeld & Nicholson, 1982), p. 454.

29 Few now accept that the Soviet Union directed matters, but in 1950, the perception of a direct threat from the Soviet Union was arguably at a peak, and it was natural to accept that the Soviet Union was the hidden hand behind North Korean aggression.

30 Foreign Office memorandum, 26 June 1950, FO 371/84058. Cited in M.L. Dockrill, *Op Cit.*, p. 459.

31 Cabinet Minutes.CAB 128, 27 June 1950, PRO. Cited in Robin Renwick, *Op Cit.*, p. 109.

32 These brigades ultimately served as part of a British Commonwealth Division.

33The Chiefs of Staff were against even a token contribution of British forces, declaring that, 'whilst they recognise and fully sympathise with the political arguments for this, they are technically opposed to it on military grounds.' Cited in Alex Danchew, *Op Cit.*, p. 123.

34Discussions were held in Washington, between 20 and 24 July 1950, concerning developments in Korea. During these discussions, General Omar Bradley, then-Chairman of the Joint Chiefs of Staff, requested that Britain provide ground forces for the UN Command. Initially, this was intended more as a gesture to emphasise the UN aspect of the war, and to demonstrate to the American public that the US was not alone in shouldering the burden. By August however, the military situation in Korea had become critical, and General Bradley requested the immediate commitment of British forces to reinforce the beleaguered South Korean forces and the US 8th Army.

35The British Ambassador in Washington.

36Cited in Robin Renwick, *Op Cit.*, p. 111.

37Kenneth Younger to Ernest Bevin, 11 July 1950, FO 371/84091, Public Record Office, London (hereafter denoted as PRO). Cited in William Stueck, *Op Cit.*, p. 298.

38Alex Danchew, *Op Cit.*, p. 124. As Sir Oliver Franks himself notes, 'We no longer had to rest content with the knowledge that we were a great power. We could behave like one.'

39Indeed, it has been suggested that the US policy in Korea was based on deliberate ambiguity designed to obtain containment at minimum cost. South Korea would be discouraged from invading the north due to a lack of American guarantee on military assistance. North Korea would be discouraged from invading the south due to fears of American intervention. Unfortunately, US ambiguity could have been misconstrued by North Korea and the Soviet Union as American disinterest. See, for example, Callum MacDonald, *Korea: The War Before Vietnam*, *Op Cit.*, pp. 16-30, for an account of US and Soviet policy on Korea in the period leading up to the war.

40 The American ambassador in London informed Bevin on 11 July 1950, that Acheson had rejected any suggestion of possible negotiations, since this would give the Soviet Union the impression that the West was weakening in its determination to resist aggression. In particular, there could be no question of raising the issues of Taiwan and china's entry into the UN at that juncture. The ambassador added that he had been asked 'particularly to emphasize Mr Acheson's view that the implications of your message [to Acheson urging him to consider negotiations with the Soviet Union] and its possible consequences on the relationship between your country and mine might be very serious indeed'. M.L. Dockrill, *Op Cit.*, p. 461.

41 Particularly since Panikkar was distrusted by the Americans as being sympathetic to the Chinese.

42 MacArthur had been appointed commander of the UN forces in Korea by Truman under the terms of the Security Council Resolution 1588 of 7 July 1950, which set up the so-called Unified Command in Korea. But neither the United Nations nor the UN members who had dispatched troops to South Korea had any voice in

his conduct of operations. He was responsible to the US President through the Joint Chief of Staffs in Washington.

43 Cited in Alex Danchev, *Op Cit.*, p. 129.

44 Roy Jenkins described it as a 'mood of near panic' far worse than any he experienced throughout his entire political career. Cited in C. J. Bartlett, *The Special Relationship: A Political History of Anglo-American Relations* since 1945, (London: Longman Group UK Ltd, 1992), p. 49.

45 Cited in Peter Lowe, *Op Cit.*, p. 129.

46 Foreign Office minute, 28 Nov. 1950, FO 371/84121, PRO. Cited in M.L. Dockrill, *'Op Cit.*, pp. 464-465.

47 See Peter Lowe, *Op Cit.*, p. 132.

48 Acheson to Douglas, 5 January 1951. Cited in Callum MacDonald, *Korea: The War Before Vietnam*, *Op Cit.*, p. 81.

49 It was recognised that the Truman administration was facing difficulties with the Republicans, who favoured an 'Asia first' policy. Bevin warned the Cabinet on 19 January 1951, that American public opinion was in a crucial mood, and nothing should be said which could jeopardise the retention of the full military support of the United States for the defence of western Europe. Cabinet minutes, 19 January 1951. Cited in Ritchie Ovendale, *Op Cit.*, p. 138.

50 Where Britain was contemplating military action due to the crises which had broken out with both Iran and Egypt. Callum MacDonald, *Britain and the Korean War*, *Op Cit.*, p. 50.

51 In the spring of 1951, Moscow had issued veiled warnings against any such move. *Ibid.*, p. 53.

52 Any further advance against communists troops fighting defensively beyond the parallel would require a heavier commitment of forces and was likely to result in heavy casualties.

53 This was in contrast to earlier American objections that a return to the status quo would signal a victory for the Soviets.

54 These included an advance by UN troops to the North Korean waist beyond Pyongyang, expediting Japanese rearmament, raising additional South Korean divisions, and air attacks against North Korean hydro-electric plants, which supplied power to both China and North Korea.

55 Cited in Callum MacDonald, *Op Cit.*, p. 58.

56 Churchill's Foreign Secretary.

57 It became known as the 'greater sanctions' statement.

58 The new draft stated that if the communists breached the armistice, the consequences would be so grave that 'in all probability, it would not be possible to confine hostilities within the frontiers of Korea'. Cited in Callum MacDonald, *Op Cit.*, p. 63.

59 Particularly as this might create a precedent which might be used by the communists in future conflicts.

60 By which Britain and the US had pledged to repatriate all Soviet citizens in Western Europe at the end of the war. Many Russians had committed suicide, rather than accept compulsory repatriation, and the others had faced reprisals by their own side.

61 Cited in Peter Lowe, 'The Settlement of the Korean War', in *The Foreign Policy of Churchill's Peacetime Administration 1951-1955*, ed. by John Young, (Leicester: Leicester University Press, 1988), p. 214.

62 The Conservative government continued to come under domestic pressure from the Labour opposition, particularly on accusations that POWs were being violently re-indoctrinated, and that the Americans did not

have firm control over their camps. See Callum MacDonald, *Britain and the Korean War*, Op Cit., pp. 72-76 for an account of the POW problem, and the British government's difficulties in obtaining American assurance.

63. The compromise was initially proposed by Chou Enlai, the Chinese Foreign Minister, and was essentially based on the release of the POWs to a neutral commission of five powers acceptable to both sides, who would hold them for a limited time until their choice regarding repatriation could be re-determined.

64. Secret talks with China collapsed in the wake of the attacks. It is unclear whether or not Chou had been on the verge of offering concessions as Nehru claimed. Callum MacDonald, *Britain and the Korean War*, Op Cit., p. 79.

65 Cited in Robin Renwick, Op Cit., p. 110.

66 Callum MacDonald, *Britain and the Korean War*, Op Cit., p. 95.

67 As Bevin told Nehru on 5 January 1951, 'the United States is still a young country and the Administration was too apt to take unreflecting plunges. We had made it our business to try to restrain them.' Foreign Office minute, 5 January 1951, FO 371/92776. Cited in M.L. Dockrill, Op Cit., p. 475.

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The Significance of the Korean War on the People's Liberation Army: An Analysis From 1950-60

by LTA (NS) Wong Tze Yung

The Korean War of 1950-1953 was the most important war fought by China's national armed forces, known as the People's Liberation Army (PLA). The war's significance stems from a number of factors. For one thing, it inflicted the largest casualty figure ever sustained by the PLA in its 40-year history. It was also the only war which saw the participation from all the three armed services of China; and it was China's only prolonged conflict with a superpower.¹ More importantly, it gave the PLA valuable combat experience which enabled it to mature as a military force, including lessons from the defeat (such as correction of flaws in military strategy) as well as confidence which could be gained from victory (for example, the affirmation that the military doctrine used was apt). But more importantly, the Korean War initiated China's military modernisation programme. This programme involved two main components: an intensive effort to upgrade the PLA's array of weapons to meet the technological demands of a modern war, and a determined attempt to professionalise the PLA's officer corps through a reformation of military education, doctrine and training. Although this modernisation process was somewhat hampered from the late 1950s to the mid-1970s by the antiprofessionalist stand taken by some powerful Chinese Communist Party (CCP) leaders against the PLA during this period (particularly during the Great Leap Forward of 1958 to 1961 and the Cultural Revolution of 1966 to 1969), it nevertheless laid the foundation for a well-equipped, modern army.

Background

When the CCP came to power on 1 October 1949, its military prowess was weaker and inferior to its foreign adversaries. This became evident in the Korean War, which erupted less than a year later. The reasons for this relatively poor military state lie in the fact that as of 1949, the PLA was primarily a guerrilla force well-trained in "hit-and-run" tactics which had been very effective in the battle against the Kuomintang forces of Chiang Kai-Shek, but was in no shape to fight a modern conventional war in which guerrilla tactics were useless. Its weapons were obsolete; its command structure was decentralised; its soldiers were irregulars (although termed volunteers); its communications and logistics were simplistic and slow and, what was even worse, its military officers lacked the skills and attitudes necessary to transform a guerrilla army into a conventional one.² They lacked a proper navy and air force³ - elements so crucial in modern warfare. Even after the CCP leaders realised the need for military modernisation, they were reluctant to carry it out due to insufficient financial resources and technical skills and also to the fact that whatever resources available then were preferentially channelled towards rebuilding China's economy, which had just been torn by the civil war against the Kuomintang forces.⁴

What the Korean War did do to the PLA was that it injected a vital change to the concepts held by the CCP regarding the role of the Chinese army. It made the CCP realise that one of its most vital and urgent tasks was to turn its "victorious but primitive army" into "an armed force capable of defending China" against foreign enemies who were militarily superior in terms of technology and methods of warfare.⁵ To understand how and why China undertook this intensive military modernisation programme, it is imperative to examine China's participation in the Korean War.

