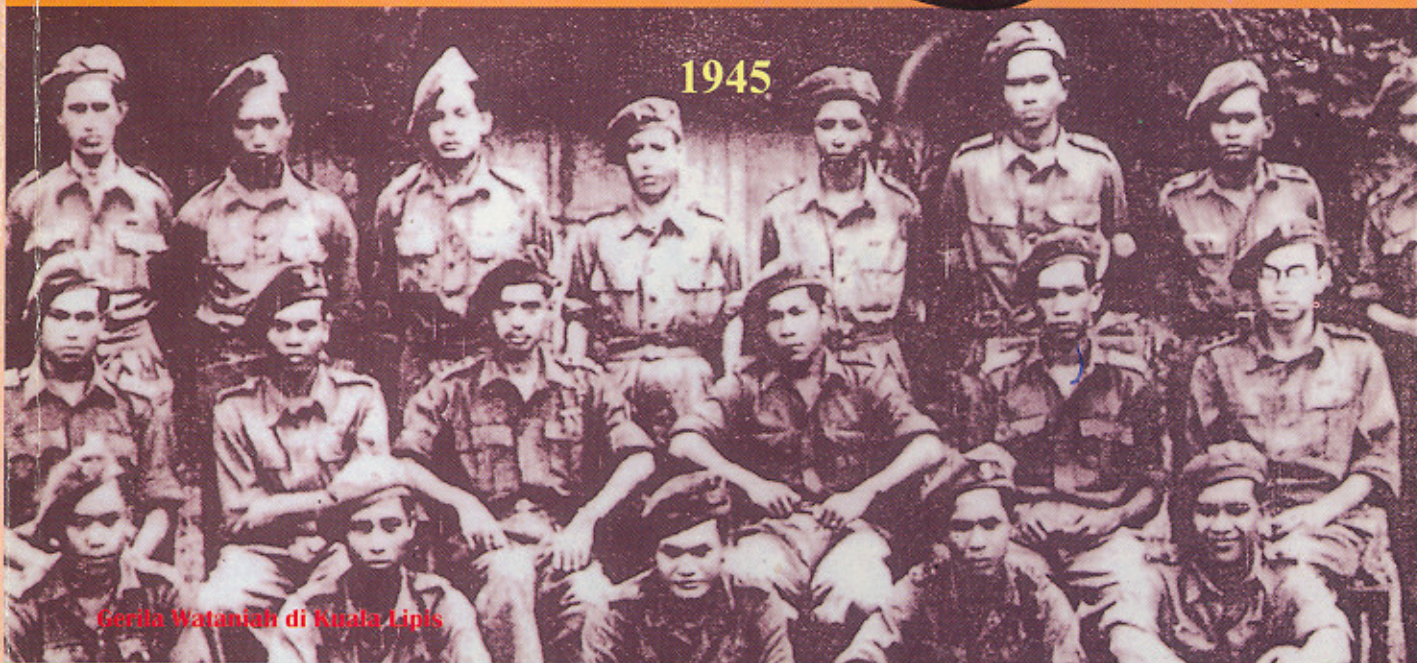


SOROTAN DARAT



1996

ASKAR WATANIAH

Bersedia Membantu Mempertahankan Negara



JURNAL TENTERA DARAT MALAYSIA

JILID 1

JUN 1996

BIL 29

KANDUNGAN

**Kedayaan dan Kemampuan Askar Wataniah
Dalam Konteks Pertahanan Menyeluruh
(HANRUH)**

Oleh Lt Kol Prof Madya Dr. Ahmad Fauzi bin
Mohd Basri

3

Pemenang Artikel Terbaik

10

**"Enhancement of Linkages in a Changing
Security Context - Ministerial Perspective"**

Oleh Menteri Pertahanan

11

**Planning The Malaysian Army for the 21st
Century**

Oleh Panglima Tentera Darat

17

**Peace Support Operations - Command, Control
and Training - A Malaysian Perspective**

Oleh Mej Jen Dato' Md Hashim bin Hussein

27

Security Implication of Computer Technology
oleh Brig Jen Mohd Zaki bin Hj Wan Mahmood

38

Assault on Peleliu, Why Was it Necessary?
oleh Kol Mohd Kamal bin Omar

49

**Perlaksanaan Sistem Latihan Teknikal
Kor JLJ Ke Sistem Latihan Vokasional**
oleh Lt Kol Safii bin Mohammad

55

**Field Artillery in an Anti Armour
Role in the Future**

oleh Lt Kol (B) Heera Singh

63

Pemansuhan 'Initial Spare Requirements'
oleh Lt Kol Khairuddin bin Haji Abu Bakar

73

**Jomini's 'Decisive Points' and Clausewitz's
'Centres of Gravity'**

oleh Mej R. Anthony Raja Gopal

85

Konsep Perang Terhad
oleh Kapt Saiful Anwar Md Ali

91



27



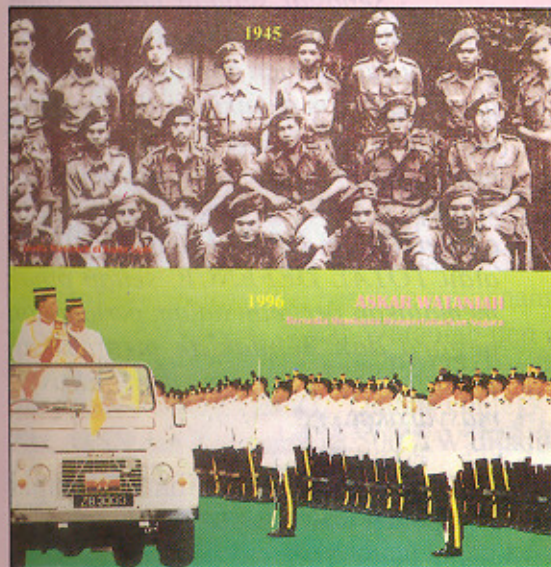
63



38

KEDAYAAN DAN KEMAMPUAN ASKAR WATANIAH DALAM KONTEKS PERTAHANAN MENYELURUH (HANRUH)

Lt Kol Prof Dr Madya Ahmad Fawzi bin Mohd Basri



PENDAHULUAN

Dalam keadaan yang ada masa kini, Askar Wataniah kurang mendapat perhatian sepenuhnya dari kerajaan, agensi pusat, pengurusan pertahanan negara dan rakyat jelata. Keadaan ini menjadi Askar Wataniah kekal statusnya sebagai askar kelas dua walaupun Kementerian Pertahanan (KEMENTAH) merancang fasal membesarkan kekuatan pasukan simpanannya dalam nisbah 1 : 1 satu perubahan baru setelah lama bermadah dengan nisbah 3 simpanan bagi satu anggota tetap.

Dalam pada itu satu dari perubahan sosial yang berlaku di negara kita pasca Merdeka ini, ialah merosotnya idealisma tentang semangat kesukarelaan (volunteerism) dan semangat patriotik cinta-setia dan bela negara. Ini adalah kesan dari proses modenisme yang meletakkan keufamaan kepada nilai materialistik dan individualistik, kelihatan nilai-nilai murni tradisi yang meletakkan asas 'hidup bagai aur dengan tebing' dan 'cubit peha kiri dan peha kanan terasa jua' makin pudar. Dengan itu kita hidup dalam persaingan 'bagai enau melepaskan pucuk masing-masing.'

Zaman pasca Merdeka yang kian makmur dan kurang kelihatannya ancaman terhadap negara kita menyebabkan semangat kebangsaan (nasionalisma) di kalangan generasi muda, bagaikan tidak kelihatan. Perang Dunia dan Darurat yang lalu telah memberikan inspirasi untuk generasi muda berkhidmat dalam pasukan

SINOPSIS

Tumpuannya tulisan ini adalah kepada pengurusan pasukan-pasukan simpanan sukarela pada masa ini dengan mengambil PALAPES dan Rejimen 500 sebagai kajian kes. Kajian rambang telah dibuat terhadap pegawai kadet yang ditauliahkan dalam bulan Jun 93 dengan kerjasama Bahagian/Cawangan di KEMENTAH. Kajian terhadap pegawai yang sedang berkhidmat dalam satu Rejimen yang dipilih telah di lakukan bersama sosiologis Lt Shafee Saad. Manakala kajian rambang terhadap beberapa graduan yang telah ditauliahkan dan tidak aktif lagi dilakukan berdasarkan kaedah temubual tidak berstruktur.

tentera demi mempertahankan dan juga untuk keamanan negara. Masyarakat telah meletakkan 'status' tentera sebagai simbol kebanggaan negara. Keadaan ini telah berubah, kemewahan adalah simbol kehidupan baru dalam masyarakat kita, penyertaan dalam kerja kemasyarakatan dan 'bersiap-siaga untuk negara' diletakkan sebagai keutamaan yang rendah dalam kehidupan kita.

Walau apa jua yang berlaku, negara perlu dipertahankan. Kita terpaksa terus mengajak masyarakat dan generasi muda khususnya untuk sama-sama bersiap-siaga dalam menghadapi sebarang kemungkinan ancaman terhadap negara. Kita tidak boleh membiarkan masyarakat leka dengan kehidupan materialistik semata-mata, kerana negara lebih selamat jika rakyatnya membuat pendekatan 'prosperity-security approach'. Dengan cara itu rakyat jelata akan merasa terlibat dalam ketahanan nasional sebagai pra-syarat HANRUH.

TUJUAN

Tulisan ini bertujuan untuk melihat kedayaan (efficacy) dan kemampuan (competence) Askar Wataniah atau Pasukan Simpanan atau Pasukan Simpanan Tentera Darat dalam menyempurnakan gagasan pertahanan menyeluruh (HANRUH).

SKOP

Skop kajian ini meliputi aspek-aspek berikut:

- * Dasar Pertahanan Negara.
- * Ancaman dan Permodenan
- * Pengurusan
- * Prestasi (Kemajuan dan Kemerosotan)

DASAR PERTAHANAN NEGARA

Tan Sri Musa Hitam di waktu beliau menjadi Timbalan Perdana Menteri telah mencetuskan idea Dasar Pertahanan Negara (DPN) haruslah berasaskan konsep pertahanan menyeluruh (Kassim, 1989:4):

"Sebagai sebuah negara yang sedang membangun, kita tidak mampu mewujudkan sebuah angkatan tetap yang besar. Dengan demikian pemimpin kita dan pihak perancang pertahanan telah menetapkan negara ini memerlukan konsep HANRUH sebagai salah satu elemen dalam DPN. Dalam HANRUH atau TOTAL DEFENCE, setiap pihak memainkan peranan dalam pertahanan negara dan hendaklah menjadikan sebagai sebahagian dari aktiviti masyarakat....."

HANRUH melibatkan empat komponen utama seperti berikut:

- * Angkatan Tetap (Regular Armed Forces).
- * Angkatan Kerangka iaitu kumpulan rakyat yang dilatih dan boleh dikerah bersiap-siaga bagi tujuan mempertingkatkan kekuatan angkatan tetap, ini termasuklah pasukan simpanan Angkatan Tentera dan pasukan para militer yang lain.
- * Bantuan nasional termasuk pengembelian sumber negara untuk pertahanan negara seperti sumber material, perkhidmatan pengangkutan dan organisasi pertahanan awam.
- * Bantuan luar negara khususnya ASEAN dan negara sahabat FPDA.

Dasar Pertahanan Negara menetapkan dalam era teknologi moden HANRUH adalah keterlibatan dan kesiapsiagaan seluruh warganegara sama ada pihak tentera menghadapi ancaman serta kemampuannya mempertahankan kedaulatan dan keutuhan negara. Usaha ini meliputi aspek infrastruktur ketenteraan dan bukan ketenteraan dan juga pembentukan pemikiran, bantuan material, perkhidmatan pengangkutan dan tenaga manusia.

Kertas ini cuba mengaitkan satu dari komponen angkatan iaitu Askar Wataniah. Akta Angkatan Tentera 1972 (AKTA AT 1972) telah memaktubkan fasal penubuhan Angkatan Sukarela (Volunteer Force) bagi tiga cabang perkhidmatan Darat, Laut dan Udara. Cabang Tentera Darat mempunyai pasukan simpanannya yang dikenali sebagai Askar Wataniah dan ada ketikanya dulu dikenali dengan PSTD (Pasukan Simpanan Tentera Darat). Dalam konteks ini PALAPES dan Rejimen Siri 500 AW dijadikan kes kajiselidik. PALAPES dan Rejimen Siri 500 AW khususnya boleh membantu menyemai bibit semangat patriotik dan perpaduan kaum kerana kita yakin kewujudan semangat bersatu di saat terakhir adalah terlewat untuk membantu kejayaan konsep pertahanan menyeluruh di negara ini (Patriot, 1993 (7) : 9).

Dari segi kordinasinya ternyata angkatan kerangka tidak efektif, malah identitinya dikaitkan dengan matlamat jabatan bukan ketahanan nasional keseluruhannya. Persepsi dan keterlibatan rakyat dalam RELA, dan Pasukan Pertahanan Awam (Civil Defence) masih kabur. RELA lebih banyak dilihat sebagaikan pasukan kawalan keselamatan kampung, manakala Pasukan Pertahanan Awam adalah pasukan bantuan bencana alam kawasan bandar. RELA diletakkan di bawah Kementerian Dalam Negeri, manakala Pertahanan Awam mengecilkan statusnya dari sebuah Kementerian kepada sebuah Jabatan. Orang ramai juga gagal melihat

kesatuan 'dasar', unit-unit di bawah Kementerian Dalam Negeri digolongkan sebagai elemen keselamatan dalam negeri, manakala organisasi ketenteraan difahamkan sebagai elemen pertahanan. Pada hakikatnya keselamatan dan pertahanan adalah 'dua dalam satu' dalam konteks HANRUH.

Kurangnya kefahaman terhadap konsep ketahanan nasional dan DPN, bukan sahaja berlaku di kalangan rakyat, malah di kalangan elit di negara (Utusan Malaysia, 13 Nov 1993 : 4). Pelawaan untuk pihak sektor awam dan swasta menyertai kursus di MPAT mulai tahun 1994 membuktikan keterlibatan para elit ini adalah penting kerana bukan sekadar kurang pengetahuan dalam aspek pertahanan dan sebagai satu percubaan melibatkan mereka bagi mencapai keberkesanan DPN, bahkan ini adalah satu dari cara yang boleh mengubah sikap mereka terhadap kepentingan nasional dan mereka menjadi penggerak kepada keterlibatan rakyat dalam angkatan kerangka serta ketahanan nasional.

Paling akhir, Dewan Rakyat diberitahu bahawa kerajaan sedang menimbangkan sama DPN yang sudah dikaji dan dikemaskinikan dibentangkan sebagai satu kertas putih atau sebaliknya (Berita Harian 2 Disember 1993 :4). Kerajaan juga sedar setengah negara sudah mengambil langkah membentangkan DPN masing-masing sebagai kertas putih untuk pengetahuan umum bertujuan membolehkan rakyat mengetahui dasar tersebut serta rasional tindakan kerajaan.

Ketahanan Nasional adalah pra-syarat kepada DPN, ketahanan nasional itu sendiri dibina dari kekuatan beberapa faktor seperti geografi, penduduk, sumber alam, ideologi, politik, ekonomi, sosio-budaya, di samping faktor kekuatan militer. Oleh itu ketahanan nasional merupakan kondisi dinamik sesuatu bangsa yang mengandungi kecekalan dan kegigihan mencapai

cita-cita negara-bangsa, serta kemampuan mengembangkan kekuatan nasional dalam menghadapi segala tentangan, hambatan serta gangguan dari dalam dan luar negara yang membahayakan kelangsungan hidup negara-bangsa itu.

ANCAMAN DAN PERMODENAN

Panglima Angkatan Tentera (PAT) dalam kenyataannya (Berita Harian, 16 Sep 1993 : 14, kol 1-5) menyebut walaupun perang dingin di antara negara barat dan timur sudah tamat, keadaan itu bukan satu jaminan keamanan akan berterusan kerana kebanyakan negara lebih mementingkan hal ekonomi yang kerap menjadi punca konflik. *"Ancaman kepada keselamatan negara juga boleh bertambah pada masa depan dengan cabaran yang mungkin dihadapi di kawasan Zon Ekonomi Eksklusif negara yang luas serta kaya dengan sumber ekonomi"*.