The Course of the Korean War (1950-1953)

On 25 June 1950, communist North Korean troops belonging to the North Korean People's Army (NKPA), crossed the 38th parallel and invaded South Korea. Within a few weeks, they captured Seoul and forced the South Korean troops to retreat southwards to the harbour of Pusan.⁶ The United Nations (UN) Security Council, with the exception of the Soviet Union, which boycotted the Council at that time, condemned the invasion and called on UN members to come to the aid of South Korea. The United States and 15 other UN member nations promptly responded by sending troops to assist the retreating South Korean forces.⁷ Under

UN command, a defence boundary in the Southeast region of the Peninsular called the Pusan Perimeter was established to protect the vital port of Pusan.⁸

With superior technology and air superiority, the US-led coalition was able not only to stem the North Korean advance, but also drive them away from the Pusan Perimeter and back towards the 38th parallel by October 1950. The UN's success was largely due to General MacArthur's daring amphibious landing at the harbour of Inchon on 15 September 1950. This landing was strategically important as it occurred behind the North Korean lines, thereby prohibiting any North Korean retreat. From here on, the UN forces swiftly drove the North Koreans back beyond the 38th parallel.

Meanwhile, China became rather disturbed at this sudden influx of US and UN troops on Korean soil as they did not want to face the threat of having anti-communist forces sharing borders with them. They were even more provoked when US President Harry Truman ordered the US Seventh Fleet to patrol the Taiwan Straits as an apparent measure to delay and prevent the taking over of Taiwan by China. The tension between the US and China did not cease when in August 1950, General Douglas MacArthur, the Supreme Commander-in-Chief of all UN forces in Korea, proclaimed support for Chiang Kai-Shek's nationalists in Taiwan, declaring Taiwan as a part of the US chain of air bases.⁹

After the UN troops crossed the 38th parallel on 7 October 1950, Mao Zedong, perceiving this act as a major threat to national security, ordered the PLA, under the command of General Lin Biao, to interdict the UN forces in North Korea. From 14 to 16 October, General Lin Biao's field armies secretly crossed the Yalu River at night to support the ailing North Korean armies.¹⁰ Employing tactical surprise to their advantage, the PLA engaged UN troops on 25 October 1950 and then suddenly disengaged on 7 November. The PLA's purpose of "rubbing the enemy" was to see if the UN would pull back their forces.¹¹ To their dismay, the UN did not. Instead, on 24 November 1950, the UN resumed an all-out offensive against both the North Korean forces and the PLA. The PLA counter-attacked, launching a massive offensive on 26 November which involved 250,000 Chinese troops.¹² This assault forced UN troops to retreat south. In December 1950, Marshal Peng Dehuai, second in command of the PLA, co-ordinated his armies superbly and pushed the UN forces down further south past the 38th parallel.¹³ The PLA reached its pinnacle of success when Chinese troops entered Seoul on 4 January 1951.¹⁴ By 25 January 1951, the PLA had gained control of as much as one-third of South Korea.¹⁵

From this point on, however, the PLA was to advance no more! The US-led UN forces regrouped, achieved air and naval superiority, effectively cut off PLA supply lines and perhaps most importantly, broke the Chinese troops' morale.¹⁶ With these breakthroughs, the UN forces retook Seoul on 14 March 1951 and proceeded to push the PLA and North Korean forces back to the "chain of hills that ran just north of the 38th parallel".¹⁷ On 23 June 1951, the Soviet ambassador to the UN offered a truce and negotiations began on 10 July 1951 - although sporadic but savage fighting continued along the 38th parallel.¹⁸

The Korean War had a significant effect on the PLA in that from October 1951 onwards, China embarked on a rapid modernisation of its armed forces. It accomplished this feat with the help of the Soviet Union, who, upon seeing their fellow communists losing, started to supply huge amounts of military equipment as well as transferred military doctrines to the PLA.¹⁹ With this Soviet help, China was able to put up a formidable air force comparable to that of the UN's by the end of 1951. Improvements were also made to artillery firepower and in logistics and communications.

Nevertheless, from January 1952 until the truce was signed on 8 June 1953, both the PLA and the UN forces seemed to be at a deadlock along the 38th parallel. Neither side budged nor gained any territory. Instead, both sides "suffered continuous casualties".²⁰ The eventual armistice of 1953 was brought about by two events: first, in March 1953, China gave in to US demands on the Prisoner-of-War (POW) issue, agreeing in principle to allow POWs to choose whether or not they wished to be repatriated. This release of POWs gave way to a peaceful armistice. Second, US President Dwight D. Eisenhower used nuclear diplomacy to bring the Chinese and the North Koreans to negotiate the truce.²¹

At the end of the war, the number of casualties on both sides was appalling: the US had 54,000 men dead, 103,000 wounded and 5,000 missing - a total of 160,000, while the South Korean casualties numbered 400,000 and the North Koreans suffered 600,000 casualties. The nation that suffered the most casualties, however, was undoubtedly China, with up to 900,000 casualties.²² Such staggering losses on the part of the Chinese made the PLA leaders think twice about their strategy and methods of warfare. Indeed, it was the tragedy of the Korean War which forced the PLA to see the need for rapid modernisation in order to stay on par with the Western powers.

Lessons learnt from the War

The PLA that entered the Korean War in October 1950 was markedly different from the PLA that emerged from it in June 1953. Throughout the course of the war, the PLA had been learning its lesson: "It was impossible to win a modern war without meeting the requirements of modern warfare and without strengthening modernisation in various respects".²³ In the initial stages of the war from October 1950 to January 1951, the PLA had been largely victorious because it placed heavy "reliance on the human element".²⁴ This strategy was part and parcel of the Maoist military doctrine known as *the People's War concept*.

A unique feature of this doctrine was it "emphasised voluntaristic motivation and conscious discipline".²⁵ Another feature sprang from Mao's personal conviction that "properly organised and motivated masses could move mountains through sheer human will power".²⁶ PLA commanders were convinced that their superiority in numbers (over that of the UN forces) coupled with their troops' morale and motivation - two key elements in a "people's war" - would make up for deficiencies or weaknesses in areas such as weapons and equipment.²⁷

However, Maoist doctrine soon proved ineffective in a modern war. Under the fallacy of this doctrine, the PLA adopted human wave tactics to overrun key enemy positions by sheer force of numbers and human tenacity. They advanced in closely packed formations.²⁸ The UN forces absorbed these initial thrusts and then counter-attacked along a firm battleline which "deprived the Chinese of the ability to manoeuvre on the enemy's flanks".²⁹ These counter-attacks were supported by murderous firepower which incessantly pounded the Chinese troops and the PLA found these 'human wave' tactics very costly in terms of human lives. In other words, Mao's People's War doctrine was ineffective.

From June 1951 onwards, this Maoist doctrine was refuted by the PLA commanders, most notably Marshal Peng, the man who was later to spearhead the PLA's modernisation process. UN forces re-captured Seoul - using superior technology, inflicted intolerable casualties on the PLA. The PLA commanders learnt their lesson well - "Maoist doctrine was no substitute for modern weapons and organisation".³⁰ They realised that their strategy of relying on "the human factor in war" simply had to go! Drastic changes to military doctrines had to be made to transform the PLA into a viable force capable of interdicting a modern army.

Aside from the realisation that the Maoist principles of warfare had to be discarded, the Korean War was also instrumental in making the PLA commanders acknowledge that the PLA was an incompetent and obsolete force. When the PLA entered the war in October 1950, its infantry was poorly equipped with a motley assortment of outdated small arms, mainly of pre-World War II vintage - Russian PPsh 'burp guns', US and British arms captured from the Kuomintang during the civil war and weapons taken from the Japanese during the Sino-Japanese War of 1937-1945.³¹ Worse still, each infantryman was issued with only 80 bullets or less³² - hardly sufficient for a modern war where it is the norm for soldiers to be equipped with several hundred rounds each.

The PLA suffered under an inefficient logistics system. The main supply line for the PLA in Korea was the railway, which became the prime target for UN bombers. When the railway system became severely paralysed, most of the Chinese food and ammunition had to be sent down the Korean Peninsula to the frontline troops "in the most primitive way imaginable - by porter"³³, that is, peasants carrying the supplies on foot. Eventually, as UN bombing raids stepped up, the peasants shouldering these supplies formed the

PLA's "umbilical cord". However, even this form of supply line became disrupted as it soon became overstretched and it took a long time for supplies to reach the front. Such was the state of the PLA's logistics!

The methods of communication of the PLA was just as primitive. There was only one communications company to a PLA division and there was no radio equipment below regimental level.³⁴ Communication in battle was conducted through the use of "bugle calls, whistles and flags".³⁵ Although these 'revolutionary' methods of communication (used in the civil war) somewhat unnerved the UN forces, they were greatly inferior as a means of communication. Inadequate medical support and food supplies aggravated the hardships of the PLA. Clothing was also unfit for the Korean winter as up to 90 percent of Chinese troops suffered from frostbite.³⁶ The fact that the PLA did not have an air force to complement its defence system did nothing to help them either. Their susceptibility to UN air attacks meant that their troops and supply lines fell easy prey to UN strike aircraft and contributed to their high casualty rate

From October 1951, China turned to the Soviet Union for help. This proved to be the single most important event for the PLA because it was this sudden reliance on the Soviet weapons and technology that enabled the PLA to match the UN's dominance in firepower and, for the first time, pose a threat to it. The Soviet assistance was also significant as it marked the beginning of the PLA's massive military modernisation programme.