Sebelum itu PAT menyorotkan kewaspadaan dalam konteks ketahanan negara (Patriot, 1992 (2) : 14 - 15) :

Benteng Pertahanan negara perlu sentiasa bersedia menghadapi setiap bentuk aktiviti yang mungkin tercetus khususnya di kawasan sekitaran sempadan negara. [Kita] perlu lebih peka kepada perkembangan yang sedia ada dan perlu berusaha mempertingkatkan lagi keupayaan dan tahap kesiap-siagaan untuk mengatasi sebarang kemungkinan demi menjaga kedaulatan dan kepentingan negara. Kita tidak seharusnya leka dan terikut-ikut dengan 'sindrom damai' yang boleh menjejaskan taraf kewaspadaan kita. Sebaliknya pula kita perlu menggunakan kesempatan ini untuk meningkatkan keupayaan peperangan konvensional semasa suasana aman ini".

Sesungguhnya sejarah telah membuktikan bahawa apabila sesuatu negara ingin hidup damai, maka ia harus mempersiapkan diri untuk perang. Apabila suatu negara hanya memperhatikan kesejahteraan saja, tetapi mengabaikan kepentingan pertahanan keamanannya, maka negara tersebut mudah dihancurkan oleh suatu negara 'kecil' lain yang sudah siap untuk mengadakan perang. Kesiapan untuk berperang dapat merupakan faktor pencegah (deterrent factor) terhadap usaha perang atau keinginan untuk berperang negara lain (Lemhannas, Kewiraan, 1982 : 222).

Dalam konteks tulisan ini, wawasan yang berkaitan ialah doktrin pertahanan-keamanan yang berteraskan perpaduan serta integrasi antara kerajaan, angkatan tentera dan rakyat. Hal ini sesuai dengan pendekatan 'prosperity - security' dalam konteks pembangunan negara, Menteri Pertahanan (Berita Harian 2 Disember 1993 : 2) menyebut:

"[kita] berbelanja untuk pertahanan bukan bermakna Malaysia mahukan peperangan tetapi mengelakkan kemungkinan tercetusnya konflik ketenteraan".

Oleh itu membina HANRUH seharusnya bermula dengan ketahanan nasional. Ketahanan Nasional itu sendiri menuntut rasa keterlibatan cinta negara dan semangat patriotik setia negara. Persoalannya di sini apakah benar merosotnya penyertaan dalam angkatan tentera kerana semangat patriotik? Atau apakah kerana konsep, sistem dan budaya militer itu sudah serasi dengan perubahan nilai semasa? Apakah faktor yang sama juga menyebabkan pegawai dan anggota sukarela sukar menangguk minat dan semangat untuk terus berkhidmat dalam pasukan masing-masing dan juga faktor yang menyebabkan sukarnya kita mendapatkan anggota baru dalam Wataniah?

PENGURUSAN

Am. Secara umum elemen penting dalam pengurusan ialah perancangan dan kawalan penyusunan dan perturusan, membuat keputusan dan pembentukan dasar. Dalam tulisan ini, tumpuan adalah kepada pengurusan Askar Wataniah iaitu sebagai organisasi yang bertanggungjawab terhadap pembinaan dan penyertaan publik dalam Pasukan Simpanan Tentera Darat satu dari rangkaian utama angkatan kerangka dalam HANRUH. Dalam hal ini aspek perancangan adalah terbukti paling berkesan, namun aspek penyusunan, kawalan dan perturusan masih belum memberikan imek yang berkesan serta pencapaian matlamat melahirkan satu Angkatan Simpanan yang setanding dengan Angkatan Tetap.

Kajian Terdahulu. Dalam tahun 1989 satu kajian ringkas telah diterbitkan bagi menjelaskan permasalahan dalam pengurusan Askar Wataniah (Kassim, 1989 : 1 -12). Satu konsep umum Angkatan Simpanan juga telah dirumuskan:

"Sesuai dengan keperluan DPN, maka konsep Angkatan Simpanan kita telah digariskan. AW adalah satu komponen dari Angkatan Simpanan kita. Objektif AW adalah untuk menyediakan satu angkatan simpanan sukarela yang boleh diatur-garak dan berupaya untuk menjalankan tugas operasi dalam masa yang paling singkat tanpa banyak gangguan terhadap ekonomi dan penghidupan sosial negara. Keberkesanan AW sebagai sebahagian dari komponen Angkatan Simpanan kita adalah amat penting bagi mengukur keupayaan

menyeluruh ATM dalam menghadapi keselamatan dan kepentingan negara".

Setelah proses reorganisasi dilakukan dalam tahun 1980, pasukan-pasukan simpanan sukarela ini masih mewarisi masalah yang sama dari segi pentadbiran, latihan dan kelengkapan.

Dari tahun 1980 sehingga tahun 1989, masalah yang dihadapi masih lagi merupakan masalah warisan dan amat struktur sifatnya di samping masalah sikap dan persepsi terhadap keterlibatan dalam Wataniah. Konsep HANRUH yang membabitkan angkatan kerangka khususnya Askar Wataniah adalah satu yang agak 'asing', kerana organisasi Askar Wataniah di peringkat tempatan masih lagi dalam kemelut asas yang perlu diselesaikan sebelum HANRUH itu dihayati oleh rakyat untuk menyertai pasukan simpanan sukarela.

HANRUH itu sendiri dapatlah dikatakan sebagai bukan urusan negara tetapi urusan elit militer. Tiada penglibatan serius elit politik dan birokrat. Namun begitu ternyata elit militer sendiri mempunyai persepsi yang berbeza terhadap organisasi Askar Wataniah. AW mendapat keutamaan yang rendah dari segi perancangan dan peruntukkan logistik. Tiada perhatian serius terhadap kemudahan latihan serta pentadbiran. Keberkesanan pengurusan Askar Wataniah biasanya wujud apabila dua komponen utama pegawai dan staf tetap dan pegawai dan anggota sukarela mempunyai hubungan yang akrab. Keakraban inilah yang melahirkan tingkat keterlibatan yang tinggi dalam pasukan. Bolehkah kedua-dua komponen ini bergabung kesamaan matlamat dalam mempertingkatkan keberkesanan pengurusan Askar Wataniah.

Walau apa jua jawapan yang akan diberikan seperti 'ketiadaan belanjawan', perubahan 'priority', halangan dari elit birokrat atau ketiadaan 'political will' di pihak Kerajaan, ternyata perancangan penyusunan semula pasukan simpanan sukarela menghadapi beberapa 'rintangan', gencatan dan tempo kelajuan pembangunan yang tersekat-sekat dan tidak menentu. Bagaimanapun beberapa perancangan reorganisasi telah dilaksanakan iaitu dari PSTD telah berkembang maju dengan ujudnya elemen-elemen Tempur seperti Pasukan Simpanan Tempur, Statik, Bantuan Pakar, Pasukan Simpanan Bantuan Tempur dan Sekolah Latihan.

KEMAJUAN ATAU KEMEROSOTAN

Dari segi organisasi, pencapaian matlamatnya hampir disempurnakan. walaupun berlaku perubahan dan tersekat-sekat di sana sini. Jika semuanya berjalan baik, kekuatan pasukan simpanan di negara kita sudah pasti akan sampai ke taraf sebuah Kor, iaitu atas dasar nisbah 1 : 1. Bagaimanapun masalah besar yang kita hadapi ialah dari segi penyertaan rakyat dalam pasukan simpanan adalah amat minimum sekali. Jumlah kekuatan pegawai dan anggota khususnya dalam pasukan simpanan statik tidak seperti yang diharapkan. Malah adalah satu lumrah, jumlah kekuatan di kertas tidak sama dengan kekuatan sebenar pada masa latihan. Agak mendukacitakan juga ialah kita telah mentauliahkan beribu pegawai dari PALAPES sejak tahun 1982, tetapi jumlah yang aktif tidak seperti yang dijangkakan.

Mengapakah berlakunya kemerosotan penglibatan dalam AW? Dapatkah organisasi yang kekurangan anggota dan pegawai merealisasikan HANRUH dalam konteks Dasar Pertahanan Negara?

Persoalan yang timbul ini memerlukan jawapan yang realistik. Oleh itu HANRUH akan hanya dapat disempurnakan jika kita semua dapat memperbaiki masalah pengurusan Askar Wataniah dalam konteks pembinaan semangat patriotik dikalangan generasi muda, seterusnya mendalami pengurusan AW dalam aspek pentadbiran, latihan dan kelengkapan. Kita mungkin dapat menyediakan organisasi yang lengkap dari segi struktur dan hiraknya, tetapi struktur organisasi itu adalah pengurusan pada peringkat perancangan. Kita perlu meneliti aspek penyusunan (organising), kawalan dan kordinasi, serta perturusan. Jika kesemua ini dapat kita sempurnakan, barulah kita dapat menilai keberkesanan pengurusan organisasi AW di semua peringkat.

Hanya dengan organisasi yang berkesan dan kordinasi dengan semua jaringan 'kuasa' yang terlibat dalam ketahanan nasional barulah DPN atau HANRUH itu dapat direalisasikan dalam minda, jiwa dan fizikal rakyat.

PENYATAAN MASALAH

Persoalannya sesudah kita lupakan nisbah 1 : 3, kini masuk ke era 1 : 1 mampukah kita mengerah kekuatan rakyat untuk menyertai dan meneruskan khidmat dalam pasukan simpanan. Dalam keadaan masyarakat yang kian materialistik dan masuk ke ambang masyarakat industri yang biasanya melahirkan suatu keadaan yang anomi - iaitu matlamat yang diharapkan dan norma yang menguasai pencapaian tidak 'compatible'. Dapatkah kita gerakkan kesedaran rakyat terhadap tanggungjawab mempertahankan negara? Apakah ketika itu kita terpaksa menggunakan 'askar upahan', kerana rakyatnya sudah tidak mahu bersusah-payah dan rakyat meletakkan sepenuhnya tanggungjawab kepada kerajaan?

Persoalan **keduanya** ialah dapatkah dalam keadaan dalam pasukan simpanan yang serba kekurangan dari aspek infrastruktur dan kelengkapan mengujudkan suasana yang membangkitkan 'semangat' pegawai dan anggota yang terlibat dalam AW dan memberi rangsangan yang tinggi.

Persoalan **ketiga** ialah tentang latihan. Apakah yang dijalankan dalam unit-unit pasukan simpanan sekarang berdayatahan dan berkemampuan menyiapkan diri sebagai anggota atau pegawai yang sama kualitinya dengan anggota dan pegawai tetap.

Persoalan **keempat**, apakah silibus yang disediakan perlu dikaji semula, kaedah pengajaran disesuaikan dengan tingkat akademik anggota yang rata-ratanya lulusan tingkatan tiga dan tingkatan lima sekurang-kurangnya? Dalam konteks yang sama apakah jurulatih perlu 'dilatih semula' dan kaedah pengajaran dikemaskini sesuai dengan peredaran zaman.

Persoalan **kelima**, apakah perlu diwujudkan kesedaran 'ketahanan nasional' dan pembinaan semangat patriotik di peringkat persekolahan, sebagai jawapan kepada pertumbuhan minat untuk menyertai askar wataniah? atau hanya cukup jika Jemaah Menteri membuat keputusan mewajibkan majikan melepaskan stafnya untuk latihan wataniah tanpa sebarang prejudis? atau apakah perlu ada insentif lain guna menarik lebih ramai rakyat terlibat dalam usaha bina-negara melalui AW.

Persoalan **keenam**, tidak ramai pegawai kadet PALAPES yang mahu berkhidmat di bawah sekim graduan? Apakah ianya disebabkan kurang maklumat, promosi pengambilannya tidak agresif, sekim pegawai graduan yang tidak mengiktiraf latihan PALAPES, atau sekim Pegawai Angkatan Tentera yang tidak menarik jika dibandingkan pembangunan kerjaya di sektor awam lain dan sektor swasta?.

Persoalan **ketujuh**, apakah pasukan simpanan menjadi sumber mendapatkan pegawai tetap dan anggota tetap sebagai respon kepada kedinginan generasi muda untuk berkhidmat dalam Angkatan Tentera?. Dapatkah peningkatan taraf kelayakan untuk menjadi anggota (SPM) dan pegawai (ijazah) [Utusan Malaysia 17 September 1993 :21] menjadi titik permulaan era baru Angkatan Tentera tanpa perubahan dari segi struktur, sistem dan proses pegurusannya.

Persoalan **akhir** ialah bagaimana dapat memberi 'wajah' baru kepada Askar Wataniah melalui komitmen bersepadu elit militer, elit birokrat dan elit politik dalam 'qui pro-qua' - perkecilkan saiz dan memodenkan teknologi angkatan tetap sambil lebih rumit dan teknologi yang kian canggih?.

Kesemua persoalan di atas dapat kita rumuskan sebagai permasalahan dari segi konsep pembinaan semangat patriotik, pentadbiran, latihan dan kelengkapan dan peralatan.

(Bersambung sila lihat muka surat 79)

"Penglibatan semua tenaga negara untuk mempertahankan kedaulatan adalah tanggungjawab bersama rakyat Malaysia. Askar Wataniah sebagai salah satu Komponen Tentera Darat adalah Wahana untuk rakyat menyumbang bakti secara sukarela terhadap persediaan pertahanan negara".

YB Dato' Syed Hamid bin Syed Jaafar Albar
Menteri Pertahanan

(Bersambung dari muka surat 9)

PENEMUAN KAJIAN 1 : PEGAWAI KADET PALAPES

Dalam pertemuan dengan wakil-wakil Pegawai Kadet PALAPES semua pusat pengajian tinggi di UKM dalam bulan Jun 1993, usaha telah dilakukan untuk melihat faktor yang menyebabkan tidak ramai pegawai kadet PALAPES yang berminat menyertai Angkatan Tetap. Di antara faktor yang telah dikenal pasti termasuklah:

- * Faktor kurangnya sebaran maklumat tentang usaha untuk menarik pegawai kadet yang telah ditauliahkan untuk berkhidmat dalam Angkatan Tetap.
- * Tidak ada maklumat yang jelas tentang sekim graduan.
- * Pegawai Kadet PALAPES mendapati terdapat persamaan latihan dalam sekim graduan dan PALAPES, oleh itu wujud perulangan bagi pegawai kadet yang menyertai sekim graduan.
- * Sekim perkhidmatan Angkatan Tentera untuk graduan tidak begitu menarik, ditambah pula dengan peluang kerja yang baik di luar Angkatan Tentera.
- * Semangat 'kebendaan' mengatasi semangat patriotik yang menyebabkan kerjaya dalam Angkatan Tentera diletakkan sebagai pilihan terakhir.

PENEMUAN KAJIAN 11 : PEGAWAI SUKARELA DALAM PERKHIDMATAN

Dalam penelitian kami, didapati 70% pegawai sukarela yang masih aktif meneruskan latihan kerana mempunyai kesedaran yang tinggi

terdapat usaha mempersiapkan diri untuk mempertahankan negara. Mereka ini percaya bahawa penglibatan diri dalam Askar Wataniah kerana berminat dengan disiplin dan imej ketenteraan dan 30% kerana keistimewaan yang diperolehi melalui penyertaan dalam Askar Wataniah. Enam puluh peratus daripada responden percaya penglibatan dalam Wataniah ini membantu mempertingkatkan status mereka dalam masyarakat, untuk mereka ini uniform tentera adalah asas keyakinan untuk terus berkhidmat.

Pada umumnya ilmu ketenteraan dan latihan kepimpinan dorongan untuk mereka terus berkhidmat, 90% responden percaya Askar Wataniah membolehkan mereka bergaul lebih luas dan 70% menjadikan kegiatan Askar Wataniah sebagai memenuhi waktu lapang.

Mengenal identiti Askar Wataniah dikekalkan 80% mahukan Askar Wataniah diperbesarkan, bagaimanapun hanya 50% yang berpendapat status AW setaraf dengan angkatan tetap, dan pada umumnya 70% menganggap AW adalah Rejimen kelas dua.