After some "reservations about the wisdom of creating a powerful Chinese army" the Soviets began sending large quantities of modern military equipment to China.³⁷ According to Ellis Joffe, this flow of Soviet military resources to China was indispensable to the PLA's modernisation.³⁸

The Modernisation Programme

Heading the list for modernisation was the updating of weapons and equipment. There were vast improvements made to PLA artillery firepower and heavy weapons; Soviet-made T-34/85 tanks were purchased by the PLA and formed into units. Such tanks were crucial for the maintenance of "a stalemate on the linear battlefield along the 38th parallel until the end of the war"³⁹, otherwise the UN would have easily broken the Chinese defence line with their more advanced weapons, superior firepower and unopposed air force. Essentially the T-34/85 was a better tank than that of the US M4A3 Sherman tank, both of which were used in the Korean War. The essential difference was that it had a bigger gun (85mm as compared to 76mm) and a longer range (300km as compared to 160km).⁴⁰ But above all, the most remarkable advance made by the PLA was the formation of an air force which, by December 1951, was fully operational and equipped to challenge UN air superiority⁴¹, which it did with some success. This commendable effort was made possible by the Soviet Union's sale of large numbers of MiG-15 fighter jets - then the state-of-the-art - to China. The MiG-15s were able to successfully engage the US F-86 Sabre. Some other light jet bombers were also made available to the Chinese.⁴²

After the war, in 1955, the Soviets began to allow the Chinese to manufacture the even more advanced and capable MiG-17 fighter under licence at their own plants in Manchuria.⁴³ By the mid-1950s, the Chinese air force comprised of some 4,000 combat aircraft⁴⁴ - a far cry from their virtually non-existent air force in 1950! At this point, the Chinese armed forces, of which the PLA was an integral part of, seemed well under way in its efforts to modernise.

Part of the military modernisation programme also entailed the PLA adopting the Soviet model of national development, which stressed specialisation and professionalism. Specialisation and professionalism specifically referred to the training of the PLA soldiers. Soviet military experts were sent to China to advise the PLA commanders on modern methods of warfare.⁴⁵ The Soviet expertise was utterly vital to the PLA as the PLA commanders needed it in order to learn how to operate its newly-acquired arms and revamp the PLA's organisation and concepts. The total number of Soviet advisers in China ranged from 3,000 to 6,000.⁴⁶ To add to this influx of Soviet operational methods, Soviet manuals were translated into Chinese and incorporated into the modernisation programmes of the PLA.⁴⁷

Measures were also undertaken to provide for the military education of officers. A large number of PLA officers were sent for advanced training at the Soviet Union's military staff college in Kiev; military academies were established in Peking, Nanking and Dalian to "train a new generation (of officers) in the techniques of modern war".⁴⁸ These efforts were designed to create a professional officer corps skilled in modern military warfare and prepared to make military life their vocation.

In terms of military organisation, the PLA made leaps and bounds too. The PLA commanders implemented conscription to replace the usual practice of having the recruit "volunteers" serve the PLA for "indefinite periods through appeals to patriotism or social pressures".⁴⁹ With conscription, the PLA gradually became a more organised force as enlisted conscripts were placed under the command of a permanent group of officers who were responsible for their training. In addition, PLA leaders "instituted a system of ranks, regular channels of entry into the officer corps and professional criteria for advancement"⁵⁰ ; they introduced a differentiated pay scale according to an officer's rank⁵¹ and conferred military titles and honours on army leaders.⁵² All these steps showed progress towards the formation of a modern hierarchical army.

Another significant change for the PLA came in the command structure. In 1952, the CCP initiated a policy of centralisation in the PLA, in which senior PLA commanders (who were mainly experts in guerrilla tactics) were transferred from the field armies to Peking, while younger but better-trained officers took over their positions.⁵³ In 1954, the old military structure that was in place in the early years of the People's Republic of China, (that is, when the military command organised in six vast regional bureaus) was abolished. In its place was a military structure that was divided into 13 regional commands under the direction of the PLA General Headquarters.⁵⁴ This General Headquarters reported to the newly-formed Military Affairs Commission, chaired by Mao, as well as to the Ministry of Defence, headed by Marshal Peng.⁵⁵ Coordinated under these regional commands were technical arms divisions such as engineering corps, railway corps and signals corps. Significantly, the General Staff was divided into different functional departments, together with their respective sub-departments.⁵⁶ The headquarters of various arms and services reported to the General Staff.⁵⁷ All these new command structures and complex hierarchy indicated that the PLA was emerging as a competent, sophisticated armed force.

Another development with the modernisation efforts was the capacity to conduct research and development independent of foreign aid. To this extent, China made efforts to build a defence industry during the war. In 1956, the CCP leaders set their sights on something further - the development of a nuclear capability⁵⁸ - as Mao was determined that China should possess its own atomic bombs.

The Aftermath of the Korean War

Despite promising prospects for its armed forces, the intensive modernisation programme of the PLA was abruptly brought to a halt in the late 1950s and did not resume until the mid-1970s. There are many reasons for this: to start with, Sino-Soviet relations from the late 1950s to the early 1960s deteriorated significantly. Mao was becoming increasingly suspicious of the Soviet Communist regime because the Soviets were pursuing a policy of "peaceful coexistence" with the Western powers; on the other hand, the CCP at that time was convinced that "war with the West was inevitable. Therefore, when they saw the Soviets making peace with the West, they accused the former of "betraying the aims of communism". This severe criticism of the Soviet Union ultimately led to their withdrawal of military assistance to China in the 1960s.

The Great Leap Forward launched by Mao in 1958, to dramatically heighten economic productivity in China, ended in disaster. As a result, China became plagued by widespread food shortages and suffered from a sharp decline in industrial output. Since the country was in economic ruins, the PLA did not have sufficient financial resources to fund the massive military upgrading programs.

Moreover, Mao and the other CCP and PLA leaders were obsessed with building a nuclear capability. They believed that possessing a nuclear capability would be a deterrent against any foreign invasion, especially from the US. It would also be a sign that China had come of age, that it once again reached the status of a

great power. Hence, whatever financial resources that could be gathered for conventional military modernisation were all channelled into the development of nuclear bombs and missiles. Few resources remained to improve the technology, weapons and equipment of the PLA.

But by far the most important factor which accounted for the halt in the PLA's modernisation from the 1960s onwards was the opposition of the majority of the CCP leaders (especially Mao) to professionalism in the armed forces; they wanted the PLA to be a "revolutionary" force indoctrinated with Maoist traditional values, not a professional army with "western elitist" concepts. They argued that as a result of modernisation, Mao's age-old military doctrine of comradely relations and informality between the ranks was now replaced by modern Soviet doctrine which emphasised relations based on hierarchy, discipline and status.⁵⁹ This led to estrangement between officers and their men, which served to undermine the Maoist principle of unity in the army. In the eyes of the PLA, another adverse consequence of modernisation was that it caused erosion of political authority over the PLA. In Maoist military tradition, there was to be joint leadership by the PLA commanders and of the CCP political commissars. However, the professional officer corps opposed this joint leadership on the grounds that it was incompatible with the requirements of a modern army.⁶⁰ Thus, the challenge posed by the professional military to the CCP' Maoist principles of army building "provoked a forceful reaction from CCP leaders designed to stem the trend towards professionalism"⁶¹ in the PLA. This anti-professional sentiment was to prevail in the Maoist era and was detrimental to the PLA's modernisation.

After Mao's death in 1976 and the subsequent removal of Mao's successor Hua Guofeng in 1980, Deng Xiaoping, as leader of the CCP, initiated professionalism once again in the PLA because, like Marshal Peng Dehuai 30 years ago, he saw the urgent need for the PLA to upgrade its backward army. Since then, the PLA has been furiously upgrading its capability.

Conclusion

The source of inspiration for the PLA's intensive efforts to modernise begins with the Korean War as it was this war that made the PLA suffer a severe mauling in the hands of a superpower (the United States), causing the PLA commanders to realise the sobering need for a modern, conventional army to fend off the superior UN armies. This compelled them to turn to their only "modern and technologically advanced ally of the 1950s - the Soviet Union, who helped to facilitate the PLA's modernisation.

The Korean War was one of the single, most crucial events in China's military history because it spurred the PLA on the road to modernisation, transforming the once rural and poorly-equipped guerrilla army of 1949 into a modern and efficient army compatible with its times.

The clamp down on professionalism in the PLA during the 1960s and 1970s, hampered the PLA's efforts to modernise. During this period, the PLA were mostly utilising equipment left behind in the heyday of military modernisation - those of 1950s-vintage. In the 1980s, while the PLA was slowly recovering from the adverse effects of the Cultural Revolution, it took comfort from the fact that it had at least a foundation on which to rebuild its army again.

Endnote

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Riding The Next Wave of Network-Centric Warfare

by CPT Irvin Lim Fang Jau

We have embraced Network-Centric Warfare as the organising principle for our Navy, and consequently it must be the organising principle for our decision-making process. It has been said that vision without resources is hallucination. Therefore, our approach is to make the resource allocation necessary to turn vision into strategy.

Adm Jay Johnson

Chief, US Naval Operations

The US Navy Steers a New Course

As we approach the turn of the century, tectonic shifts in thinking and quantum leaps in technology are radically eroding and reshaping time-tested paradigms across all spheres of human endeavor. The military sphere is no exception. Developments underway in the US Navy today promise to open up a new horizon for 21st century warfare and military philosophy.

Faced with ever-declining defence budgets, the US Navy is squaring up to confront the paradox of unrelenting global security demands. With the end of the Cold War and the diminished Force-on-Force Total War threat, the shift in focus is now on the conduct of contingency conflicts and littoral operations as an integral part of US naval or joint maritime forces. The reorientation is towards sea-to-shore power projection enshrined in the new 'Forward from the sea' doctrine of the US Navy. The timeliness of such a doctrinal shift comes in the wake of the fact that many potential regional adversaries now possess weapons that threaten US naval forces operating in their littoral backwaters. Vulnerability has replaced impunity.

To tackle such new threats, the US armed forces as a whole, is currently embarking upon a transformation of epic proportions or what some have called a *Revolution in Military Affairs (RMA)*. This RMA is said to be the most significant watershed in warfare for the past 200 years, unlike any seen since the Napoleonic Age when France transformed warfare with the concept of *levee en masse*.² It is even set to eclipse the advent of airpower or the introduction of blitzkrieg mechanised armour tactics and military radio communications earlier this century.³ In a nutshell, RMA today is concerned with exploiting new emergent information technologies as a decisive force multiplier that allows an armed force to achieve a warfighting capability that is markedly greater than the sum of its many parts.