Dari segi pentadbiran responden yang terdiri dari pegawai Sukarela, 60% daripada mereka berpendapat AW hendaklah ditadbirkan oleh pegawai-pegawai yang ditauliahkan dalam AW.

Penilaian pegawai sukarela ini dapat dilihat dari ketentuan pihak yang bertanggungjawab mengrekrut anggota baru, 70% dari responden mahukan pegawai tetap diberikan tanggungjawab membuat promosi dan pengambilan. Bagaimanapun 50% mengakui bahawa mereka kurang jelas tentang bidang tugas mereka dalam pembangunan AW. Malah 60% menyatakan mereka tidak pernah dirundingi oleh pegawai atasan tentang usaha memaju dan membangunkan AW, ini disebabkan oleh semua keputusan dibuat oleh pihak atasan.

Pada umumnya hubungan antara pegawai sukarela dan tetap adalah lemah, kira-kira 30% daripada responden bersetuju adanya hubungan yang memuaskan antara mereka dengan pegawai tetap. Oleh kerana hubungan tidak begitu memuaskan, ini menyebabkan hanya 30% yang sentiasa mendapat maklumat tentang AW. Ini membuktikan tidak berlaku kekerapan berinteraksi antara kedua golongan, dan 70% responden tidak pernah membaca buletin atau 'newsletter' terbitan Bahagian Pasukan Simpanan.

Dari empat faktor hilang minat untuk pegawai sukarela untuk meneruskan perkhidmatan kerana:

- * Masalah peribadi - 70%
- * Hubungan dengan pegawai tetap - 70%
- * Hubungan dengan atasan - 50%
- * Kurang insentif - 50%

Selain dari faktor di atas, 80% daripada responden berpendapat bahawa peralatan dan kelengkapan pentadbiran unit amat daif dan tidak memuaskan. Kesemua ini telah memberi sumbangan kepada merosotnya penglibatan orang awam dalam AW.

LATIHAN

Berhubung dengan aspek latihan, responden telah ditanya mengenai jurulatih, penjadualan, minat dan bentuk latihan. Lima puluh peratus bersetuju jumlah jurulatih di unit mereka adalah mencukupi.

Tujuh puluh peratus dari responden mendapati kekerapan anggota AW menghadiri latihan adalah tidak memuaskan, akibatnya jadual

latihan tidak dapat dilaksanakan dengan baik. Dari perbincangan yang telah diadakan membuktikan hampir 80% responden bersetuju bahawa jurulatih terpaksa mengalihkan tugas anggota AW apabila terdapat kehadiran yang sedikit.

PERALATAN DAN SILIBUS

Responden juga membuat penilaian terhadap peralatan latihan, dan silibus dari segi kandungan dan kesesuaian teknik pengajaran.

Dari kajiselidik yang dibuat, sikap jurulatih, peralatan, sikap anggota AW telah menyebabkan latihan yang dirancang dan dilaksanakan didapati tidak dapat melengkapkan diri anggota AW sebagai anggota tentera yang terlatih setanding dengan Anggota Tetap.

PENGIKTIRAFAN DAN KEPUASAN

Dari kemerosotan imej AW ternyata pada pendapat responden, 80% dari mereka mendapati masyarakat tidak memberikan pengiktirafan terhadap penglibatan dalam AW, keseluruhan responden amat bersetuju bahawa kerajaan sendiri tidak serius menggalakkan orang ramai menyertai AW. Dalam kes mereka yang menyertai AW, 60% responden berpendapat ketua jabatan tidak begitu berminat memberi pelepasan dan sokongan menyertai latihan AW.

Semua responden mengharapkan pihak atasan mengadakan penerapan tentang perancangan dan prospek dalam AW bagi mengekalkan paras penyertaan pegawai dan anggota yang sedang berkhidmat pada masa kini. Sembilan puluh peratus daripada mereka yang bersetuju AW diperbesarkan kekuatan hingga ke peringkat Kor. Pegawai sukarela ini juga yakin AW mampu menjadi sumber tenaga untuk angkatan tetap pada masa akan datang. Oleh itu satu kempen besar-besaran untuk generasi muda menyertai AW perlu dimulakan.

PENEMUAN KAJIAN 111: PEGAWAI KADET PALAPES YANG TIDAK AKTIF

Dalam kajiselidik dan wawancara tidak berstruktur beberapa penemuan ijmak telah diperolehi, ini termasuklah:

- * Hilang minat untuk meneruskan perkhidmatan akibat dari sistem pengurusan pasukan dan proses pertukaran dan lapor diri di pasukan masing-masing.
- * Sikap tidak bertanggungjawab Pegawai Kadet yang menggunakan PALAPES sebagai alat untuk mendapat kemudahan dan faedah jangka pendek dalam mengikuti program ko-kurikulum di pusat pengajian masing-masing. Oleh itu graduan jenis ini melihat tidak ada kolerasi antara PALAPES sebagai kegiatan ko-kurikulum dengan penyediaan semangat kesukarelaan (volunteerism) dan rasa cinta negara.
- * Kebanyakan graduan wanita gagal melapor diri berikutan dari perkahwinan dan masalah peribadi dan juga keluarga.
- * Graduan yang menyertai pasukan beruniform dan penguatkuasa seperti Polis Diraja Malaysia, Kastam dan Eksais Diraja, Imigresen, Bomba dan JPJ serta BPR dan juga yang menyertai perkhidmatan Bank dan Firma ikhtisas dan perniagaan tidak dapat menghadiri latihan kerana bentuk tugas dan masa bertugas.
- * Graduan yang baru mendapat pekerjaan, berpendapat prestasi tugas dalam jawatan rasminya lebih penting,

oleh itu sikap ketua jabatan atau majikan menjadi indikator utama untuk mereka sama ada mereka mahu aktif, tidak aktif atau 'bersara tanpa notis' dari AW.

- * Kebanyakan graduan yang melapor diri merasa kekok atau kaku serta tidak faham akan tugas dan tanggungjawab dan peranan serta kurang inisiatif dalam berkomunikasi menyebabkan sebahagiannya merasakan dirinya sebagai 'orang asing' dalam atau pasukannya.
- * Umumnya graduan yang telah ditauliahkan gagal melapor diri atau tidak aktif kerana kurangnya semangat patriotik 'siap-siaga bela negara' dan juga perubahan sosio-ekonomi yang telah menghakis semangat 'volunteerism'.
- * Halangan psikologi yang lain ialah ketabahan sifat orang awam mengatasi sifat dan sikap kepegawaian tentera, kurang penghayatan adat resam tentera menyebabkan pegawai muda lepasan PALAPES mudah merasa rendah diri dan enggan menyertai latihan sebagai satu pelarian dalam kehidupan mereka.

KESIMPULAN

Kesimpulan yang diambil adalah seperti berikut:

- * Dari segi perancangan organisasinya ternyata ada kesungguhan dipihak atasan dalam merancang masa depan AW - Pegawai Sukarela telahpun mengetahui proses pembesaran formasi AW dari peringkat Rejimen, ke Briged dan juga Divisyen. Namun demikian, dari segi keanggotaan dan kepegawaiannya,

belum sampai tahap yang dijangkakan. Kemudahan latihan dan bantuan perkhidmatan masih belum banyak berubah.

* Keadaan negara yang maju, tiada darurat, tiada konfrontasi dan 'aman' mengakibatkan rakyat tidak mahu mendengar 'keselamatan negara terancam' kerana mereka sedang menikmati 'kebendaan'. Ketua-ketua Jabatan juga tidak ramai yang sudi untuk turut serta menggalakkan staf berkecimpung dalam AW. Suasana anomi bukan sahaja mengancam keterlibatan generasi muda dalam AW, malah turut menghakis idealisme 'kesukarelaan' berbakti kepada bangsa melalui organisasi sukarela dan kebajikan yang lainnya. Oleh itu berdepan persoalan mencari resolusi yang serasi dengan 'kebangkitan zaman materialisme' ini.

* Pada keseluruhan di dapati pengurusan Askar Wataniah pada masa ini masih memerlukan usaha untuk perbaikan dalam aspek Gerak, Tadbir dan Logistik bagi mempertingkatkan kedayaan dan kemampuannya dalam merealisasikan HANRUH. Untuk itu beberapa cadangan dikemukakan untuk renungan bersama.

CADANGAN

Langkah-langkah berikut disyorkan perlu diambil:

Maklumat

* Penerbitan brosur tentang sekim perkhidmatan Pegawai Graduan dalam Angkatan Tentera dilakukan bagi tujuan pendedahan terhadap sekim tersebut di kalangan pelajar pusat pengajian tinggi.

* Sekim perkhidmatan bagi pegawai graduan harus lebih 'memikat' untuk menarik minat bakal-bakal pegawai tersebut. Ini bererti Kementerian wajar mengkaji semula semua sekim perkhidmatannya untuk diubah-suai dalam situasi dan kondisi yang berubah ini.

Program Patriotik Bersepadu

* Kementerian Pertahanan dan Kementerian Pendidikan serta agensi pembangunan pendidikan lain bersepadu mengambil langkah bersepadu bagi membina, membentuk dan mengembangkan semangat patriotik di sekolah dan institusi pendidikan.

* Langkah awal menanamkan semangat patriotik boleh dilakukan dalam bentuk kegiatan ko-kurikulum.

* Penubuhan unit beruniform di sekolah rendah dinamakan Unit Tunas Negara dengan menggunakan uniform sekolah dengan pindaan uniform mengandungi appolet mudah-alih dan menganugerahkan lencana asas, lencana cinta negara, lencana gagah berani, lencana kemahiran manipulatif.

* Di peringkat sekolah menengah semua pelajar wajib menyertai kegiatan beruniform yang dinamakan Unit Patriot Negara (UPN), kecuali mereka yang menyertai badan beruniform lain seperti Pasukan Kadet Bersatu Malaysia (PKBM), Kadet Polis, Bomba, Bulan Sabit Merah, Pengakap dan lain-lain. Silibus UPN adalah kemahiran kepimpinan, projek perpaduan masyarakat, serta dianugerah lencana besi untuk ketangkasan, ketahanan mental dan fizikal dan lencana kemahiran hidup.

* PKBM diinstitusikan di semua sekolah menengah dan diberi imej dan nama baru iaitu Pasukan Kadet Setia Negara (PKSN). Organisasi serta silabus pasukan ini juga dikaji semula bagi menyesuaikan dengan objektif setia negara dan kemahiran yang boleh mendorong minat untuk meneruskan perkhidmatan dalam angkatan tentera, memasuki PALAPES jika melanjutkan pelajaran ke Universiti tempatan, atau memasuki Wataniah jika melanjutkan pelajaran ke institusi pendidikan lain atau bekerja.

* Di peringkat universiti, bagi kegiatan ko-kurikulum diwujudkan pasukan Kor Setia Negara bagi mereka yang tidak menyertai PALAPES dan pasukan beruniform lain. Kor Setia Negara dipecahkan kepada unit-unit kepakaran Perkhidmatan Masyarakat - Bomba, Pertolongan Cemas dan bantuan bencana alam; Perkhidmatan Sukan-Padang, gelanggang dan olahraga; Perkhidmatan Seni-Budaya - Brass Band, Muzik Kebangsaan dan pengurusan pelancong; dan Perkhidmatan - Kelas bimbingan pembangunan perpustakaan, kesedaran masyarakat. Kor ini mempunyai silabus yang mengandungi latihan fizikal, kepimpinan, terapan jiwa patriotik, di samping kemahiran bidang perkhidmatan pilihan masing-masing.

Pengukuhan Identiti

* Kementerian Pertahanan mungkin boleh memastikan identiti pasukan simpanan sukarela dikenali sebagai Askar Wataniah. Jika siri 100 dan 300 dikenali sebagai Rejimen Tempur Wataniah, Siri 500 Rejimen Setia Wataniah, manakala kor dan pasukan lain dikenali mengikut kor masing-masing seperti Rejimen Semboyan Wataniah, Kor JLJ Wataniah dan sebagainya.

* Membuat Promosi HANRUH dan kebertanggungjawaban Rakyat. Konsep Hanruh diperkenalkan kepada rakyat melalui iklan media massa seperti mana kehebatan kempen 'setia bersama rakyat' kini boleh diubah kepada 'setia untuk negara' dengan penglibatan dalam Askar Wataniah disiarkan sebagai objektif utamanya. Filem-filem dokumentari tentang Askar Wataniah disiarkan sebelum atau selepas Berita Perdana. Manakala promosi melalui Radio dan TV dibuat menerusi 'sedutan filem' khas, lagu tema dan juga ruang 'Bina Negara' di TV.

* HANRUH menjadi satu dari subjek dalam PALAPES dan pasukan dalam AW.

* Kempen 'Siap-siaga Bela Negara' secara besaran di seluruh negara diadakan melalui satu majlis pelancaran di peringkat kebangsaan dengan mengadakan pertunjukan khas:

* Perbarisan Raksasa Angkatan Simpanan Sukarela.

* Pameran 'Berbakti dan Berbudi Kepada Negara'.

* Penerangan khas kepada jabatan kerajaan, sekolah dan generasi muda.

Sekim Galakan dan Penguatkuasaan Undang-Undang

* Kabinet meluluskan satu sekim galakan bagi kakitangan kerajaan yang menyertai AW dalam bentuk undang-undang atau peraturan yang membolehkan:

* Ketua jabatan melepaskan stafnya menjalani latihan hujung minggu, latihan

lanjutan dan latihan tahunan tanpa memberikan kesan negatif kepada penilaian prestasi dan peluang kenaikan pangkat staf berkenaan.

* Peraturan cuti khas bagi tujuan latihan Askar Wataniah dinyatakan secara terperinci dalam pekeliling JPA bagi mengelakkan pelbagai tafsiran oleh ketua jabatan.

* Ketua-ketua jabatan dikerah untuk menghadiri kursus dan taklimat khas mengenai HANRUH dan tanggungjawab mereka menggalakkan staf mereka menganggotai AW.

Latihan Mobilisasi

* Kumpulan Kadet tahun akhir PALAPES mengadakan latihan medan secara bergabung bagi mengkaji-banding tahap pencapaian dan keberkesanan latihan selama ini.

* Seluruh kekuatan AW menjalani latihan 'mobilisasi' setiap tiga tahun sekali sebagai latihan melazimkan operasi gerak-atur sebagai latihan menghadapi pelbagai kemungkinan darurat dan sebagainya. 'Exercise Kerengga' yang pernah dilakukan sebelum ini adalah satu usaha yang baik tetapi tidak diteruskan.

PENUTUP

Semoga dengan perbincangan kertas ini, semua pihak sedikit sebanyak telah dapat mengenalpasti perkara yang perlu di beri perhatian dan penumpuan tindakan untuk mendapatkan satu wawasan yang berkesan.

Rujukan:

1. Lt Kol Kassim bin Abdul Kadir (April 1989). 'Rejimen Askar Wataniah - Kemana Arah Tujuannya'. Sorotan Darat, Jil. 2, Bil. 15, hal 2-13.
2. Jabatanarah Askar Wataniah (1980). Laporan Seminar Askar Wataniah 1979, Johor Bahru.
3. Lemhannas (1982). Kewiraan Untuk Mahasiswa. Jakarta: PT Gramedia.



Lt Kol Prof Madya Dr Ahmad Fawzi bin Mohd Basri adalah Timbalan Komandan PALAPES UUM. Berasal dari Perak Darul Ridzuan dan mempunyai kelulusan akademik di peringkat Ijazah MA dari Universiti Malaya pada tahun 1983 dan PhD dari University of Hull England dalam tahun 1992. Beliau telah mula melibatkan diri sebagai rekrut LDC Selangor pada tahun 1975 dan ditauliahkan pada 27 Sep 79. Pada 1 Jan 86 beliau dinaikkan pangkat ke- Lt Kol dalam jawatan Timbalan Komandan. Di UUM beliau berkhidmat sebagai Dekan Sekolah Pembangunan Sosial.

Artikel ini adalah dari kertas kerja yang dipersembahkan di satu seminar Askar Wataniah di UUM. Fakta kaji selidik yang terperinci tidak diterbitkan bersama artikel ini.