NETWORK-CENTRIC WARFARE

As part of the overall RMA effort, the US Navy in particular has developed Network-Centric Warfare (NCW) to chart its future development. NCW as spelt out by its chief proponents like US Navy Vice Admiral Cebrowski⁴, aims to compensate for the reduced size of naval formations by increasing the effectiveness of each ship sailing into harm's way. In essence, the US Navy is poised to move away from platform-centric warfare, and toward network-centric warfare where complex systems and processes to achieve detection, engagement, destruction and battle damage assessment will reside, not on the physical platform per se, but on the virtual Grid. The vision is that the 21st century US military capability will be derived from the 'networked' nature of platforms, sensors, information processing and analytical systems. 21st century warfare will be marked by a shift from attrition warfare to warfare characterised by 'speed of command'. Dominant battlefield situation awareness will be America's most significant warfighting advantage. In the Joint Vision 2010, the US armed forces anticipate the metamorphosis of four new operational concepts, namely:

- Dominant Manoeuvre,
- Precision Engagement,
- Focused Logistics and
- Full Dimension Protection.

At the heart of these transformations for the US Navy are precision land attack and theatre air dominance missions achieved by a new generation of network-centric assets.

Precision Land Attack

Essentially the development of a precision land attack capability is to extend the present 12-nautical mile (nm) limitation to provide surface fires that can influence the land battle up to a range of 200 miles. In particular, the littoral battlefield demands accurate and responsive precision strike capability to counter emergent, time-sensitive, re-locatable targets. Faster supersonic land-attack missiles (like US Army Tactical Missile system (ATACM), and the Land Attack Standard Missile (LASM) are set to radically shorten the time between target designation and its destruction. Extended Range Guided Munitions will provide precision land attack up to 70nm. This deep strike capability is further extended by the Cold War strategic surface strike capabilities of the Tomahawk tactical cruise missile up to 1500 miles or more inland. Such cruise missiles were used with much deadly accuracy in the Gulf War, and more recently against the recalcitrant Islamic terrorist Osama Bin Laden⁵ and Yugoslav Serb forces in the Kosovo conflict. Already, the more capable tactical Tomahawk cruise missile is being developed to replace current Blk II and III versions. Expected to be fielded by 2002, it can loiter (up to 31/2 hrs at 200nm from launch point), and possesses in-flight flex capabilities. Weapons like these will significantly enhance battlefield responsiveness and flexibility.

Theatre Air Dominance

Modernisation programmes have been planned for the Aegis force of cruisers and destroyers to enable the conduct of offensive counter-air operations and High Altitude Theatre Defence in the exceedingly complex 21st century theatre air battlefield. Area Air Defence Commander (AADC) upgrades with improved AN/SPY-1 radars, new Close-In Gun System (CIGS) and Rolling Airframe Missile (RAM) launchers to engage targets at greater ranges are in the pipeline. In addition, Navy Theatre Wide missiles deployed aboard ships are expected to be integrated into a comprehensive ballistic missile defence system, for intercepting and destroying enemy long-range missiles in mid-flight well before they reach their targets. Such US Navy theatre assets may also eventually form part of the seaward National Missile Defence screen against any enemy ballistic missile attacks on US territory.⁶

Networked Platforms

DD21 will be the flag-ship and principal weapon-of-choice to make the NCW vision a reality. The 21st century Land Attack Destroyer embodies the seagoing component of the Revolution in Military Affairs. Built from the tenets of NCW, this revolutionary platform has offensive distributed firepower fundamental to its design. Future plans are for DD21 to be integrated with existing and upgraded Aegis and Arleigh Burke - class ships (Cruiser Conversion Plan)⁷, and the new CVX-78 aircraft carrier. It will be a multi-mission capable ship, with the primary mission of land attack in support of ground forces. Besides having the latest range of sophisticated land attack missiles, extended gun munitions, DD21 will also have the most advanced under sea warfare combat systems ever installed in a surface combatant. It will be uniquely suited to the environmental challenges and operational threats posed by operating in the littorals. When operational, DD21 will be able to establish and maintain local air superiority, while the rest of the 84 Aegis cruisers and destroyers provide wide-area joint force protection. The first DD21 will be laid in 2004 and commissioned in 2008.⁸

NETWORK-CENTRIC ARCHITECTURE

The enabling Network-centric architecture for such a potent web of platform, sensors and weapons embodies two principal characteristics:

Maximisation of Command, Control, Communications & Computer Systems

The C4 backbone of the NCW concept is a network in itself, permitting commonality, necessary for dynamic participation of units in an open architecture; facilitating Speed of Command. The resultant economy of effort means that units can individually narrow-cast or broad-cast their information needs to the relevant recipients for the desired response. This will facilitate enhanced capacity by significantly truncating time-lines compared to conventional messaging systems. This is a particularly important advantage in mission architectures featuring participants with different capabilities, such as a joint sea-land-task force. It will also enable self-synchronisation vis-a-vis the ability of well-informed forces to organise and synchronise complex warfare activities from the bottom-up.

Use of Commercial-Off-The-Shelf Technologies (COTS)

The emphasis will also be on adapting commercial components and processes to reduce combat system space and weight, minimise ship impact and reduce life-cycle costs. COTS integration has the bonus of increasing combat system capability over the long - term. As commercial technologies mature, COTS systems (processors, displays, LANs) can be expected to exhibit greater functionality over those they supercede. The result could be by way of an increase in processing power, disk space or networking capacity within the existing combat system architecture that can then be applied to future combat system upgrades. The challenge remains one of enabling improvements by adopting a learning systems-of-systems approach that culls new employment concepts and tactics, training, logistics support to derive optimum performance benefit from the COTS advancements.

In terms of virtual architecture, the materialization of the US Navy's NCW vision will require the deployment of three interoperable warfighting networks:

- A joint composite tracking network (ie. Cooperative Engagement Capability)
- A joint tactical network (ie. Link 16)
- A joint planning network, (ie. IT-21 intranet).

The Cooperative Engagement Capability and Link 16 are data circuits while IT-21, on the other hand, is a multimedia network.

Joint Composite Tracking & Tactical Networks [Sensor / Shooter Grid]

The goal of joint composite tracking and tactical networks is for every unit to have the ability to pipe, tap and display, at the same time, all or any part of the totality of sensor information available from all organic sensors, theatre surveillance assets or national sources. This capability would enlarge the immediate sensor envelope around a unit to become independent of that unit's organic capabilities. As an example, every ship would be able to access and display the subsurface picture because of the extensive information shared by all aviation, surface, submarine, intelligence and fixed undersea resources operating in the threat region. This gels all the platforms operating in the AO into a sensor-shooter grid with a common information system architecture that facilitates multi-path system 'hand-shakes', enabling what has been termed, a Cooperative Engagement Capability (CEC) to be employed against hostile forces. This CEC capability aims to facilitate timely and selective firepower to bear on the enemy for maximum effect.

In addition to adding range and detail to the tactical picture, having a common operational picture enhances capability because decision-makers can efficiently verify and correct any dissimilar intelligence inputs

between different reporting sources. This feature should lead commanders to have greater confidence in their situation picture compilation, and reduce such classic problems as double accounting of contacts and target-location reporting error.

By exploiting common situational awareness across all platforms, commanders are presented with new options in force disposition and deployment. Weapon platforms and sensors under their direct control can be manoeuvred to take advantage of unique sensor access, with units pre-positioned for engagement in locations that might hitherto been viewed as either too exposed or risky.

A networking approach also spreads out the centre of gravity. It has been argued by some that a Network-centric approach to warfare is expected to be less vulnerable to decapitation of key shore C3 or capability lost through upper echelon equipment casualty, combat loss or human error. Headless troops may still be able to operate effectively in many scenarios.

Another important aspect of networking within a sensor-shooter grid is that the user-driven information access permits an unprecedented degree of flexibility and insight in mission planning and execution. Every unit will then be able to adapt to new opportunities, or respond to rapid changes in the tactical situation, not contemplated in mission planning. With networking, there is less likelihood of bottlenecks. 'Speed of Command' is thus enabled. This may ultimately mean a difference between mission success and failure.

Joint Planning Network - IT-21 [Info Grid]

The goal of Information Technology for the 21st Century, or IT-21 is to enable voice, video and data transmission from a single desktop PC which enabling the warfighter to exchange classified and unclassified tactical support information from the same workstation. Riding on commercial off-the-shelf browser technology, it is basically a client-server multi-media facility with continuous TCP/IP connections and multi-level security that allows the convergence of tactical and tactical support users. It will feature technologies such as automated switching and satellite terminals, fibre-optic local area networks for all ships and facilities, and Asynchronous Transfer Mode (ATM) communications and other high-end information systems. It aims to move databases ashore, and allow afloat users to simply 'pull' the information they require anywhere in the world. Global Intranet websites, for example, will offer the warfighter one-stop virtual shopping for each category of administrative or mission-critical information. Instead of searching multiple databases manually, the sites will have links and search tools to access other relevant sources for information.

As a precursor of the power and potential of such a network, the US Navy's 7th Fleet tried out a whole new of communicating and commanding when it put its Global Network Initiative (GNI) through the paces during the China-Taiwan response in early 1996. Video-teleconferences were established between USCINCPAC, CINCPACFLT, and COMSEVENTHFLT on a routine basis, instead, of transmitting traditional text-based messages with their tedious routing methods. E-mails with PowerPoint graphic attachments were sent to-and-fro to enable near-real time communication, up and down, across the chain of command. Since 75 percent of all human communication is non-verbal, video-teleconferencing enabled the full range of communications from facial expressions, to gestures, to tone of voice. In short, the USN carried out a very high-level response mission in a radically new way which made Information Technology a decisive force multiplier.

Besides the advantage of being a decisive force multiplier in warfare, another fundamental theme in the IT-enabled reengineering is the "reachback" to resources it allows far-flung forces deployed afloat throughout the world. In other words, Reachback has the potential to qualitatively improve the support of US sailors afloat and overseas by giving them direct access to the best expertise and information available.

Information access

IT-21 will provide everyone with quicker, easier access to mission-critical information such as intelligence, logistics, weather (ie. Rapid Environmental Analysis data). There will be also be less experts on board, assuming the applications are user-friendly and adequate training is provided to the users.