"ENHANCEMENT OF LINKAGES IN A CHANGING SECURITY CONTEXT: MINISTERIAL PERSPECTIVE"

*YB Dato Syed Hamid bin Syed Jaafar Albar
Minister of Defence*

This article is an extract from the Defence Minister's talking points during the 5th Defence Services Asia exhibition and conference in Kuala Lumpur, 1996.

"Enhancement of linkages in a changing security context". My approach is to directly look at the essential fundamentals of the requirement i.e the **"whats"**, **"whys"**, **"wheres"** and the **"hows"** of the problem.

THE "WHATS"

To begin with, there are two basic questions of the **"whats"** which we must first be clear about. First, what do we mean by **"Linkages"**? And secondly, what is the international environment that is relevant towards the enhancement of this **"Linkages"**.

The term **"Linkage"** is often used to describe the relationship between foreign policy and domestic politics, and to denote the ties between a particular (small) state and a given system of relations among the large powers as explained by Charles Morrison and Astri Suhrke in their book **"Strategies of Survival"** (Quoting J N Rosenau). For the purpose of this discussion we shall use the term **"Linkages"** to mean the ties (and cooperation) between states and existing international system

The next important imperative central to the discussion is, what are the changes that have taken place in the region in the **"Security**

Context" and how can these changes affect the linkages? This must first be addressed realistically because it will determine the forms and kinds of **"Enhancements"** that can be carried out.

The end of the cold war has brought about an end to great power confrontation in the region but it has also brought about new complexities. Despite its diverse political, economic and socio-cultural dispositions, Pacific Asia can be described as a relatively coherent security region. The question now is in the changing security context, clouded by the many political uncertainties and compounded by the reemergence of old intra-regional contentious issues, what can the countries in the region do to enhance their linkages. Foremost among the military security concern in the region today, is the potential tensions that can arise from the situation in the Korean Peninsula, the Taiwan straits and the South China Sea. If not managed effectively, the problem can translate into instabilities.

On the other hand on the non-military level, there are issues in the maritime sector which can turn into irritants between the littoral states and the parties involved, related to the following concerns:

- * **Issues of Pollution**
- * **Incidents of Illegal Desludging**
- * **Oil Spillage**
- * **Piracy and Terrorism**
- * **Spillage Through Collisions and Navigational Mishaps** have increased over the past few years, creating anxiety as well as threatening marine life. If left unchecked, these issues may lead to tension among countries.
- * **Questions of Nuclear Proliferation.** Today, more countries in the region have acquired nuclear bombs or are getting close to building them. The windows of vulnerability and the list of potential tension areas seems to widen and increase in scope.
- * **"Phantom Ships".** Apart from piracy, a new phenomenon known as "Phantom Ships" is also causing concern in the region. Ships using fake documentation are now hijacking cargoes from ports across East Asia. Law enforcement agencies had been unable to stop the menace, other than to appeal to countries where ships were registered falsely to take action. If these incidents are not monitored closely, trading activities in the region will be seriously affected.

From the list of issues as outlined, there is more than sufficient reasons for countries in the region to maintain and further enhance their security linkages. For so long as there is the risk

of a military conflict, it is vital that the parties in conflict maintain a communication line for negotiation and dialogue.

As for the non-military security issues, it is important that there should be mutual concern to oversee the enhancement of linkages because the related issues are usually over matters of common good or of some shared interests.

THE "WHYS"

The very primary reason as to **why** there should be Linkages enhancement is to achieve peace and stability for the common good. Enhancing linkages also provides the following:

- * Opportunities and basis for the building up of regional resilience.
- * To establish a buffer against extra regional enemies.
- * To secure psychological support and confidence.
- * Linkages, especially cooperative, is needed to breakdown the barriers of mistrust and misunderstanding and to promote transparency of intention.
- * With the advance in technology, enhancing linkages provides cost sharing opportunities therefore reduce costs of defence which would necessitate pooling of resources, sharing of resources, and greater cooperation.
- * The need to stabilize the region in order we can effectively secure and preserve the protection of off-shore facilities, fishing zones and gas, oil, mineral deposits for the general good.

THE "WHERE'S"

The **where** here refers to the dimension. In this regard I find Australia's Air Marshal Gratton's categorization on dimension of cooperation fits in well. According to him there are three important dimensions, which are not necessarily exclusive to cooperation;

- * **Personal Dimension** which encompasses the need for dialogue at all levels which in turn will increase mutual trust and understanding.
- * **Intellectual Dimension** which provides the visibility of reasoning behind capital equipment acquisitions and specific policies.
- * **Communication Dimension**, underpin the first two, in terms of visibility, trust and understanding.

THE "HOWS"

How then do we see the enhancement of security in the region? There has been several approaches on the issue as already propagated by both politicians and students of international politics. The possible approaches are:

- * One approach is that regional countries must strive to achieve national resilience. In other words countries must continue to invest in defence to ensure peace and stability, which in turn will ensure a climate conducive to economic development and the uplifting of the quality of lives for the purpose of war.
- * Another approach is to adopt the spider-web concept where each foster closer relations with its neighbours and

in the process it will create a multiplicity of bilateral relations, which will enhance mutual and regional understanding giving added strength to the overall security networking. In this regard economy and security are inevitably intertwined for the sake of shared values and interests. It thus becomes a collective responsibility. Consider the concepts of growth triangle, the JCC, SOM etc.

- * Thirdly, the rapidly changing Pacific Asean security environment also brings about an even more pressing need for countries in this region to continually seek high level security dialogues and institute multilateral confidence building mechanism. This will foster greater regional understanding and consensus regarding respective national defence policies. This building of intellectual bridges between key defence policy formulators is imperative in fostering regional cohesion and unity and enhancing regional and national security. These bridges also help to establish a rapport between personalities and organizations which underscores the exploration of possible regional cooperation in the sectors of defence policy, defence industry and defence procurement.

Multilateral security dialogues such as those initiated at DSA can play a positive role in the process of identifying and defining potential problems. These dialogue can also act as a safety valve to air regional grievances in the context of legitimate security concerns. We must continue to seek dialogues in this manner to bolster a new era of confidence building measures, closer

bilateral relations and more flexible and pragmatic arrangements between and among our strategic Pacific Asean neighbours.

The forms of international linkages which we devise must be flexible enough to accommodate the resulting stresses. It is my view that any plan to enhance security in the changing Pacific Asia security context should also focus on the following:

* **Development of science and technology base** to train people capable of intensive application of their intellects in science & technology (S&T) research and development needed to produce the necessary weapon systems for our defence needs.

* **Creation of a corpus of laws and regulations** based on regional consensus and regionally enforceable to decide on cases of conflict of an economic nature.

* **Development of political institutions** in individual Asian-Pacific states must have relevance to and based on the people's historical and cultural traditions and their intellectual and spiritual values.

* **The establishment of a regional security council** which has certain binding political and legal authority to deal with issues such as intra-regional territorial disputes, economic and trade problems, immigration, and exploitation and sharing of regional resources.

* **Interactions of non-governmental organizations.** NGOS are private bodies primarily concerned with environment and environment-related political, social and economic issues. Environment and ecology are important not only for ensuring the quality of life on our planet. The issues from environmental deterioration tend to create problems that transcend national borders and become regional security issues which could turn into a source of regional tension and instability. Although they are pressure groups, their starting points are good and their studies and findings could be useful for formulating regional industrial and development policies.

* **Bilateral and multilateral seminars and congresses on security and economic issues.** The private and semi-official think-tanks of the Asian states, Japan and China have held quite regular meeting of this nature for some years. The papers presented at these meetings are generally based on in-depth research and the data and ideas presented have a certain level of credibility. They generally form a valuable input on perception of regional security issues and a rich store of information on the economic trends and potential of the region. But unfortunately, most of these meetings are confined to mere talks with hardly any follow-up actions on the recommendations made. This is largely due to the rivalry between think tanks and the bureaucrats of government departments, who generally suspect that the former are seeking to usurp their functions and powers. Coordination is thus important to ensure the effective contribution of think tanks to government policy formulation.

* **Military diplomacy.** This approach to enhance regional linkages has come into vogue only quite recently although already widely practised among the Asian countries. Military diplomacy has thus far involved exchanges between the military establishments of the regional states at the senior level. There should also be exchanges at the junior level so that the links so cemented could be of a broader base. Moreover, there should also be training exchanges through which officers of the various states could attend courses in one another's defence colleges and universities. This is a useful way to enhance regional transparency in defence and to disperse suspicion of one another's motives and ambitions.

* **Trade associations and business chambers.** The roles of the chambers of commerce in the Asean States have long been recognized as an important and vital link between regional states in promoting intra-Asean trade and economic links. In recent years, they have also provided important guide for investment expansion in China, Indochina and other Asean-Pacific states. As economic and trade issues have now become vital aspects of security concern, the roles that trade associations and chambers play will certainly contribute to regional stability.

* **Sports, cultural and literary exchanges.** The importance of sport exchanges has been underlined by the Sino-US ping-pong diplomacy which eventually led to the normalization of ties between the two countries. Contacts between men of letters from states in the region also enhance understanding of the modes of thinking and the social values of peoples in the region. The security policy of a state is often influenced by its prevailing intellectual modes and its social and moral preferences.

CONCLUSION

In the current post cold war environment linkages have increasingly been seen as the appropriate response to the complex and increasingly unpredictable security problem of the region. As a concept, bilateralism and multilateralism in international politics is nothing new. It reflects the process of interaction among several states in institutionalizing and regulating international relations.

The enhancement of these existing linkages can be examined from various perspectives i.e. process, structure, systems, size and scope of activities. Taking Asean as an example, its existing strength and success lies in terms of its structure, process of decision making and socialization. These characteristics thus should be further nurtured to perpetuate its strength.

Any joint military exercise, any military collaboration, or cooperation within Southeast Asia, in particular, among the ASEAN countries must never be concluded as a military pact.....We want to maintain ZOPFAN. We believe conflicts could be resolved through the dialogue process and confidence building".

YB Dato' Syed Hamid bin Syed Jaafar Albar, Defence Minister



PLANNING THE MALAYSIAN ARMY FOR THE 21st CENTURY

By Jeneral Dato' Che Md Noor Bin Mat Arshad,
Chief of Army

INTRODUCTION

The Army now more than ever is tasked with defending the nation, its democracy, people, territory and way of life. In view of the rapidly changing geostrategic situation both at global and regional levels, we need to address the following problems to make the Army suited to the conditions which will prevail in the next century. These problems among others include finding national responses to the following questions:

* *How are we adapting to the rapid changes we are going through?*

* *Is there a reduction in the overall threat to national security or merely in the threat? How will this affect the roles and functions of the Army in the future?*

* *What are the future plans of the Army with regards to its structure and capability?*

* *What challenges do we face in realizing the future plans of the Army?*

The Army's organisation, command structure and equipment up to the late 70s were reflections of our reaction to internal developments. Up to the period, a clear threat existed from within, from which we could plan a military organisation and doctrine to defeat the threat. The challenge for the future is to build an Army which is relevant to the emerging security environment at least until the following decade.

EMERGING SECURITY ENVIRONMENT

An analysis of the regional security environment must first of all be based on the changes taking place at the international level. What lies beyond the year 2000 is certainly most difficult to predict; at this juncture, suffice to say that the elements of global transformation so far have been most dramatic. The end of the Cold War saw the end of Soviet control in Eastern Europe. The Berlin Wall came tumbling down and the German question of a divided Germany was resolved. The collapse of the USSR and its break-up into constituent republics meant the end of the Soviet's dream to build a Utopian world. In its place, we are witnessing the blossoming of democracies and market economies. However, these countries continue to be beset with problems arising from nationalism and ethnicity.

With Russia preoccupied with its problems, there is a little likelihood of great power military rivalry between Russia and the other two major powers for years to come. The world situation, however uncertain and unsatisfactory, is clearly to be preferred to that of the Cold War. Not only is it no longer overarched by two gigantic powers but there is no longer the ideological divide which previously meant that every national action had to take into account whether it would be seen as favourable

or unfavourable to democracy and communism alike. The relief to smaller states is very great indeed. Such states from now on are free to consider their own position with independent judgement and in particular, to concentrate on their economic development with earnest.

The country to watch today would be the People's Republic of China. Lately China has engaged in a large defence build-up. Besides the purchase of 26 Su-27 Flanker, the proposed acquisition of an aircraft carrier and the planned procurement of the Russian made strategic Backfire Bomber, if they materialise, will significantly boost China's military capabilities, especially in its power projection. Despite recent friendly utterances suggesting that the PRC wants to see peace in the world and particularly in East Asia, it seems likely that the long-term aim is dominance, though not necessarily aggression. That surely must be the meaning of the proposed large fleet, and this factor immediately focuses attention on the most sensitive territory in Southeast Asia - the Spratly group of islands.

Everybody would like to believe in the wisdom, statesmanship and restraint of the PRC. In recent years, there have been no lack of instances of such admirable behaviour. But we are bound to ponder with alarm China's pronouncements in 1992 on the subject of the Spratly Islands: that it would not "budge an inch" over questions of sovereignty.

Here is a key point for East Asia. Up to now the whole affair has been handled discreetly. If we ignore the armed clashes of 1974 over the Paracels and in 1988 over the Spratlys, there has been remarkable consensus in behaving sensibly. It is true that all the numerous countries (except Brunei) who have an interest in the area have placed troops in it. Meanwhile, the informal

forums among the disputing countries, sponsored by Jakarta, have not produced anything beyond a vague indication that the use of force must be avoided and a diplomatic solution pursued.

With this large question unanswered, we can see the PRC as behaving in a generally cooperative manner towards the other nations of the region.

However, the situation in China must remain stable. A destabilised China would only retard the economic reform which has now reached an advanced stage in certain parts of the country. A disintegrated or a divided China would have an adverse implication on the entire region not only in the security field, but the economic as well. Hong Kong, whose economy is inextricably linked to China, will suffer a devastating blow. Similarly, if the US is determined to browbeat China, it will have a serious and direct impact on other countries such as Taiwan, Singapore, Indonesia and Malaysia as they have substantial investments in that country.

What we want is a wealthy China which is tied to the region, having an economic stake and thus committed to maintain stability and peace. The last thing we want is to see China reverting to its former position, which was rather oppressive in nature. We hope that the economic progress in China takes place smoothly. This is because if China is economically strong and if Hong Kong later in 1997 is successfully absorbed, a giant economic power is about to be born. If that power is peacefully and cooperatively minded, this could be excellent news for the rest of Asia.

Less enigmatic but scarcely less shrouded in mystery is the future of Japan. This great country still mourns its disaster of 1945. It is

constitutionally barred from military actions overseas. Yet, while itself spending little on armaments and protected from any danger by the US, Japan has become a huge economic power. It is true that the last year or two have thrown doubts on the solidity of the economic miracle, but none could have doubted its success up to this time. Barred from military action overseas, it has recently undertaken a limited military role under the auspices of the UN. Surely it cannot be long before its military role under the UN is regularised.

Nevertheless, a harmonious US - Japan alliance is the key to stability in the region. The US is happy to "defend" Japan against any external threat; to station forces in the area (even under the cuts envisaged in the '1992 Report to Congress' their strength is to be only slightly reduced); and to use Japan as the main base for protecting its own regional interests. However, Japan, the great economic competitor, cannot continue indefinitely to be protected militarily by the rival it has frequently overcome in recent years. Therefore, it must be a matter for speculation how long trade competition, effectively a war, between the US and Japan can continue without imperilling the stability of the military alliance. Here the question of nuclear power arises. Japan, the only victim of nuclear weapons, is prohibited from possessing them. In general, the international community would wish that condition to remain. But it must be open for consideration whether US-Japan relations will always be so easy; that Japan will remain under the American "nuclear umbrella" and be happy to forswear such ambitions for herself.

The Korean Peninsula remains as one of the most militarily tense areas in the world today, threatening the stability of the entire region because of the potential of major power involvement in the conflict. Not only are there

about one and half million soldiers facing each other across the DMZ, but North Korea has also developed an indigenous missile with a 1000 km range, which could be designed to carry both conventional and NBC payloads. On top of this, North Korea has not abandoned its strategy of reunification with the South by force of arms.