Support systems

Continuous connectivity, allows re-engineering of virtually every support function with significant improvement in capability and reduction in operating costs.

Logistics

IT-21 will permit faster, more accurate tracking of material and equipment, including in-transit visibility, while reducing the cost of logistics management.

Training and Education

The intranet will make possible computer base, self-paced training and worldwide access to resources within the US; such as Teletraining, which will make training courses more current and easier to arrange.

Fewer onboard trainers will be needed: Just-In-Time Training will be easier to implement, and school house/pipeline costs will be reduced. Deployed personnel will also be able to take extracurricular Distance Learning courses via the intranet.

Telemaintenance

Onboard technicians will be able to use the intranet to reach back to theater or US-based experts.

Telemedicine

Onboard Medical Care can be expected to improve in a similar fashion. Most of the Medical Care administrative and support functions can be consolidated in a central location off ship, further reducing personnel costs.

Personnel/Unit Administration/ Disbursing

US Navy personnel staff and disbursing clerks will be moved off ship, and service should improve with greater automation and more direct access to individual accounts.

Quality of Life / Connectivity

For reachback in its finest sense, deployed personnel will be able to communicate with their families and friends at home via e-mail, reasonably priced phone calls, and even video-conferencing on special occasions.

Y2K Millennium De-Bugging

IT-21 is also expected to help solve Year 2000 problems by replacing older equipment with equipment which is Year 2000 compliant. It will also enhance joint interoperability by accelerating the migration of the US

Navy's command and control systems and communication programmes to US Department of Defense and Joint architectures.

It has been widely touted that for an investment approximately equivalent to the cost of a new surface combatant or submarine, the IT-21 intranet will enable a qualitative paradigm shift in warfare and warfare support. Such an exciting initiative is expected to help the US Navy meet the operational and fiscal challenges of the 21st century.

ROCKS OF RISK IN NAVIGATING TOWARDS THE NETWORK NAVY

At this juncture, before the 'techno-phoria' gets carried overboard, the refrain we will need to remind ourselves, is that Technology in itself is not a simple panacea and can even be a bitter pill when prematurely, haphazardly or overzealously prescribed. Already, in the USN's drive to realize the new vision of NCW, some new dangers emerge:

Problem of Lost Haven

Some critics have rightly pointed to the potential vulnerability of network-centric-based systems to a devastating surprise attack akin to that of an 'Electronic Pearl Harbour' or 'Electronic Waterloo'. Adversaries may yet choose to asymmetrically engage a technologically superior threat with more rudimentary 'short-cuts' or unorthodox yet as effective information warfare tactics¹⁰. This is possible because adversaries now have access to virtually the same technologies and can attack directly with nefarious adaptive software through commercial information networks. Network penetration and its effects become difficult to detect and the cost of a single penetration can be very high. An important lesson to be drawn from the regularly publicised internet security flaws through hacking is that any network-centric approach must acknowledge that such Achilles heels are not a passing problem, but a new reality that must be dealt with perpetually. Safeguarding the security, reliability, fidelity and integrity of network-centric systems has no end-point; it is an iterative and interminable process of constantly building cryptographic fortresses after erecting encryption-firewalls.¹¹

Reliance on COTs Increases Vulnerabilities

There are underlying concerns that commercial-off-the-shelf computers - like those planned for the Aegis ship system upgrades - are not as robust as current systems as they are more susceptible to electromagnetic interference and very susceptible to Electro-Magnetic Pulse (EMP) weapons.

Information Saturation

Non-essential information could swamp critical information. Sophisticated presentation could obscure vital information or mask the absence of (or poor quality) of data. Uncertain information quality and/or integrity could lead to a lack of confidence. Information imbalances could hamper commonality of perception, resulting in a poverty of attention to vital areas of critical information which require urgent action. And, ironically enough, information saturation can also result in confusion or loss of control, rather than dominance.

Pejorative Panoptic Effect on Performance

Real-time automated review could have a chilling effect on subordinates. The panoptic¹² and pervasive media spotlight stifles performance and generates unhealthy levels of stress and work practices; eg. superiors micro-manage and subordinates second-guess.

Diminishing Returns on Decision-Making and Quality

The desire for near-perfect information before commitment can delay decisions. Furthermore, lack in tactical coordination can impact poorly on decision quality. More detrimentally, the herd mentality of collective wisdom and decision-making tends to stifle individual innovation and tactical brilliance.

Systemic Organisational Problems

Uncontrolled or unanticipated use could degrade systems and organisation. Failure to accept expert systems leads to under-utilisation. Mid-level information managers may also become redundant in the process.

It is clear that in exploiting NCW opportunities, there is a need to mitigate the dangers inherent in information systems and technology dependency. These dangers are exacerbated by beliefs that technology can solve all problems. Rather, when used unwisely, technology can contribute, or even compound, the problem - contributing to information overload, micro-management and the dangerous illusion that precision and certainty in war is not only desirable, but attainable. Total transparency of the battlefield is a technological myth. The Clausewitzian Fog and Friction of War can never be totally eliminated and will always remain with us.

CONCLUSION: SETTING OUR COMPASS

Ultimately, the real test of whether or not NCW's *Force Multiplier* effects and Reachback benefits bear fruit, will largely depend on whether the agents and systems in the elaborate nexus get their act together and get the balance right in the heat of battle.

We would do well to keep abreast of the USN's foray into NCW, for adoption and adaptation where applicable; albeit on a much reduced scale and scope.¹³ The success or failure of such an ambitious effort will be of considerable significance and relevance for small and trim Navies like the RSN. This is particularly pertinent as the RSN is constantly striving to do more with less by rationalising its lean human resource pool while seeking novel ways to best optimise limited assets in order to operate successfully across the spectrum of conflict in even higher threat environments of the future.

In any case, we will need network-centric systems that are robust, resilient and have greater redundancy; not prone to disruption or brittleness. Admittedly, it will not be an easy task. It will require a bold mind-set change and long-term organisational investment. We would indeed be remiss if we were to neglect the importance or treat desultorily the difficulty associated with converting all the existing producer-push, point-to-point architectures to fundamentally new consumer-pull network approaches. To be sure, NCW is not particular to the Navy. Similar initiatives are also underway in the Army and Airforce. We will ultimately want to develop 'fully joint' inter-service network-centric architecture systems for us to achieve that sweet spot of seamless synergy across the fighting arms. According to Metcalfe's Law, the 'power' of the network is proportional to the square of the number of entities (or nodes) participating in the network. That is the 'bottom line' value of network-centric warfighting to a naval force. As the total size of the force expands to embrace a larger number of interconnected sea-air-land and even space-based nodes, its total knowledge power - and with that, combat power - increases exponentially. In other words, the value of the network is in its ability to allow a future naval force, with full benefit of networked sensors, weapons and command oversight, to be as powerful and successful in its ability to accomplish its mission as a substantially larger force today. Already, the SAF's increasing reliance on high-tech simulators and development of Intranets are concrete examples of the possibilities that network-centric technologies offer. Such VR and IT technologies now allow us to command, to communicate and 'to train as we fight'; enjoining our spatially dislocated training units across the synthetic continuum by transcending the traditional constraints of time and space. The next step after that perhaps would be to exploit information technology and computer advances such as artificial intelligence (AI) advances that are coming on-line by incorporating them right into the heart of a future battle scenario, to further integrate our forces in order 'to synergise as we fight'.

In any exploration of the opportunities presented by NCW *vis-à-vis* RMA, it stands to reason that cutting-edge technology can only do so much to help us cut our teeth. As individuals and as teams, it behooves us all to quickly master and optimally maintain the complex web of NCW systems once brought aboard in order to fully exploit their potent capabilities. Technology dependency will not make human decision-making redundant or any easier.¹⁴ Rather, sound decision-making skills and sharp tactical instincts will have to be cultivated amongst our commanders at all levels to achieve superlative warcraft. To be sure, the demands on robust training and reliable technology support will continue to pose an even greater challenge. But they should not prove to be too daunting. Like the USN, the RSN must similarly seek to discover and exploit new possibilities through a programme of vigorous experimentation and operational adaptation. As I have argued elsewhere, heartware for human-centric development must match network-centric development.¹⁵ The first rays of NCW have only just begun to dawn on the world's naval warfighting community. It is no false dawn. The imperative is clear. NCW is the 'emergent standard which navies must achieve if they are to match the operational capability of modern western navies'.¹⁶ As French novelist Victor Hugo once said, 'Nothing is so powerful as an idea whose time has come'. In time to come, we will be better able to identify the relevant import of ideas that will make the most qualitative impact. Thereafter, we should move swiftly to secure access to turn-key systems and emergent technologies¹⁷ that will enable our naval commanders and warfighters to, confidently and comfortably, ride the next wave of NCW well into the new millennium.

Endnote

1 From a major policy speech at the Naval War College, 15 June 1999 on the need to turn the US Navy's future vision into reality (see *Defense News* 28 Jun 99: 28).

2 The *levee en masse* was a shift from the previous model of maintaining a small professional army. France was able to take advantage of the changes in society from industrialisation to take nearly the entire adult male population to war, transforming the nature of armed conflict during the Napoleonic era. Cited in Cebrowski, A.K. & Garstka, J. J. (1998) 'Network-centric Warfare: Its Origin and Future' in *Proceedings*, Jan. Pg. 35.

3 Smith, E. A. S. Jr. (1997) 'The Navy RMA War Game Series' in *Naval War College Review*, Autumn, Vol. 1 No. 4, Pg: 17-31.

4 Ibid: 28-35. See Vice Admiral Cebrowski, A.K (1997) 'Sea Change' in *Surface Warfare*, Nov-Dec, pg. 3-6. See also Johnson, J. L. (1998) 'The Future of Surface Warfare' in *Surface Warfare*, Mar/Apr, Pg: 4-7. The so-called Street Fighter ship concept is also Cebrowski's brainchild. It envisages a small, highly armed and stealthy warship that can operate close to enemy shores and provide support for forces inland as well as defeat diesel submarines and clear minefields (see *Defense News*, 26 Jun 99: 27)

5 On 27 Aug 98, the US carried out 'Operation Infinite Reach' against the wealthy Saudi terrorist Osama Bin Laden. US warships fired about 80 *Tomahawks* at facilities linked to Bin Laden, the alleged mastermind behind 7 Aug 98 US embassy bombings in East Africa. The retaliation was aimed at a paramilitary camp in Afghanistan and a pharmaceutical plant in north Khartoum, Sudan.