Our region shows several points of potential trouble arising from the desire for independence, or at least some form of self-government, on the part of ethnic or religious groups. In Myanmar there is reason to believe that the country would be heading for better times, albeit at a pace that would be comfortable for the military to take in its stride. From a regional perspective, the ASEAN countries' "constructive engagement" with Myanmar through economic and trade contacts have resulted in bilateral dialogues that have helped ease some of Myanmar's internal problems, for example, the release of political prisoners. On a more important note, closer interaction with the regional countries would hopefully wean Myanmar from over-dependence on China for economic and military aid and the subsequent military access that China would stand to gain. This would only further complicate the military equation in the Bay of Bengal, relative to India and New Delhi's traditional sphere of influence in the Indian Ocean.

In Cambodia, the withdrawal of UNTAC after the successful conclusion of general elections was a political victory for the people of that war-ravaged state. Despite the optimism in the new-found democratic process, peace and internal stability will necessarily have to tread a long and hazardous course before realization. For one, the Khmer Rouge has been side-lined from the political process and left to pursue a military struggle, with an alleged connection with a

neighbouring state via a lucrative gem and timber trade. Internally, the coalition government of strange bedfellows is wrought by political bickering and infighting between factions intricately balanced, and outwardly preferring unity only because of the venerable machinations of King Sihanouk. It is not too difficult to portend what this would mean for the future political direction of Cambodia should the King be politically incapacitated or in the event of his demise, given his advanced age and deteriorating health.

NATIONAL SECURITY PROBLEMS

Malaysia's Bilateral Territorial Disputes. In addition to the Spratly issue we have several territorial disputes with our neighbours. Bilateral territorial disputes with Singapore, Indonesia and the Philippines concerning Pulau Batu Putih, Pulau Sipadan/Ligitan and the Sabah claim respectively call for diplomatic resolution. In addition to the above issues we have also unresolved claims to areas in the EEZ.

Malaysia's strategy in solving these disputes has always been through diplomacy. In this regards, exchanges of documents have already been instituted with Singapore and Indonesia and regular dialogues conducted through Joint Committee Meetings at ministerial level. With regard to the Sabah claim, the Malaysian Prime Minister's recent visit to the Philippines has opened a new political resolve on the part of Manila to negotiate an amicable solution for dropping its claims and pursue a plan to mount coordinated sea patrols between Sabah and the southern islands of the Philippines.

Similarly, we have also made progress to seek a settlement of the dispute in the EEZ. In two instances, namely with Thailand and Vietnam, pending resolution of the disputes

Malaysia has opted for joint cooperation through joint development of the affected areas. Joint fisheries talks have also been initiated with the Philippines to exploit resources in an agreed area. There are also on-going discussions with Brunei to resolve the overlapping maritime zones.

Protection of Maritime Assets. As a country divided into two halves by the South China Sea, Malaysia is indeed very vulnerable, from the maritime perspective. The focus is on the protection of our maritime interests and assets at sea. Overall there is a need to expand the surveillance capability of the Malaysian maritime area both from the surface and the air. Plans are underway to increase the capability of our navy through the acquisition of ships such as frigates and to replace the aging patrol boats with new offshore patrol vessels (OPVs).

Malaysia views its neighbours in the region as friends and does not visualize any country grabbing its territories except in the disputed areas of the South China Sea. Even with the problems in the South China Sea, the present policy is to maintain a friendly, albeit an alert, posture and not to undertake activities that could escalate the conflict level. The expansion of the Chinese Navy in the Indian Ocean and the possible remilitarisation of Japan are causes for concern. As it is, there is no clear cut indication of a threat and it is therefore difficult to formulate a firm defence plan based on threat scenarios.

National Defence Policy. Malaysia's defence policy is designed to pursue as well as address the fundamental elements of its defence needs: self-reliance, regional cooperation and external assistance. We see self-reliance to be vital for the protection of our core values. However, Malaysia also realises that it is not possible for us to be self-sufficient in defence

material, hence alliances with others are necessary. Therefore, developing and enhancing defence collaboration with our partners in and outside the region into the next century is essential.

Malaysia is also developing its own concept of Total Defence. The concept is based on military, economic, social and psychological factors. From a universal point of view, total defence is "total in the organisational sense". It involves almost every aspect of society as opposed to the armed forces alone. In essence, the concept of Total Defence is not new to Malaysia. The fight against communism and its success could not have been made possible without the organisation, mobilization and coordination of the total national effort. The public and the private sectors, the military, the police and the whole government administration were involved. We have now expanded the scope of this concept to cater for defence against external aggression. To accomplish this we need to create a four-tier force structure:

1. A core force, which consists of the active armed services of the country.
2. A framework force of men who have undergone military training and can be rapidly mobilized when an emergency arises.
3. Behind and supporting these must lie an infrastructure, industrial and commercial, oriented towards defence needs.
4. Finally the country needs to be able to call on assistance from outside.

A country which is united and determined to maintain its sovereignty and freedom, will, to an extent, deter any potential aggressor. Total Defence should be able to inculcate these values. A country which is divided, and which is socially and economically unstable, is an easy prey

to external aggression. This premise is equally applicable to the region, and it is upon this premise that ASEAN was founded and ZOPFAN was promulgated.

FORCE STRUCTURE

Contingencies. Because there is no clear-cut military threat, the Malaysian Army in future must be able to respond to a wide spectrum of contingencies. Our assessment indicates that there is no justification to tailor the Army to a specific threat. It is for this reason that the Army should be task-oriented, and its adequacy in future is judged by its ability to undertake the following tasks.

- * Protect Malaysia from attacks by a hostile power.
- * Assist the government in internal security.
- * Participate in UN peacekeeping and humanitarian operations.
- * Assist the government in national disaster relief operations.
- * Participate in nation-building.

CAPABILITIES. The Army in future will probably be smaller in size than the present one but it must have the capability to fulfill its tasks in an uncertain environment. To be able to react to various contingencies as mentioned above, the Army must have the following capabilities:

Rapid Response. This requirement calls for the existence of a force capable of swiftly responding to intended acts of aggression by being able to react during the critical pre-conflict stage or deployed into a threatened area or region in sufficient time to gain a tactical advantage.

Wide Range of Options. The Army must have a force-in-being capable of providing the national command authorities with a wide range of options for employment in any contingency. The ability to respond across a wide spectrum of conflict requires a total force posture that is flexible, effective and balanced.

Interoperability. The Army must work with the Navy and Air Force to ensure it is capable of deploying and fighting as a coordinated joint force. The Army will play its role to improve interoperability through joint exercises and development of common force procedures.

STRUCTURE. To achieve the capabilities of rapid response, a wide range of options, and interoperability the Army must have the following structure:

Balanced Force. There is a need to restructure the Army, which is predominantly infantry, along the combined arms model so that it will possess the necessary firepower, mobility and communications to enable it to perform its mission. The imbalance between combat, combat support and combat service support and the other deficiencies in the infrastructure force will also be addressed. Additionally the reserve components will also be restructured to enable them to play a more meaningful role to augment the regular force.

Quality of Men. "War may be fought with weapons but they are won by men". Consistent with this aphorism, the Army has drawn up measures to

ensure that men of the highest quality constitute the main bulk of its force. The Army is looking at ways and means to entice the cream of society into its organization. A project has been launched to provide selected officers with the necessary training and exposure to prepare them for challenges of the future. Measures have been taken to improve the present military education system to ensure that officers in future possess the required capacity to adjust to the ever changing sophistication of the military profession.

Facilities. The Army of the 21st Century should possess all the required infrastructure facilities to enable them to be more productive and efficient in their designated roles. Training facilities and housing have been given due priority since the Sixth Malaysia Plan. In the Seventh Malaysia Plan the Army hopes to continue to construct or purchase more houses to be turned into married quarters. The Mersing and Gemas Projects will be revived and developed as the future Army Training Centres. While Mersing is earmarked as the future home of our Special Forces Group, replete with state of the art facilities, Gemas will be the main Combined Arms Training Centre for the Army. We hope to merge all the schools under one roof to provide the additional combined arms impetus that we need in terms of doctrinal development and training.

Modernization. The future Army development plan calls for the acquisition of modern infantry equipment, greater firepower and mobility in the form of mechanised infantry, armour and

artillery. The Malaysian Engineers' capability will also be upgraded to help improve the mobility of fighting vehicles and men. Command, control and communications, and combat intelligence services too will be upgraded.

COMPOSITION. The composition of the Army will differ from what we have today with the adoption of the combined arms concept in order to boost mobility and improve firepower, intelligence and communications. Briefly, the composition of the future Malaysian Army is as follows:

- * The number of formation headquarters will generally remain the same. However, some infantry brigades will be converted into specialist formations namely Parachute, Mechanised and Armoured Brigades.

- * The standard infantry battalions will be reduced to the three company concept. Some infantry battalions will be converted to parachute and mechanized battalions.

- * The armoured and artillery units will be expanded to beef-up the firepower and mobility of the divisions. The Army hopes to acquire main battle tanks for the armoured regiments.

- * In the case of artillery, more medium guns (perhaps including self-propelled guns), air defence systems and locating radars will have to be acquired to boost the units that are in existence.

- * The Engineers' capabilities will also be upgraded by acquiring additional

equipment such as tactical bridges, mine laying and mine clearing devices. The Army is planning to restructure the current holding of Engineer units including the formation of an Engineer Support Squadron for each Infantry Division.

- * In line with developments in the formation headquarters, the Signals units will be accordingly reorganized. The plan is to upgrade the capability of the Air Support Signal Squadron and the establishment of the Army's own Electronic Warfare Squadron.

- * Intelligence units will be introduced in every Infantry Division. The Army hopes to further upgrade the intelligence capability in the divisions consistent with a conventional setting.

- * The Army's logistics and service support units will have to be upgraded and streamlined in order to achieve the desired balanced force. Besides establishing new units, steps are being taken to reorganize and upgrade the capability of existing units.

The establishment of the Army Logistic Command and the Service Corps Battalions are cases in point. The Ordnance and EME units too are being addressed to meet future requirements.

MANPOWER

With the realization that man is a critical element in war, continuous emphasis is placed on the human factor, especially towards enhancing morale. Among the measures taken is the provision of facilities and amenities, and

other less visible but equally important measures aimed at ensuring that the soldier is physically and psychologically prepared for war.

There will be, however, no increase in personnel within the Army. If at all, there will be a reduction. In order to ensure that sufficient funds can be injected into defence development programmes, operating expenditure in terms of personnel emolument will be programmed to ensure that the force level is maintained at a level of 55% for PE and 45% for OE and non-PE.

In order to carry out the manpower reduction programme, the following options are being studied and carried out:

- * To privatize some of the base units where appropriate.
- * To civilianize certain non-combatant appointments.
- * To streamline the roles and tasks of the base infrastructure units, in particular the training institutions.
- * To streamline the tasks of each individual within an organization in order to avoid duplication of functions.
- * The reduction of personnel through the introduction of office automation and enforcing the concept of double hatting.
- * General force reduction, if the current study on the Reserve Force is found viable.

CHALLENGES TO MILITARY PLANNING

Defence Technology. We anticipate that sophisticated new defence technology in future will be highly critical for the defence of our territory. It is for this reason that more emphasis

will be given toward exploiting new technologies to ensure we gain a distinct increase in the following capabilities:

- * Command, control and intelligence.
- * Operational and strategic mobility to repel penetration.
- * Fire support with intelligent artillery ammunition.
- * Anti-tank, anti-aircraft surveillance and EW combat systems.
- * Protection of personnel and equipment against weapons effect.

Greater priority will also be given to air mobility and operational support for the Rapid Deployment Force.

Doctrine. To enable the Army to make better use of advanced equipment and weapon systems, new doctrine and tactics need to be developed to maximise their use under local conditions. There is a need to examine the impact of local terrain and vegetation before introducing new defence technology into the Army.

The guiding principle is to ascertain whether the equipment has the potential to improve combat effectiveness in the Malaysian environment. This calls for extreme ingenuity and innovativeness on the part of defence thinkers to formulate doctrine and tactics that would maximize the utility of new defence technology in the local environment.

Cooperation. The Malaysian Army must continue to maintain a high level of military cooperation with other armies in ASEAN. This is the key to future peace and stability in the region. There is also a need to maintain military cooperation with US land forces and armies of the FPDA. Efforts must also be

taken from now to establish military relationships and cooperation with the PLA and armies of former communist countries in Southeast Asia to gain their confidence in a new regional order.

National Constraints. There will be many financial and manpower constraints in our efforts to shape an Army which is compact, mobile and has the ability to hit hard when needed. Our objective of having a thriving officer corps will be severely tested, given the fact that other sectors have a better capacity to attract our youths into joining them.

Reliance on advanced technologies to maintain our fighting edge is capital intensive and costly to the nation. Similarly the retention of individual and collective skills require extensive training and exercises which must be adequately funded at all times. Military planners must develop the skills and capacity to project the Army's short and long-term plans, and to convince decision-makers of the desirability to implement them *in toto*.

CONCLUSION

With the defeat of the CPM, it is no longer feasible to shape an Army based on a specific threat scenario generated from within. Similarly, the external environment in the region does not call for a specific type of response. For many years, since the end of the Cold War, the region has experienced rapid economic transformation, involving also to a certain extent former communist countries in the Southeast Asian

region. Although there are still outstanding bilateral issues involving territorial and sovereignty issues between member states, these are expected to be resolved through diplomacy. Based on the common interests of these nations to achieve economic transformation, we are optimistic that there is little desire among leaders to embark on military adventurism as this could jeopardise their countries' economic prospects.

Given this encouraging prospect, the Malaysian Army in future will be tasked-orientated to carry out its traditional function of defending the national sovereignty and carrying out other secondary roles.

The Army will be made smaller, but will possess a higher degree of flexibility, mobility and firepower. The Army will have more flexibility to configure itself to the task at hand due to a better intelligence capability and an improved command, control and communication structure.

To prepare for the challenges in the coming decade, steps are being taken to improve the Army's education system, training facilities and infrastructure and the development of human resources to support the transformation process.

The biggest challenge to Army planners would be to ensure that there would be sufficient national resources allocated to support the plan to transform the Army into a modern fighting force by the turn of the century.

"...that despite the apparent peace and prosperity, the Army is as indispensable and as relevant as any instrument of the state; that soldiers still have a vital role to play; and that money spent on defence is money well spent."

Jen Dato' Che Md Noor bin Mat Arshad.

This article is an extract from the Chief of Army's presentation at the seminar on "Land Forces in the 21st Century - The Challenges for The Malaysian and Regional Armies" held in Kuala Lumpur. (This seminar was organised by Cawangan Perisikan Markas Tentera Darat in November 1995)

PEACE SUPPORT OPERATIONS - COMMAND, CONTROL AND TRAINING - A MALAYSIAN PERSPECTIVE

Oleh Mej Jen Dato Md Hashim bin Hussein



Synopsis

The Malaysian Armed Forces has committed a significant number of troops in support of United Nations operations. On 1st November 1993, Mej Jen Dato Md Hashim bin Hussein was appointed as the MALBAT UNPROFOR Commander and served until 23 August 1994. From this experience he is able to evaluate that peacekeeping offers valuable individual and collective training benefits. His personal perspectives denotes that peacekeeping commitments provide useful quasi operational experience and perhaps will dominate the MAF activities in the years to come. This article is an extract of Mej Jen Dato' Md Hashim's lecture notes to MTAT students of course 1996.

INTRODUCTION

The Malaysian Army of late talked about undergoing a paradigm shift. As for the **first Malaysian Contingent to Bosnia**, the word brought a totally new meaning altogether. From CIW which had been our main preoccupation since the late Forties we went on to conventional warfare.

It was a completely new kettle of fish as it did not only entail a shift from CIW operations to conventional but, was a real quantum leap as we had to operate in a temperate environment. What was more we had to brace ourselves to be ready for war. We did not know what to expect, things were largely uncertain. I presume this is what war as articulated by **Carl Von Clausewitz**, actually means. **Clausewitz** talked about the importance of 'moral forces' and hence much emphasis was given to this. He added that war

was dangerous (which we all know) and that it was in the realm of uncertainty and chance and the realm of suffering, exhaustion, confusion and fear.

AIM

The aim of this article is to discuss on Peace Support Operations - Command, Control and Training - A Malaysian Perspective.

PREPARATION

As a soldier and having to command a professional lot, there certainly were numerous issues to consider. Again this is where the teachings of **Carl Von Clausewitz** proved useful. He emphasized on what he described as 'military genius'. He felt that it was not something paranormal or God given but simply a very highly developed mental aptitude for a particular occupation. Two qualities were addressed in so far as what he regards as military

genius. This was intuitive (coup doeil) and determination. The word '**coup doeil**' was the capacity by the commander to discern what was before him and then select the right course of action. It is essentially the well proven technique which we refer to as '**appreciation**' - the logical sequence of reasoning leading to the best solution of a problem.

Let me elaborate on 'coup doeil' by quoting from a book. It is described as, *"The almost distinctive capacity to discern through the fogs of war what was happening and what needed to be done, a flair of essentials that enabled the Commander to select the right course almost without thinking, and certainly without going through the elaborate process of calculation of possibilities and probabilities that would paralyse the decisions of a lesser man."* In terms of determination it was to **Clausewitz** rooted in intellectual insight and composed of a rare blend of intellect and moral courage.

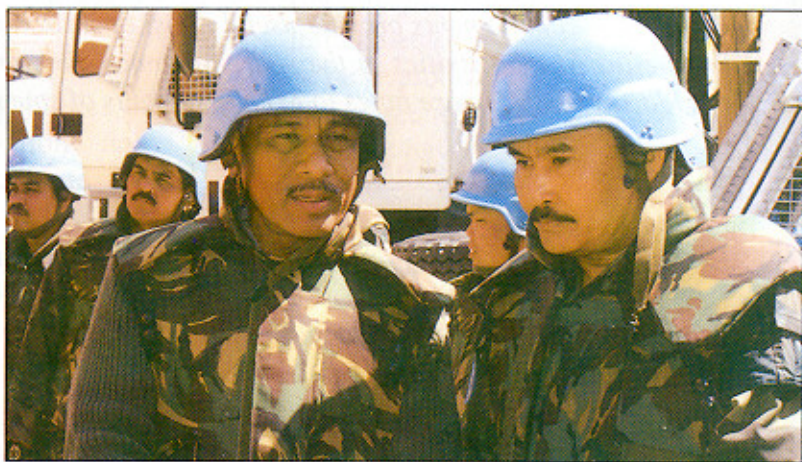
I cannot resist emphasizing the need for military officers to equip themselves intellectually. It is through academics that one can further articulate and debate with confidence.

PLANNING

The Malaysian Contingent tasked for UNPROFOR duties had a lot to do in so little time. The time frame from the time the government agreed to our commitment and the deployment of the first group of our soldiers was very short. On being appointed as the commander it was fortunate that there were several

references which facilitated planning by me. Several guidelines were derived from:

- * Norman Schwarzkopf, It Doesn't Take A Hero
- * S E Finer, The Man On Horse back.
- * R Stubbs, Hearts and Minds in Guerrilla Warfare, The Malaysian Emergency 1948-1960.
- * S R Covey, The Seven Habits of Highly Effective People.



Jen Tan Sri Dato' Ismail bin Omar, Chief of Defence Force in MALBAT HQ at Konvic

The book 'It doesn't take a Hero' described the deployment of the US forces from mainland USA to Saudi Arabia. It provided an insight on issues to be considered for the deployment of troops from permanent bases and installation to a theatre of operations. In the case of Schwarzkopf he had to reckon with 5 1/3 Divisions or 120,000 troops at the start of Desert Shield - the forerunner of Desert Storm.

What has been emphasized is the fact that you do not have to reinvent the wheel neither

should you be perplexed for not knowing what to do. Though it was not a piece of cake, it proved to be a successful exercise when the whole contingent of 1533 personnel was fully deployed from tropical Malaysia to the bleak winter of Croatia and later Bosnia Herzegovina. At the end of the day it was experience, foresight, imagination, determination and what was derived from authoritative references that eased our preparation.

COMMAND AND CONTROL

Mission Area. I propose to share my experience which was gained while serving UNPROFOR. I hasten to add that MALBAT Superior Headquarters (HQ Sector South West) were made up of military staff whose countries were members of the NATO Alliance. The organization is shown in Appendix A.

The force commander exercise command and control through the military staff, a civil affairs staff and Public Info. The discussion will focus on the military staff only. The Chief of Staff is the PSO to the Bosnia - Herzegovina Commander.

The functions of the various staff are:

- * GI - Responsible for all matters related to Human Resources.
- * G2/G5 - As can be seen the word intelligence was left out deliberately. In view of the large dealings with civilians, the G5 work very closely with the G2.
- * G3 - All matters related to operations.
- * G4 - Logistics and maintenance.

As a matter of policy, national contingents or commonly referred to TCN (Troop Contributing Nations) contribute several staff officers to fill in a number of specific appointments. Each government will be informed of the posts. The UN requires that officers nominated must be trained, experienced (especially in commanding units), holds substantive rank and be proficient in the English language.

In so far as the organization within MALBAT the layout is as shown in Appendix B. This is found to be functional and only minor problems were faced which were well within the means of the contingent to resolve.

The staff system utilized in the mission area by MALBAT which was closely tailored to the American and NATO staff systems was an exposure to our officers. See Appendix C. It enhanced the learning process. As for me I was convinced that it facilitated better liaison, closer coordination, quick passage of information and rapid execution of orders. Whether this was continued by subsequent contingent cannot be ascertained.

TRAINING

What will be deliberated are in close adherence to the Aide-Memoire issued by UNPROFOR. The Memoire provided guidelines for Troop Contributing Nations. It was not exhaustive. As professional soldiers and being used to reckon with uncertainty, training was given major emphasis. In so far as meeting the training requirement, please see Appendix D on how this was done.

The training conducted was based on our Malaysian Army Training System (MATS).

Before the troops arrived at the assembly area, MINDEF had given early warning to those units earmarked, for individual training to be carried out. In the case of the first contingent the Assembly Area chosen was Sungai Petani. It was decided that the training was to be in two distinct phases:



Along 'Gannet Line' - A route Split-Mostar Konjic - Pazaric which was opened by MALBAT. Photograph was taken during the Chief of Army's visit to MALBAT.

* **Phase I - Pre Deployment Training In Country.** When the troops reported to the Assembly Area it was clear that they were amongst the select few. The standard of their individual training was very satisfactory.

* **Phase II - Mission Area Training.** It is difficult to assess how Malaysians would perform and react in a temperate environment. Echoes of Clausewitz 'Uncertainty, Confusion, Exhaustion and Fear' come to my mind. All the same, training in the Mission area was conducted soon after arrival. A little later driver training and training with equipment commenced once the vehicles and stores were cleared by the Croatia authorities. Some problems encountered were:

* Non- suitability of the training area. MALBAT were initially deployed in the Republic of Croatia where the terrain and geography were different from Bosnia.

* Carriage of weapons was not allowed in Croatia as there was no conflict. It was peaceful and quiet in Croatia especially along the central coastal region.

* No live firing was allowed at all.

* No tracked vehicles were allowed on Croatian roads. Consequently we had to make use of low loaders and flat racks.

* **Spiritual Training.** As you can see special emphasis was given for this. 'Moral Forces' as emphasized by Clausewitz was something that Commanders should view seriously.

QUALITIES EXPECTED

* Let me share with you the moral qualities expected of troops. They are:

* **Bravery.** It is quite straight forward.

* **Adaptability.** For sure they have to be conditioned to operate in a temperate environment and in sub zero temperatures. You can imagine how cumbersome it can become when you have to put on layers of clothing, more than a pair of gloves, balaclava on top of that a blue helmet, and then handle your weapon, speak on the radio, drive vehicles and perform all the other tasks expected of a soldier.

* **Stamina.** There is a saying which goes 'when the going gets tough the tough gets going'.

* **Enthusiasm.** You need to be not only cheerful but display high motivation and commitment.

PRINCIPLES OF PEACE SUPPORT OPERATIONS

Some thoughts on the principles of Peace Support Operations are discussed below. These are based on MALBAT'S experiences while serving UNPROFOR. They are:

- * Impartiality.
- * Minimum force.
- * Negotiations.
- * Credibility.
- * Consent.
- * Mutual Respect.
- * Flexibility.
- * Transparency.

Impartiality. In a way it is as much a question of perception as well as of practice. The perceived or actual loss of impartiality may bring about loss of confidence and trust.

To allay suspicions from the warring factions, we had the Bosnian Muslims and Bosnian Croats with us when we conducted mounted and dismounted patrols, operate our checkpoints, road blocks and when conducting tasks assigned.

To further reinforce this factor we had Muslim and Croat interpreters with MALBAT.

Minimum Force. This remains a major principle as troops must use force only as a last resort in self defence. Though we were shot at by the Bosnian Croats there were no occasion when we shot back.

Negotiations. This was carried out frequently. We conducted numerous negotiations with the Bosnian Croats, Bosnian Muslims and Bosnian Serbs. The official forum was the JCSC (Joint Commission Sub Committee) meetings akin to our SSEC and DSEC.

Credibility. It is important for the force to demonstrate its capability to carry out its task and to be adequately supported with resources. Thorough planning and clear orders facilitated the carrying out of orders. Our soldiers carried out their tasks very well and demonstrated sincerity and goodwill.

Consent. A major difference between peacekeeping and peace enforcement is consent. Peace keeping depends on the consent of the belligerent parties. To circumvent the denial of consent, impartiality and the use of minimum force are both essential.

Mutual Respect. Mutual respect, understanding and trust are crucial in Peace Support Operations. The Bosnian Croats and Bosnian Serbs were hostile initially but because of our friendly gestures and the good behaviour of our troops, their attitude began to change positively.

Flexibility. This was maintained without losing sight of the aim of the operations. Flexibility prevailed at all levels of command as opportunities were always capitalized. We took

the initiative during negotiations and promoted the cause of the UN when executing our tasks.

Transparency. We emphasized this need to avoid misinterpretation and suspicion by the various factions and the local community. After formulating our TQM concept in the mission area we conducted surveys with the close assistance of the community. Such surveys as well as visits, celebration of religious festivals, media coverage enhanced transparency.

Whatever has been discussed are not exhaustive. They are principles which we thought were very appropriate in Bosnia-Herzegovina. Given the task of commanding future Malaysian Contingents, the future Commander may wish to consider what was presented and perhaps even enumerate their own.

LESSONS TO BE HIGHLIGHTED

The lessons that I will be highlighting are not based on any order of importance or priority. I thought it is essential that I share them with you.

Performance Oriented. All of us have been trained during the many courses throughout our military career. We have gone through several exercises - preparation of movement graphs, logistics appreciation, Communication and Thinking Skills (CATS) series, preparing briefs and others. We have also introduced the MATS since 1983. However in most cases whatever we have been taught have not been put into practical application on the ground.

For instance how often do you apply the mechanics of appreciation when faced with a problem. You need not have to enumerate them formally. However as a staff, in your discussions

with your commander we expect you to tell us what are the courses open, its advantages and disadvantages and the staff recommendations.

Confidence Building Measures (CBM). Our experience during the CIW operations have made us realise how important CBM is. I need not have to elaborate what we have been doing in the past but suffice for me to say how essential it was for us in Bosnia to open and maintain communications with all warring factions.

It would be to your advantage if you have equipped yourself sufficiently with the history, the customs, the culture and the taboos of the various communities. Your ability to converse in the local language will go a long way to promote CBM.

Our numerous contacts with the Croats, the Muslims and the Serbs and our confidence in taking charge of the discussions was to me a combat multiplier. We became assertive. We always had the initiative. I dare say that my tours in Ft. Benning, Warminster and Bovington in UK, as well as Puckapunyal in Australia was only a form of minor introduction to mechanised warfare.

Conduct of Mechanised Operations. I had to dwell into JFC Fuller, Guderian, not forgetting George Patton armoured drive across Europe, as well as Erwin Rommel. I knew I did not have to reinvent the wheel as their exploits would provide several lessons on the conduct of mechanised operations, and in Europe.

Whatever shortcomings I had were addressed, by the many armoured officers who served MALBAT. They rose to the occasion and because of that we were able to perform whatever tasks given satisfactorily.

Logistics. Our deployment was dispersed over a large area which meant that our lines of communications was stretched. With MALBAT 1 we were deployed over six main bases. Maintaining a contingent of about 1500 was therefore a no mean feat. Besides, initial deployment had to be done during the heart of winter. The icy roads and the thick snow made our logistics movement very slow and coupled with that was the threat from the warring factions who hampered our move at every available opportunity.

Whatever problems encountered were actually resolved by the logistics staff. Most of them did not leave it to chance especially after discovering the numerous difficulties by the other contingents.

Boredom. "Idleness is the devils' workshop", and for us in the military boredom and inactivity will have far serious repercussions. What do you do to fill in their time? That is something you have to figure out at length. For us in MALBAT 1, the myriad of activities kept us busy and occupied. There were the logistics stocks to be built up, bases to construct and defences to be fortified. Security of the camp to cater for all contingencies had to be given special attention. This was the building of watch

towers, underground command posts and building of bunkers. All this plus the various operational tasks to perform kept us occupied. The short daylight hours in winter meant that there was little time to think of and getting into any mischief.

However towards the later part of the tour when all the locations were adequately completed, the chain of command had to think of other ways to keep the soldiers busy and out of trouble.

CONCLUSION

Malaysia's role in peace keeping operations was given an impetus in the late eighties. After almost three decades of non participation in UN peace keeping, we unhesitantly offered our services by sending a Contingent to Namibia. We have not looked back ever since and later went on to serve alongside other UN Contingents in Kampuchea and Somalia. Our tour in Bosnia-Herzegovina is akin to a 'Quantum Leap'. It was for all intents and purposes peacekeeping of a more difficult and dangerous kind.

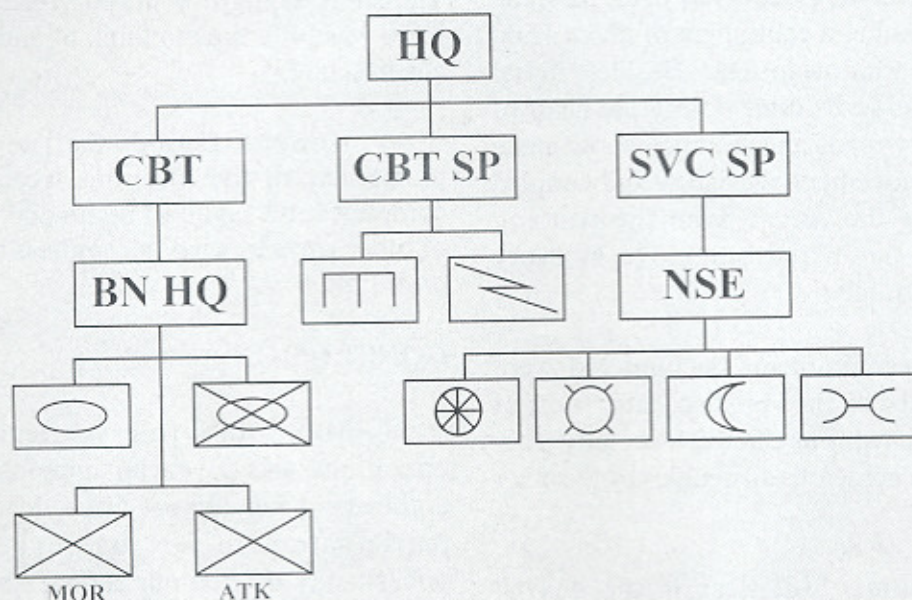
Our experience in Bosnia was the first ever that our Malaysian troops were sent to operate in a temperate environment. Several lessons were derived which will augur well with the Malaysian army's march into the 21st century.