6 Such a plan for a sea-based NMD system contravenes the 1972 Anti-Ballistic Missile Defence treaty signed by the US and the former Soviet Union. But it may yet materialise with the changing geopolitical climate.

7 See Murphy, D. J. (1998) 'Achieving 21st Century Naval Mastery' in *Surface Warfare*, Mar/Apr, pg: 9-13.

8 The US Navy is expected to release the first contracts for its DD21 destroyer program soon to the ship-builder's alliance that is coordinating the developing of the new warship. Each of the two defense industrial teams competing for the eventual production of DD21 will receive a three - year US \$105 million contract. See *Defense News*, 17-23 Aug 98, Pg: 2.

9 See Nutwell, R. M. (1998) 'IT-21 Intranet Provides Big Reachbacks' in *Proceedings*, Jan, Pg: 36-38.

10 See Singh, A. (1998) 'Information Warfare: Reshaping Traditional Perceptions' in *Strategic Analysis: Monthly Journal* of the IDSA, March, Vol. XX No. 12, New Delhi: Institute of Defence Studies and Analyses, Pg: 1793-1803.

11 It has been reported that the US government is developing a new super-secure computer network - Extranet for Security Professionals (ESP) - that allows secure sharing of top-secret data through the Internet that could be used to track criminal computer hackers and terrorists. See *Defense News*, 31 Aug-6 Sep 98, Vol. 13 No. 35: Pg: 1.

12 See Foucault, M. (1979) *Discipline and Punish*, Harmondsworth: Penguin

13 Professor Lawrence Freedman argues that: "Only the US has the resources and military establishment capable of following this (RMA) path... The US is designing a war game that only it can play. It is putting itself in a league all on its own". I would suggest that this may seem the case for now or even the next few decades. But as in the nature of revolution in new ideas, it is difficult to play solely in one's own league for long before others start joining in; particularly in a Borderless Age of global information flows and technological exchanges. See his article "The Revolution in Military Affairs" in *Pointer*, Oct-Dec 97, Vol. 23, No. 4, Pg: 51-63.

14 See US Admiral Prueher's timely reminder that 'more data does not mean superior judgement' in his article 'Information Age Overload' in *Defense News*, 30 Nov - 6 Dec 98, pp. 23. See also Thomas Barnett's 'The Seven Deadly Sins of Network-Centric Warfare' in *Proceedings*, Jan 1999, pp. 36-39.

15 Lim, Irvin 'Grooming and Grounding Heartware', *POINTER* Apr-Jun 99

16 Davis, Malcolm R, 'China's Security Aspirations for the 21st century and challenges for East Asia' *Asia-Pacific Defence Reporter* Aug/Sep 99.

17 Another exciting netcentric technology set to take the world by storm, is the Next-Generation Internet being developed by Media Fusion. It is an ambitious plan to supercede and render obsolete current optic fibre and copper cable networks by harnessing the untapped power and potential of a nation's electrical grid to transmit voice, video and internet data. From the military point of view, it will provide the tremendous advantage of secure internet and telephone communications. The USN is reported to be interested in collaborating on the technology's potential applications for improving shipboard systems' performance. See *Armed Forces Journal International*, May 1999.

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Technological Advancement and its Impact on the Human Factor in Infantry Combat

by MR Tan Puay Seng

The influence of technology on land warfare is undeniably profound. The improvement in the range and power of weaponry, the use of mechanisation and air support, and the advent of sophisticated electronics inter alia transform the nature and scope of ground combat unprecedentedly. In the midst of these developments, the human factor in the battlefield remains crucial. Technological advance in war is meant to enhance the soldier's survival or alleviate his mental and physical stress in combat. On the other hand, the astonishing rate of improvement in the range and firepower of weaponry presents a dilemma - soldiers are at its mercy as well. If located, the infantryman can easily be killed by a wide array of weapons.¹ Furthermore, emerging technologies have become increasingly complex and so increase the need to man the armed forces with qualified people.² Thus, this prevailing situation nurtures a general impression that 'the cold-blooded technician now controls the battlefield, and that the hot-blooded warrior is now an anachronism'.³

An infantryman's role has remained consistent despite the development of wide-ranging weapons. He is expected to hold ground against any attacks, or capture ground by closing in to engage the enemy. The essential point remains - at some time or other, infantrymen have to advance under enemy fire and put their life on the line.⁴ An infantryman can also be considered as a weapon system in itself - he is a highly versatile weapon-carrier with a slow but good cross-country performance. He has good sensors in the shape of his eyes and ears and each is equipped with a miraculous computer superior to any man-made model.⁵ However, this 'system' suffers from mental and physical stress in combat. In Keegan's view, the tremendous improvement in firepower has intensified the 'fear, noise and fatigue' of combat which have become so stressful through the centuries, up to the point that combat may disappear entirely.⁶ Moreover, the increase in weapon lethality brings about a need to fight in dispersed formation, which in turn requires initiative and high morale in the soldier. Thus, the changing nature of the battlefield demands a concomitant change in attitude towards training, discipline and motivation.

This paper examines the impact of technology on the various aspects of an infantryman - his lethality, command and control capabilities, survivability, sustainability and mobility. Finally, it will attempt to conclude with the impact of technological advancement on infantry combat and its effect on human limitations and abilities.

Infantry Combat in 19th Century

The battlefields of the early 19th century were dominated by the combination of flintlock and bayonet, supported by the smoothbore, muzzle-loading cannon. The flintlock was extremely ineffective as a weapon with an accuracy of up to 80 yards. Thus, the infantry had to be deployed in lines to exploit the maximum firepower. The defending side had to stand stoically in their lines and wait for the attacking infantry to advance at close range before they delivered their volleys. Waiting without firing until the enemy came close enough to charge must have been a nerve-racking business which tested the coolness and discipline of the troops to the limit.⁷ Infantrymen, however well-trained and well-armed, however resolute, however ready to kill, remain erratic agents of death.⁸ They were easily distracted by the dead and wounded around them, the oppressive smoke and noise of black powder guns, resulting to the uncontrolled discharge of their weapons. The shoulder-to-shoulder drill and blind obedience to orders was to make an infantryman an automaton, making him oblivious of any influences around him, and to inject in him the discipline to stand or advance steadfastly in the heat of battle.

Furthermore, each infantryman surrounded by his comrades, provided him a sense of psychological and moral support, and the nature of the danger was predictable. Above all, battles were short, lasting only a

few hours, thus limiting the soldier's need for endurance in combat. Therefore, infantry combat in the early 19th century was predicated on the mechanical coercion on the individual soldier while trying to curb his mental stress and sustain his morale through rigid drill discipline and group cohesion in battle. Ultimately, victory belonged either to the defender who could hold their ground stoically, or to the attacker who could aggressively carry their forward impetus to break the defender's line. It was the relative balance of morale and steadiness, which decided the victor in an infantry fight, and not the balance of power.⁹

Infantry Combat in the 20th Century

A vast array of major weapon innovations emerged in the course of war from 19th century to early 20th century, ranging from rapid-firing artillery, the machine-gun and magazine-loading rifle to the tank. Mechanical and chemical improvements in weaponry enhanced the human ability to inflict injury and damage to a tremendous magnitude - a soldier having a weapon with a high rate of fire can pin down a quantitatively superior force - no more being constrained by the limits of his muscle power. The individual does not require greater skills to operate a machine gun than to use an aerosol can. Moreover, the range of modern rifles is able to kill the enemy at a distance, thus obviating the need to engage in appalling face-to-face confrontation. After all, the primary functions of weaponry have been the prevention of close combat.¹⁰ The infantryman can hover tentatively around a combat perimeter, and has the option to choose between engaging the enemy with his long-range rifle or retreating if the odds are against him. In this way, one can limit one's personal exposure to danger and decrease the effect of chance upon the outcome.¹¹

World War II first saw an extensive use of mechanisation on the battlefield. Before the development of mechanical transport, soldiers of most armies entered battle tired because they had had to march into the combat area under the weight of their weapons and kit.¹² Tactical mobility depended on a soldier's marching endurance, which thus limited his operational distance. The use of mechanised transport obviated the infantryman from fatigue due to marching, thus increasing his operational radius. Furthermore, the soldiers enjoy relative immunity from enemy fire inside a tank or an armoured carrier while their mobility is restored.¹³

Another potent element of mobility, the helicopter, became synonymous with the Vietnam War as it was used for the first time in large number and in a variety of roles. The added operational advantage of helicopters allowed troops to fight in inhospitable terrain. This spawned the idea for the creation of large forces of helicopter-mobile infantry.¹⁴

Contemporary and Future War

The contemporary battlefield, as the Gulf War in 1991 had demonstrated, witnesses the extensive use of computerised communications and high-tech sensors at the operational level. Advances in electronic warfare, remotely-piloted vehicles, secure communications, real-time battlefield surveillance, target acquisition and reconnaissance (STARS) have been made.¹⁵ Information from these sensor platforms is transmitted to the infantrymen, providing a comprehensive picture of what is going on the battlefield.¹⁶ Ground combat troops are also automatically co-ordinated with supporting weapon systems, directing their immense firepower at key enemy targets with speed and precision before moving in to deliver a *coup de grace*, instead of a battle of attrition with the enemy. Night vision equipment also makes 24-hour combat possible as the infantryman is no longer constrained by darkness. For instance, during the Gulf War of 1990/91, the coalition forces employed a wide range of night vision and all-weather systems.¹⁷ Increasingly, besides knowing the various tactics and rules of engagement, future infantrymen have to be equipped with the necessary technical expertise to operate sophisticated equipment like night vision equipment, laser-range finder and the 'battlenet' - a battlefield computer system.