YAB Dato' Sri Dr Mahathir bin Mohamad being briefed by the MALBAT Commander

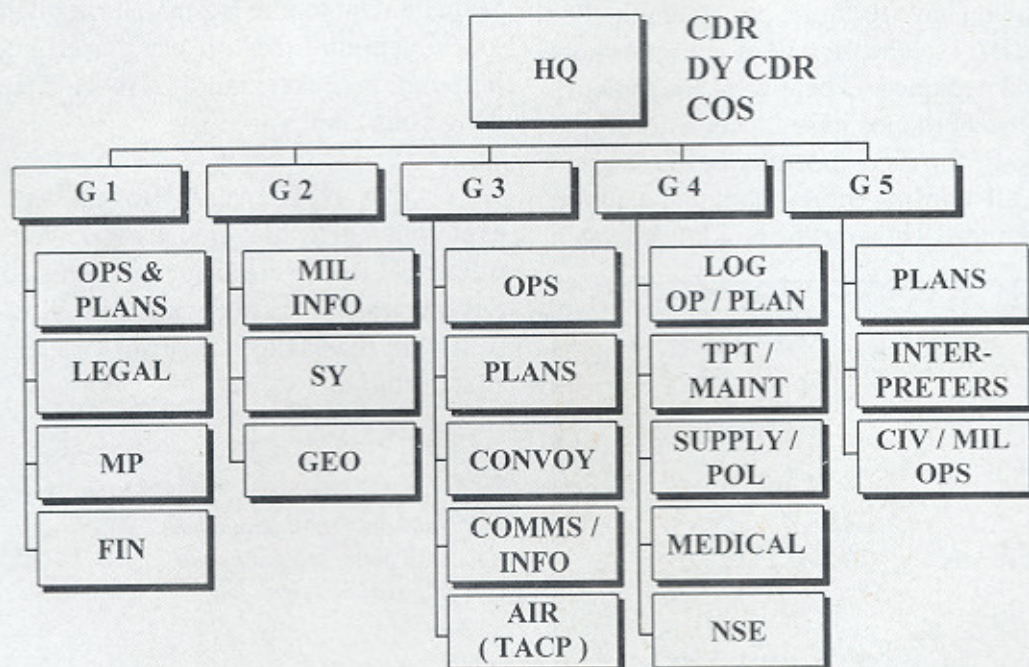
APPENDIX A

ORGANISATION OF THE MALAYSIAN CONTINGENT WITH UNPROFOR - BOSNIA HERZEGOVINA

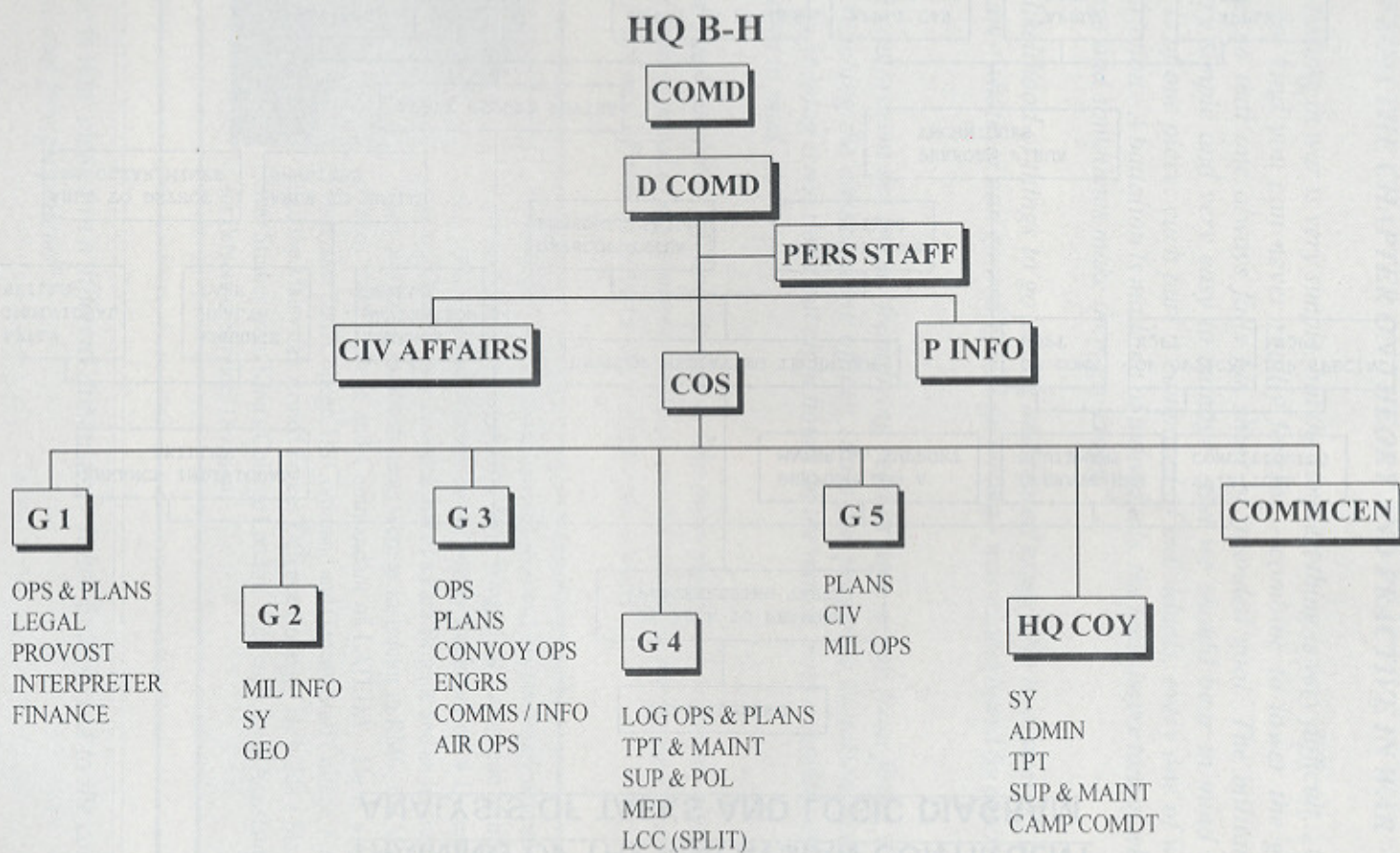


HQ MALBAT

APPENDIX B

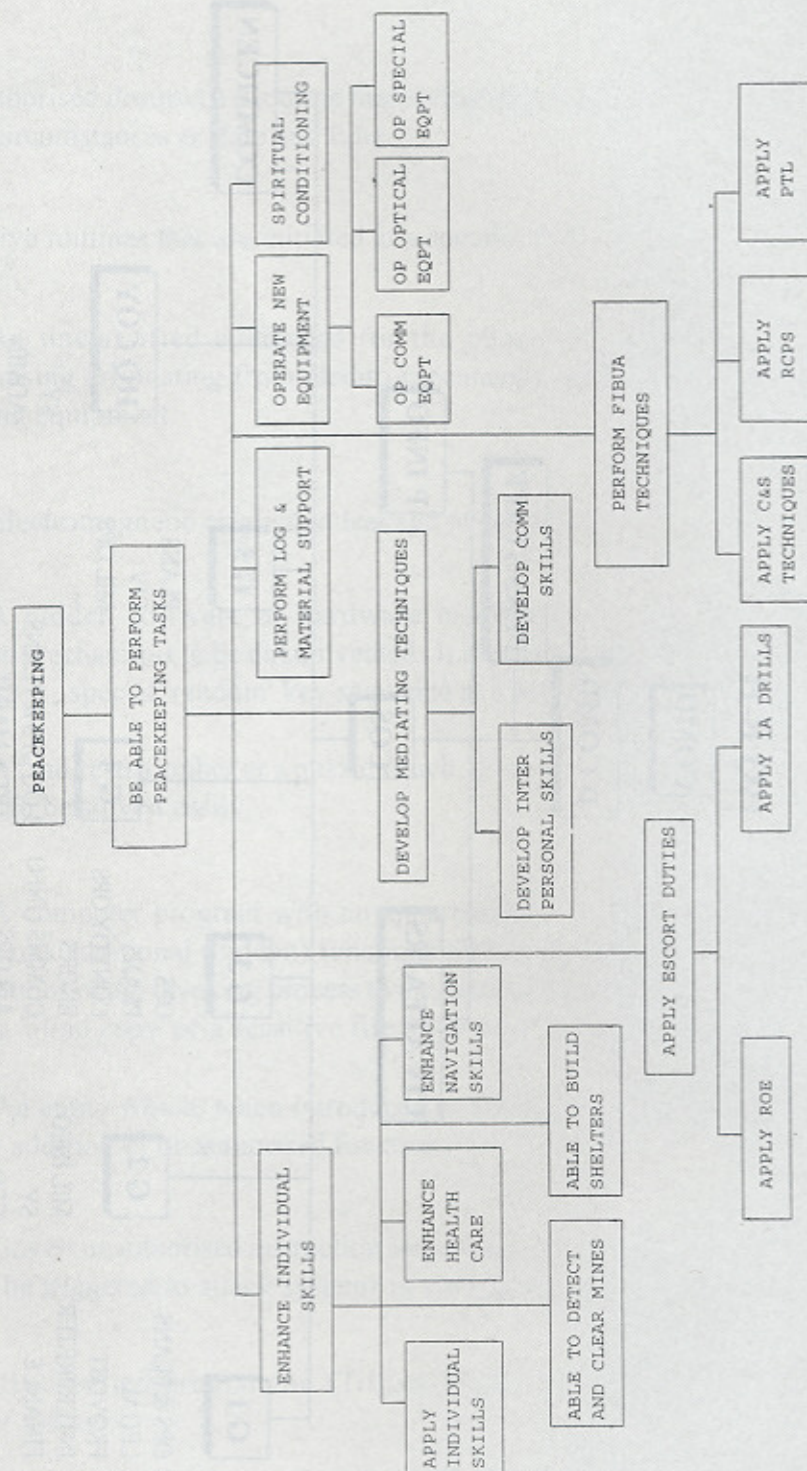


APPENDIX C



APPENDIX D

TRAINING OF THE MALAYSIAN CONTINGENT ANALYSIS OF TASKS AND LOGIC DIAGRAM





A QUOTE FROM THE CHAPTER ON THEORY AND PRACTICE IN WAR

"Everything in war is very simple, but the simplest thing is very difficult....Countless minor incidents - the kind you can never really foresee - combine to lower the general level of performance, so that one always falls far short of intended goal...The military machine... is basically very simple and very easy to manage. But we should bear in mind that none of its components is of one piece: each part is composed of individuals, every one of whom retains his potential of friction...A battalion is made up of individuals, the least important of whom may chance to delay things and sometimes make them go wrong."

*The likelihood of things to go wrong and feared especially in almost all armies known as **Murphy's Law** - whatever can go wrong will go wrong - was exacerbated by external factors, such as weather.*

"Fog can prevent the enemy from being seen in time, a gun from firing when it should, a report from reaching the commanding officer. Rain can prevent a battalion from arriving, make another late by keeping it not three but eight hours on the march, ruin a cavalry charge by bogging the horses down in mud, etc".

In the final analysis, "Action in war is like movement in a resistant element. Just as the simplest and most natural of movements, walking, cannot easily be performed in water, so in war, it is difficult for normal efforts to achieve even moderate results".



Mejj Jen Dato Md Hashim Hussein received his secondary education from Malay College Kuala Kangsar, and the Boys Wing of the Federation Military College. He was commissioned into the Royal Malay Regiment on 8 December 1966. His command experience includes that of a Para Brigade and an Infantry Division. His tours in training establishments were as instructor in RMC, the Malaysian Armed Forces Staff College and Commandant of LATEDA. He is a graduate of the Malaysian Staff College, US Command and General Staff College, Fort Leavenworth and the Malaysian Armed Forces Defence College. He holds a Masters Degree in War Studies from King's College London. Currently, he is Assistant Chief of Staff for Personnel Services Division.

"Defence is now viewed in a different dimension - it has to be linked to the country's economic and foreign policies".

YB Dato' Syed Hamid Albar, Defence Minister

SECURITY IMPLICATIONS OF COMPUTER TECHNOLOGY

Brig Jen Mohd Zaki Bin Hj Wan Mahmood

COMMUNICATIONS AND COMPUTERS

During these last few years, there have been tremendous technological developments in the fields of communications and computers. The emergence of these new information technologies may have been the results of computer industries wanting to meet the demands for efficient information systems by the commercial sector. However, in this respect, defence organizations of major powers may also have some roles in providing the leadership nudge for the rapid progress in the developments of communications and computer technologies. Militarily, an efficient and most advance communications technology has always been the dream of military commanders.

Today's technological developments in information technologies have however, generated many security implications. Within the commercial world, these security issues may be trivial but within the defence systems they are indeed serious matters. Communications and computer systems of defence applications are always of interest to many sectors. Friends and foes are always keen to be informed of developments which are taking place within each other's armed forces. Communications links, radios and lines have long been the targets of foreign intelligence operators for they are good sources of intelligence. The use of these new information technologies in communications,



Hands on: TPTD tries out the features of CODIMS 111.



command and control, surveillance and weapon systems by the military have introduced new elements of security risks. Computer networks widely used now are also found to be very vulnerable to sabotage and interceptions by interested parties, threatening the safety of data, softwares and hardwares. We are now in the area of information warfare.

Military applications of computers are varied, ranging from office automation and nation-wide communications, to multimedia and battlefield management systems. Defence forces will find their applications are ever on the increase and there is no way of stopping the trend. Along with all these developments there also emerge the security risks related to computer applications and computer systems. It has been established that no computer system is safe.

Users from defence forces must be aware of these risks and must adopt the necessary precautions. Defence intelligence as well as communications and electronic organizations must develop and improve security measures so that computer systems and networks used by the defence forces are safe and secure. Commanders and staff officers have to demand for high technology applications to ensure that they are moving towards developing an efficient force. Simultaneously they must ensure that security measures are available.

DEFENCE APPLICATIONS

Before we take a look at various risks that the military may face when using computers, let us review some military high technology applications of communications and computers. Presently there are wide scopes of computer application by the military, including those used in combat environments. The characteristics of computers, such as speed and accuracy are most suitable to meet the military needs. The advancement in technology in the last decade has resulted in tremendous reduction in computer sizes, which made them most suitable for military use. Smaller but more efficient computers are replacing huge main frame computers which are used initially in military bases for logistics, finance, personnel and research and development applications. Computers have the ability to process accurately volumes of data repeatedly and with special care are able to provide secrecy to its operations and storage. Manipulations, computations, analysing and transmitting of informations are done with ease through the use of computers. Informations kept in data bases are easily accessible and shared with other users. With the help of computers, administrative functions of maintenance, inventory, finance and personnel are done with

high degree of efficiency. Operational and Intelligence functions too have greatly improved through the applications of computer and communications technologies.

Present day's applications are so wide and total that in some defence forces every military installation and unit has computers or computer terminals. Area networking have made it possible for staff officers and commanders, although physically far apart, to be electronically close together. From readily available universal networks such as the Internet, military organizations have greater access to a wider spectrum of applications of electronic information super-highway systems. While the services are not without security risks, with the adoption of necessary precautions and control measures they are very useful resources in providing open source information and knowledge. These networks are also fast replacing facsimile in high speed electronic communications. Data transmissions are more efficient and much cheaper than image transmissions of the facsimile.

The most common computer application in the military is with respect to accurate and timely distribution of informations. The information flow is normally done through nation wide administrative communications networks or command and control communications systems. In battlefield environments there are similar applications, but the systems do not cover areas as wide as those of peace time networks. In addition there are other systems and networks such as those for weapon control, fire control and surveillance systems. It is of common knowledge that communications systems for these networks, which use lines, radios or satellites, have inherent security risks of being intercepted.

However, lines offer the least risk. Fighter aircrafts on the other hand, have their own special computer systems such as those for light mission control and threat warning assessment. Battleships, helicopters and land fighting vehicles too have on-board computers for weapon control, navigation and threat warning. Equipped with computers these combat and weapon platforms are getting more sophisticated, giving them better ability to manoeuvre as well as accurate delivery of fire power. Advanced technologies can be an element to a force multiplier, if these technologies are intelligently and safely applied.