Medical Advancement

Weapons have been brutish to human flesh. The infantryman in today's battlefield is subjected to more diverse physical and psychological wounds. The provision of elaborate medical care and facilities will help

alleviate his pain and stress. During the Vietnam War, a combat victim could be receiving expert care within minutes of boarding the medical helicopter while en route to a base hospital in Japan.¹⁸ In some futuristic projections, bio-engineered stress-reducing drugs and artificial blood plasma will tend to mind and body in more direct ways. The need to shave or relieve oneself could also be controlled by 'bodily function retarding' drugs and freeze-dried, high-energy rations.¹⁹ The soldier is also protected from the sight of mutilated bodies by disintegrating foam. Advances in medical science will raise the threshold for physical or psychological limitations.

The Impersonal Face of War

The use of automatic weapons has made the ritual of killing impersonal. The machine-gun has not so much disciplined the act of killing as mechanised it.²⁰ Systematic artillery fire directed over several hundred yards at blocs of human beings is perceived by gunners only as differently coloured masses.²¹ Furthermore, prolonged bombardment creates such deafening noise and shock waves that soldiers begin to suffer from mental trauma known as 'shellshock'. Thus, besides the conventional way of neutralizing an infantryman by death or injury, heavy bombardment can drive him to the bottom of his burrow, persuading him that it is wiser to stay there since he is unable to observe or handle his weapon. This makes him effectively non-operational.²²

The perception of the soldier's ability to counter a threat constitutes another dimension of fear. Anti-personnel mines are perceived as inhuman and impersonal threats, engendering great fear as they can strike anyone indiscriminately.²³ In Dinter's view, fear of mutilation is greater than fear of death.²⁴ Despite improved protective equipment, with nuclear, biological or chemical weapons, the soldier is put under extra and unaccustomed physical pressures: his fear of mutilation will increase dramatically.²⁵ Thus, the use of such devices reveals the cruel reality of 20th century warfare that the infantryman is increasingly subjected to the inhuman threats of war, making him more susceptible to fear and combat stress.

The use of electronic night-fighting equipment - image intensifiers, infra-red searchlights, movement sensors - significantly increases the range and tempo of operations. It requires the soldier to remain continuously in combat for a sustained period of about 100 hours. Deprived of sufficient rest or sleep, the soldier is a potential victim of combat stress. For instance, the Israelis and Arabs who had lavishly used night-fighting equipment found themselves exhausted at the end of the day-long battles in October 1973. They relapsed gratefully into sleep as soon as darkness fell.²⁶ On the other hand, modern artillery fire is a double-edged weapon of support²⁷ ; the practice of indirect fire, or from map references rather than visible targets, has the most unfortunate consequence of shells falling on friendly instead of enemy forces. Other forms of fratricide - the killing or wounding of forces by their own side or allied forces - become more likely with the increase in tempo of combat operations. The US air strikes on British armoured forces during the Gulf War, killing nine British servicemen and wounding 13, is a particularly tragic example.²⁸

Dispersion

The increased lethality in firepower implies that the soldiers cannot fight as a massed formation but dispersed. Dispersion increases more than lethality. This explains why, for example casualty rates in combat were lower in World War II than in World War I.²⁹ It implies that the individual soldier has become increasingly independent in combat; this in turn has not only called for improved training, discipline, motivation and coordination. It requires fostering improvement in intelligence, initiative, and judgement on the part of each individual at lower levels.³⁰ The World War I German 'stormtrooper' was the embryonic modern combat soldier, who was given the flexibility and independence to adapt to changing battlefield conditions and employ a range of new weapons to the full. Furthermore, the need to fight in scattered groups accentuates the importance of small unit cohesion. A group created by blind obedience will produce panic when subjected to violent shock. In a small unit, elements of leadership are taught to all so that it still maintains their combat effectiveness even if the incumbent leader falls. Small unit cohesion can be inculcated through building strong friendship, co-operation and respect among members. As a unit, the willingness of men to fight for the sake of another survives the terrible impact of battle far better than any other individual source of morale.³¹

Moreover, the infantryman requires more than mechanical skills to work the weapons at the tactical level. He also needs the more subtle tactical skills needed to make good use of the terrain and weapons at hand, within the particular context of each encounter.³² With the advances in technology increasing weapon effectiveness and the increasing danger of confronting the enemy soldier in the future, the ability to retaliate will demand more will to fight and win.³³

Operating Today's Weaponry

Operating modern weapons *per se* does not pose a problem - the *Stinger* surface-to-air missile was viewed as 'extremely sensitive to the skill of its operator and too complicated for the caliber of people assigned to that duty'.³⁴ Notwithstanding that, the *Mujahideens*, with low-quality of human capital, used them to great effect against Soviet helicopters in Afghanistan from 1986.³⁵ The personal assault rifle, with its high rate of fire, is light and simple enough to allow even untrained children to kill 'with a profligacy the veteran of the past could not achieve'.³⁶

On the other hand, effective leadership and command and control are needed to translate technology into real military capability. For instance, the North Vietnamese had demonstrated the ability to handle highly complex weapon systems even with the absence of high-literacy human capital, only because the PAVN (North Vietnamese Army) was able to cultivate expertise, arrange technical training for its troops, and devised innovative tactics.³⁷ In contrast, the Iraqi military proved incapable of using advanced weapons in the field during the Gulf War due to highly conflicting civil-military relations - the officer corps were frequently purged and promotions were highly politicised. This had severe repercussions on combat effectiveness, resulting in a lack of initiative, weak discipline, divided lines of command, and tight control of information.

The Quest for Certainty

As Creveld has mentioned, '...the history of command in war consists essentially of an endless quest for certainty - certainty about the state and intention of enemy's forces...'³⁸ The automated battlefield is supposed to provide a view analogous to a grandmaster's view of a chessboard, so that the enemy will always be out-thought and out-maneuvered. However, as Clausewitz points out, war brings to the fore the most powerful emotions known to men, including hatred, anger and fear. As such, Creveld reasoned that 'the quest for certainty cannot be expected to proceed rationally or even most of the time, even disregarding the manifold ways in which the human mind distorts information in the very act of processing it'.³⁹ Furthermore, the more available the information, the longer the time needed to process it, and the greater the danger of failing to distinguish the relevant and the irrelevant, the reliable and the unreliable.⁴⁰ The term 'information overload' thus became synonymous with the 21st century soldier when he is over-fed with excessive information on the battlefield. The soldier of the future faces an unprecedented form of stress where he has to discern the right and more vital piece of information to make the right judgement.

Not By Technology Alone

The Vietnam experience also served as a constant reminder that even the most advanced technology may fail to deliver all that it promises, and an effective tactical doctrine is needed to compensate any technical shortfalls.⁴¹ The Americans seemed to believe that supporting firepower could destroy an enemy without the need for an infantry assault.⁴² However, the Vietcong were willing to accept high casualties when taking the initiative, combined with the use of terrain, camouflage, dispersion and entrenchment to minimise casualties at other times.⁴³ A paradoxical tendency emerged whereby soldiers 'hugged' enemy positions as close as possible to seek safety from long-range weapons.⁴⁴ In Vietnam, engagements ranged were often no more than 30 metres. The PAVN was able to make use of efficient combat technique as a force multiplier to compensate for their technological inferiority vis-à-vis the Americans.⁴⁵

During the 1982 Falklands conflict, high physical and moral exertion was needed to engage the dug-in Argentinian defenders, and as soon as one position was painfully priced from the ground, another had to be

laboriously fought and chewed through, and another.⁴⁶ The British won a classic victory for training, unit-cohesion and military professionalism, over Argentina's poor leadership and badly conscripted soldiers.⁴⁷

In other instances, the intense ideological feeling inculcated into a contemporary soldier pre-dominates over superior firepower, driving him to engage the enemy regardless of any human instincts for self-preservation - a testimony of the faith by guerilla pundits who put 'men above machines'. The 1980 Iran-Iraq War illustrates this point, in which fervent religious beliefs motivated the Iranians to employ costly human wave attacks against Iraqi positions.

Conclusion

Technological advancement is a vicious cycle - since 1800, the infantryman's efficiency has undoubtedly improved significantly by better firearms and combat gear. But his psychological burden and dangers encountered are increased by the very same weapons developments. The solution to more difficult conditions imposed by technological advancement seems to lie in improving the individual fighting man himself.⁴⁸ It was thought in World War I that the deadlock created by firepower on the battlefield could be broken by a machine - the tank. On closer analysis, the tank itself is very vulnerable to firepower: with the advent of anti-tank weapons, it has to be escorted by infantry. The traditional role of the infantry remains paramount.⁴⁹ The Vietnam War has indicated that excessive preoccupation with technology can seldom become decisive: close-quarter combat tactics remain indispensable. The soldier's ability to exploit the terrain, to conceal and disperse himself, makes him difficult to dislodge even with intense firepower. Armed with only a personal weapon, he is still capable of launching a successful attack.

Modern firepower will not be counterbalanced by pure elan, as World War I demonstrated, but with innovative tactics fused with new available means of offensive power. Thus, weapons development is only one corner of a triangle, of which the other two are a tactical 'doctrine' for using the weapon, and the training of the combatants, individually and collectively to deploy the weapons effectively.⁵⁰ The technological edge per se will not confer an absolute advantage, seen by the performance between the PAVN and Iraqi forces.

The Gulf War of 1990/91 demonstrates the "fusion" of advances in tactics, technology and human factors which proved decisive.⁵¹ The US ground troops involved were well-trained regulars, not the type of conscripts who served in Vietnam. Furthermore, technology itself will not cause the capabilities of the operator to be redundant - it takes tremendous steadiness for the missile infantryman to acquire his target in his sights without any diminished consciousness of the battle environment. Belief in push-button war is simply a fallacy.⁵² War has been, and is still, fought by human beings. Superior leadership, morale and unit-cohesion are still needed to provide a counterweight to the inherent limitations to 'fear, noise and fatigue' on the battlefield. Technological advancement will not make Man a helpless bystander. His abilities need to be harnessed to devise new techniques to exploit technology. The advent of the Information Age requires the soldier to differentiate relevant information from the irrelevant, the reliable from the unreliable. In such a context, technological advance does make man's abilities and limitations in certain physical aspects less important. This advantage however, is far overshadowed by the more demanding tactical environment that it inadvertently creates which accentuates his abilities and limitations.

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Book Review:

The One-Minute Manager and Putting the One Minute Manager to Work by Kenneth Blanchard, Ph.D and Robert Lorber, Ph.D

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Not since 1969 and the original publication of Paul Hersey and Kenneth H. Blanchard's *Management of Organizational Behavior* has there been so fresh or exciting an approach to the management of people as that of *The One Minute Manager* by Kenneth Blanchard and Spencer Johnson and *Putting the One Minute Manager to Work* by Kenneth Blanchard and Robert Lorber. One-minute management is a figurative expression with practical implications. Basically, it encourages us to take time each workday to know the people we manage because we understand that they are our most important resource. Thus, *management* as used in these books (and in this review) closely resembles *leadership* found in other contexts.

The management skills, techniques, and wisdom gleaned by the authors have resulted in a powerful on-target, common sense, workable approach to modern management practice. A recent CBS News study revealed that 80 percent of American employees are dissatisfied with their work. In support of this statistic, since 1962, American productivity has dropped to less than one-third that of Japanese productivity. One-minute management as described here is responsive to these startling realities and is intended to provide some answers to the complex questions confronting current US managerial practices. Henry David Thoreau noted that "for everyone who is striking at the root, there are 10,000 hacking at the branches. "In both a philosophical and practical sense, one-minute management strikes at the root of achieving significant, overall managerial performance and productivity. It addresses the most important issue facing managers today - the constant awareness of ineffectiveness.

One-minute management, as presented in *The One Minute Manager* and *Putting the One Minute Manager to Work*, addresses would-be managers who lack confidence in their management capabilities and who are somewhat hesitant about achieving their full potential. It may seem surprising, but the lack of personal achievement occurs in a great many instances because managers are literally standing in their own way toward fulfillment. One-minute management challenges people to get out of their own way. It says that they have to trust and believe in themselves. The concept holds that people must have the daring to accept themselves as a bundle of possibilities and undertake the process of making the most of their best.

Wise managers find stimulating excitement in self-discovery. They are always willing to share, grow, and develop; they are rarely predictable. One-minute management seeks constructive change: change that occurs spontaneously, offers a challenge to our maturity, and promotes our personal and professional development. This type of manager believes that subordinates must be accountable for their work lives, but he does not live their lives for them. Other broad characteristics of one-minute management are dedication and commitment. A one-minute manager emphasises that leaders and subordinates need one another. This special quality or managerial feature enriches the organisational world and enlarges potential for increased group effectiveness and productivity. One-minute management is a sharing notion or idea fostering the development of a common bond between leaders and subordinates. In applying this idea, the manager gives little advice, provides options, and always stresses the need for all personnel to keep growing in concentric circles so that there is a systemic multiplier effect on whoever they contact. A practitioner of one-minute management knows how to interact. He is capable of having solid relationships with subordinates. He gives and receives without explanation. He understands his people and gets to know them on a gut level. He is demanding and expects followers to employ their energy in becoming successful one-minute managers also.

To grow, in becoming a one-minute manager, is to risk (the biggest risk any manager takes is never taking a risk). There is always some pain. The most exciting thing about one-minute management is the realisation

that most human beings have the potential to become good managers. The effective manager is not a superman but simply a fully functioning human being! One-minute management makes people aware that they have unlimited possibilities. Erich Fromm says the pity in life today is that most of us die before we are fully born. A good manager is not simply an observer of life but an active participant seeking not only his own growth but the development of those around him.

In dealing with today's subordinates, most managers grope forward with all the cocksureness of a foot soldier crossing a foggy minefield. One-minute management helps to smooth the path to managerial success. Its strength rests largely in its ability to reduce complex issues to simple words and images that everyone can understand and relate to. Its greatest asset is that it involves the very people who do the work, increasing their sense of importance and responsibility. It contends that effective leadership comes from a style based on trust and subordinate involvement in decisions affecting them and the mission.

The first of the two books, *The One Minute Manager*, offers a quick way for people in organisations to know exactly what they are doing in managing people. The one-minute manager is a person who learns how to direct his activities and his people with three fundamental requisites: one-minute goal setting, one-minute praisings, and one-minute reprimands. The one-minute manager shows confidence in others. He speaks the truth, laughs, works, and enjoys - and he encourages the people who work for him to do the same. He follows a simple motto: "There is no limit to what persons can do or where they can go if they don't mind who gets the credit." He does not cloak himself in the garb of a crusader going off to do battle in search of the Holy Grail; he strives simple to increase productivity, improve morale, and inspire his people to become more effective managers themselves.

The first step in being a one-minute manager is to set goals. Unless the manager and his subordinates establish and agree on goals, objectives, or key milestones, no one will have a clear understanding of accountability areas and job performance standards. Furthermore, without clearly defined goals, there is no basis for one-minute praisings or one-minute reprimands. Therefore, one minute goal setting starts the whole management process.

In establishing one-minute goals, a one-minute manager must first meet with subordinates individually or in groups to discuss job-related tasks. Considering that for 80 percent of people performance comes from 20 percent of their activity, the manager and subordinates select five or six key areas needing attention. Together they agree on and establish performance standards. Next, they write out the established goals on a single sheet of paper, using less than 250 words for each goal; and they read and reread the goals to ensure clarity, understanding, agreement, and brevity. Reading each goal should take less than one minute. After the goals have been set on paper, each person in the organisation takes a minute occasionally during each day to compare his performance against his goals. Moreover, each person observes whether his behavior matches the goals. If in doubt, subordinates meet with their leaders to discuss and resolve any problem.

One-minute praisings following one-minute goals represent the second step in the process. Praisings are extremely effective with all employees, whether they are newly - assigned, in training, in transition from one position to another, or most senior and experienced. One-minute management cautions us to remember that when subordinates are learning new tasks, the manager should praise performance that is approximately right rather than waiting for it to be exactly right. A series of tasks approximately right leads to doing a task exactly right. Properly administered praisings will positively reinforce desired behavior and will keep subordinates motivated and achieving. The central intent in praising is to help people reach their full potential by catching them doing something right and rewarding achievement through recognition. One-minute management insists that feedback on results and relaying these facts to your subordinates is the number-one motivator of people. As Dr. Blanchard told a group of students at Air University, "Feedback is the 'Breakfast of Champions'."

In delivering one-minute praisings, the one-minute manager will:

- immediately recognise people's performance;

- tell subordinates in specific terms what they have done right;
- stop for a moment and let his people internalise and grasp how good he feels about what they have done; and
- encourage subordinates to continue their good performance. The one-minute manager realizes that people who feel good about themselves and what they have accomplished produce better results.

One-minute reprimands constitute the third aspect of one-minute management. Reprimands can be effective with experienced, capable, and motivated subordinates. Job familiarisation has made these workers aware of their ability to perform assigned tasks. However, a manager needs to exercise caution when considering reprimands for people who are new to the job, still in training, or simply inexperienced in learning a new task. In these instances, a one-minute manager will revise goals rather than reprimand.

One-minute reprimands separate the person from the behavior. Feelings are discussed so that behaviors can be analysed and corrected. These discussions are intended to illustrate that the individual is not just his behavior, but he is the person managing his behavior. Managers should not be managing the subordinate's last mistake as if it were representative of his entire behavior pattern.

Some key points that the manager will keep in mind in delivering a one-minute reprimand are:

- Reprimand immediately;
- Tell subordinate specifically what he did wrong;
- Communicate clearly to followers how he feels about their error;
- Allow subordinate time to internalise how he feels about what he did;
- Impress on people how much they are valued, but not the particular behavior about which they are being reprimanded; shake hands or touch them in a way that expresses warmth and concern, indicating that he means them no harm and is trying only to help them; and
- Comprehend that when the reprimand is over, it is over, and that he holds no resentment toward the reprimanded person.

The one-minute reprimand keeps things moving in the right direction. This form of discipline leaves people who have been reprimanded concentrating on improving their performance and not on the reprimand itself or feelings of unfair treatment.

In *Putting the One Minute Manager to Work*, Dr. Blanchard and Robert Lorber take goal - setting, praising, and reprimanding further, instructing managers how to apply these concepts in a systematic day-to-day basis that improves productivity and personnel satisfaction. The second book builds on the first and further reinforces the one-minute management theme. It contains powerful new information and methods for increasing managerial effectiveness through the PRICE System. This system involves five basic steps:

- Pinpoint - determine performance areas. This is the process of defining in observable, measurable terms what needs to be done.
- Record - measure observed performance and track progress made toward goal achievement. This method directs attention to those areas managers want to improve - not problems. People have difficulty acknowledging that there are problems, but most have an area they want to improve.
- Involve - seek an agreement with subordinates on performance goals and strategies for coaching and evaluation. People who are in the same boat with you are not going to bore a hole in it. The key to this step is remembering that "one-minute management just doesn't work unless you share it with your people."
- Coach - observe performance and manage consequences. Coaching is basically observing subordinates' performance and providing them with constructive feedback on results. It is a process of managing people toward achieving good performance.
- Evaluate - examine performance progress and determine future strategies. As the last step in the PRICE system, evaluation is the process of reviewing information gathered and using it to form judgments, which, in turn, are used in further decision making.

Readers of *Putting the One Minute Manager to Work* are given an easy-to-apply guideline for adapting the PRICE system. This ordered assemblage of simple principles puts one-minute management concepts into an actionable format.

All too often we seem concerned about the husk of management and disregard the kernel. Not so with one-minute management. Like a piece of blotting paper, it absorbs in simple yet profound ways the essence of managership. It might be called the Jonathan Livingston Seagull of Management. Lewis Carroll once wrote to his sister: "Imagine this scene: An old man asks a little girl why she isn't eating her carrots. She replies, 'If I eat them, I might like them, and I can't stand the things!'" One-minute management makes sense. Try it - you may like it. You may even find that it works.

The abovementioned titles are available for borrowing at the [SAFTI MI Library](#). The catalog references are:

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Kenneth Blanchard and Spencer Johnson

HD31 BLA

Putting the One Minute Manager to Work

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Endnote

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