It is assessed that these wide applications of communications and computer technologies have brought about changes as to how wars are to be fought. Armed forces therefore have to be equipped accordingly, lest one side will be fighting a war with out-dated equipment and in an out-dated fashion, against an opponent equipped with sophisticated war machines. The result will be similar to what had happened to the forces of Saddam Hussein during the Gulf War in 1991. Defence forces of many nations have now realised their need for the application of the modern technologies. The need for high technologies in future wars was also one of the conclusions derived by the Chinese People's Liberation Army and the Australian Defence Forces from their studies on the lessons learnt from the Gulf War.

With the introduction of these new technologies many of world's armed forces are able to reduce their manpower. Computerization, automation and artificial intelligence have provided the alternatives and justifications for the reduction of manpower, without affecting the status of defence capabilities. Besides these technologies have

enhanced the combat power of defence forces. However, these new sophisticated systems by no means will allow reduction in defence spending. Capital costs are high, so are the costs of operating, maintenance and training of personnel.

Defence planners must understand that future wars are warfare of command and control as well as warfare of informations, knowledge and technologies. Both of which are heavily dependent upon communications and computer technologies. Present developments in technologies are also revolutionizing warfare, bringing about better range, speed and accuracy to weapon system. The technological advancement has allowed battle plans to be practised and rehearsed through electronic simulators and computer war gaming, providing opportunities to commanders to evaluate their plans before they are executed.

IMPACT ON DEFENCE

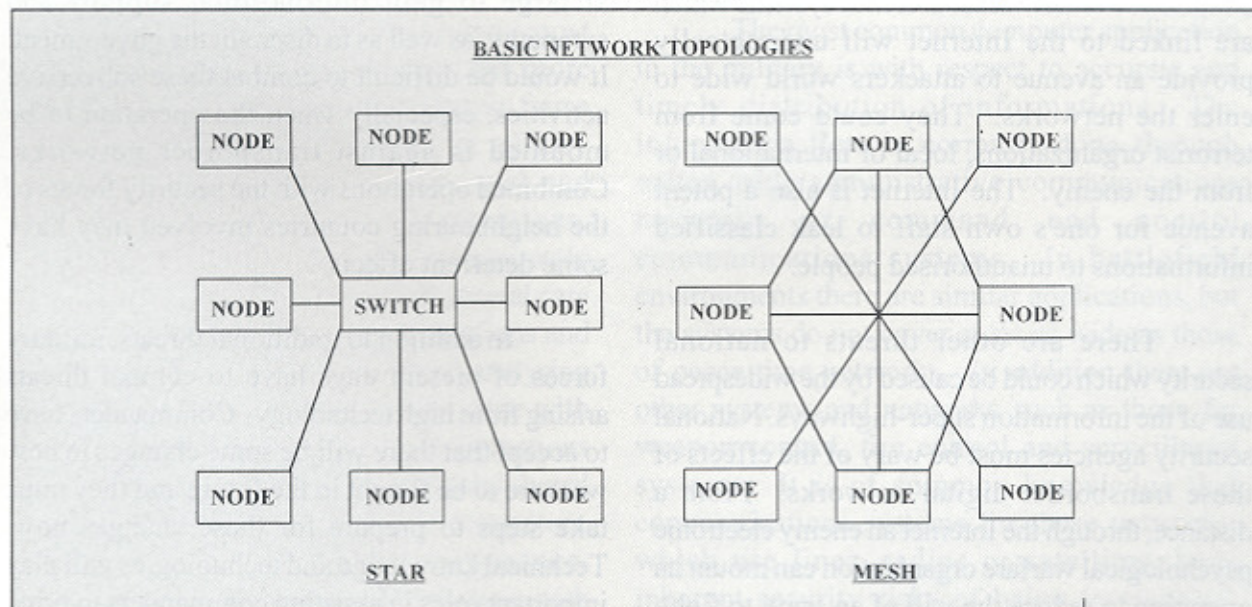
The developments in computer and communications technologies have in fact proven several security impacts. These security risks are serious implications. The defence forces regularly develop strategies to deal with the management, acquisition, processing, storage and dissemination of information. In this regard, the most important consideration will be the security of the protection of information systems against interferences by adversaries. The needs for such protection over computer systems and networks are serious considerations. Our success in preserving the security interest of our information systems and our ability to intercept and impose disruptions over the enemy's information systems would be our aim in *information warfare*. This kind of warfare exists continuously, during peace time as well as during war time.

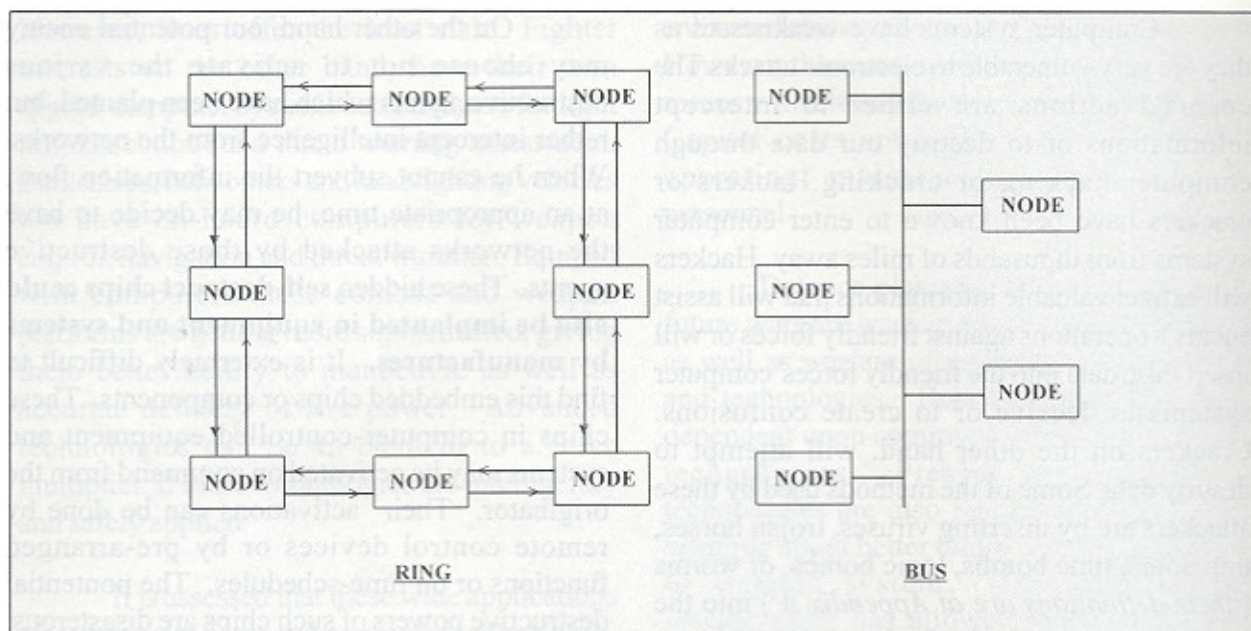
Computer systems have weaknesses as they are very vulnerable to electronic attacks. The enemy's actions are either to intercept informations or to destroy our data through computer hacking or cracking. Hackers or crackers have been known to enter computer systems from thousands of miles away. Hackers will extract valuable informations that will assist enemy's operations against friendly forces or will insert false data into the friendly forces' computer systems to deceive or to create confusions. Crackers on the other hand, will attempt to destroy data. Some of the methods used by these attackers are by inserting viruses, trojan horses, trap doors, time bombs, logic bombs, or worms (*their definitions are at Appendix A*) into the computer systems. In the final analysis, their aim is to use similar techniques to disrupt or destroy the opponents' strategies and plans, still in their data bases, before they could be implemented. Computer networks utilising satellite and radio communications, in some cases, are easier to be manipulated by adversaries than those using lines.

On the other hand, our potential enemy may choose not to activate the various destructive agents which have been planted, but rather intercept intelligence from the networks. When he cannot subvert the information flow, at an appropriate time, he may decide to have the networks attacked by those destructive agents. These hidden **self-destruct chips could also be implanted in equipment and systems by manufactures**. It is extremely difficult to find this embedded chips or components. These chips in computer-controlled equipment and systems may be activated on command from the originator. Their activations can be done by remote control devices or by pre-arranged functions or on time-schedules. The potential destructive powers of such chips are disastrous. Communications, surveillance and weapon systems will fail to function, resulting in military forces and their sophisticated weapon platforms becoming easy preys to the enemy.

Computer network topologies (*see Diagram 1*) however, intensify vulnerability of

DIAGRAM 1





computer systems. They do provide for easy access to sabotage works by opponents. An entry at any point will allow an attacker to have access to any part of the system as well as to the central storage or the heart of the network. An important network, such as the defence command and control system is very vulnerable if it is interconnected with other logistic or administrative networks. Defence systems which are linked to the Internet will undoubtedly provide an avenue to attackers world wide to enter the networks. They could come from terrorist organizations, local or international or from the enemy. The Internet is also a potent avenue for one's own staff to leak classified informations to unauthorised people.

There are other threats to national security which could be caused by the widespread use of the information super-highways. National security agencies must be wary of the effects of these transborder digital networks. From a distance, through the Internet an enemy electronic psychological warfare organization can mount an operation to reduce the will of an army to fight,

or deplete the support of the population for the government. Specific digital networks linking computer-based electronic bulletin boards belonging to underground organizations may be an option for insurgency movements. These networks can be used to disseminate informations or plans to create civil disorder. They can also be used to have access to the world at large to gain international support and sympathy, as well as to discredit the government. It would be difficult to combat these subversive activities, especially when the operation to be mounted is against transborder networks. Combined operations with the security forces of the neighbouring countries involved may have some deterrent effects.

In addition to traditional threats, military forces of present days have to combat threats arising from high technology. Commanders have to accept that there will be some changes in how wars are to be fought in the future and they must take steps to prepare for these changes now. Technical knowledge and technologies will play important roles in assisting commanders to bring

about victories. These two elements are sources of power to commanders. They are therefore, to be given emphasis during development and training. Organizations and doctrines will have to be adjusted to cope with the necessary introduction of equipment and weapon systems of high technology. Failure to adapt to these necessary changes, a defence force will be fighting a losing battle against an enemy who is far superior in technology. While adapting to the developments in technologies, security measures are not to be ignored and must be realized at all levels of command.

Various communications, weapon and surveillance systems in service with many forces now are computer-controlled, and using artificial intelligence. Data of these systems are prepared and updated regularly by master computers. These data are entered into weapon systems, command and control networks, flight mission computers and threat assessment computers. Master files of these data are high value targets to computer attackers. If these data are known and are accessible to the enemy they then can apply measures to counter us. Alternatively electronic destructive agents despatched by the enemy or embedded in equipment could destroy our data at the most crucial time, or incorrect data introduced into the system would render our systems ineffective at the outbreak of any hostility.

SECURITY MEASURES.

It is apparent that applications of communications and computers will need very high level of security measures. Security implications from the applications of these technological developments in computers and communications are too numerous. Medium and small size armed forces may not be able to cope

with them. Furthermore measures, countermeasures and counter-countermeasures are racing and chasing one another in a circle. The lack of money, time and human resources may limit speedy development of security measures by the military. The development of security measures is however most effective when problems are tackled centrally at the highest level of authority. It is most appropriate and most effective if suitable organizations are established at defence and service headquarters to supervise all computerization and automation development programmes, including those of the weapon systems. Problems and experiences from different organizations are managed and resolved centrally at these headquarters, which in turn are shared with other headquarters.

The roles of such organizations will be further simplified if the country has laws to safeguard computer users. Legislations are required to prosecute those involved in illegal manipulation over others through the use of computers. Offensive and subversive users of computers by members of the public should also be prosecuted. On the other hand to fight transborder illegal use of digital networks will require international bodies to come out with rules and regulations. International laws are also necessary to safeguard legal purchasers of defence products from unknowingly buying equipment with embedded chips and components. Bilateral agreements to counter transborder illegal and subversive uses of information technologies may be relevant. National defence headquarters may initiate to get the government to act towards obtaining these legislations.

Legislations alone are however insufficient. Defence communication-electronic and intelligence communities are to ensure that defence forces have their own policies,

regulations and standing orders, listing out steps and measures to ensure reliable applications of their computers and networks. Preventive and protective measures have to be initiated at the system planning stage. It is best the development of security features be integrated with the system development plan, to protect hardwares, softwares and networks. Access control, encryption, passwords, codes and authentication techniques are some of the security measures to be considered. It is best that these networks and their security measures including cryptographies are to be developed and system engineered in-house by the defence staff. If it is done by vendors, their credibilities are first to be verified and close supervision of the works by the staff is necessary. *International vendors do require to the closest of supervision.* These vendors are exposed to temptation to accept offers for collaboration with potential enemies or some foreign intelligence agencies. The best option is to do own system planning and implementation, without much involvement of vendors, especially for command and control and intelligent systems. The least of their involvement in any defence system is the safest. Purchases of hardwares and softwares are done through reliable and established suppliers.

Every hardware and software procured have to be screened and cleared of any embedded foreign material. Procedures for these tests have to be developed and will need qualified personnel to do them. Various users within the defence communities can jointly develop this requirement, if necessary in collaboration with local universities. Those who already have them can share with others. Once the systems are installed, measures should then be centered at safeguarding the security of personnel, equipment and networks. Defence

operators, maintenance and supporting staff are to be security cleared before employment. They are to be regularly reminded and checked so that they adhere strictly to the instructions and standing orders. These security instructions and orders are part of the security policies a defence organization must have and they are to be regularly reviewed to ensure that they are current with the technologies. Defence systems are not to be operated by contract workers or vendor's staff once they are installed and have been in operation.

Safeguarding a system is best done by isolating the entire system from all other computer systems. It is necessary to ensure that networks and all equipment are safely secured and are not made accessible to unauthorised persons. All processing equipment will need to be protected from emitting radiation as well as receiving interfering radiation. Data storage facilities will need protection from unlawful physical and electronic accessibility. Therefore, all uses of equipment and data must first be authorized and movement of equipment and storage facilities always be under close supervision. Computers and printers which are required to be removed are to have data cleared and when they are returned they are to be inspected to locate any embedded chips. All movements of equipment are only done with the authority from the responsible officers. Terminals on Internet or other information super-highways in defence organizations and their cabling must be isolated from defence networks. Uses of these terminals must be under close supervision and control. Some considerations of security measures for Internet application by defence forces are given at *Appendix B*.

Defence systems are better assured of their security if all defence personnel are aware

of the exiting threats. All security measures will be more effective if there are sufficient numbers of technically qualified officers at all levels of command. The application of high technologies in defence forces will be most beneficial if commanders and key staff officers are knowledgeable in these technologies.

CONCLUSION

The developments that have taken place in the communications and computer technologies have provided the defence forces with better efficiency. While the advantages are beneficial to the military, they are not without security risks. However, these risks can be overcome by proper planning and management of the equipment and networks. For security reason, system planning, development, integration, maintenance and operations are all done by defence staff.

Benefits from the application of communications and computer technologies are numerous. Defence organizations can not ignore these developments, but must be equipped to apply these advantages to defence roles and be prepared with security and protective measures. A defence force without the support of these technologies will find itself fighting a war using yesterday's doctrine and methods. Introducing

these advanced technologies into the military forces without the necessary security protection, on the other hand, is inviting disaster.

The defence communications and electronic community have a major role to play in ensuring that these technological developments are utilised by the armed forces without foreign interferences. Knowledge and experiences gained by some parties can be shared through seminars or direct contact between parties. It is the duty of all parties to ensure that their equipment and systems are secure and safe for use during all occasions and under all conditions. Commanders are however will be held responsible if his equipment and systems are not secure. Commanders must be knowledgeable as well as being sufficiently supported by qualified officers.

Applications and the security impacts mentioned are some of the most common ones likely to be found within the armed forces. The suggestions of security techniques and security measures are limited to those which are commonly and currently known and they are not dealt with in detail. They ought to be studied in depth where necessary. Policies and procedures must be formulated and regularly discussed, tested and updated to keep abreast with the developments in technologies.

Appendix A

Logic Bomb	An unauthorised destructive routine that is executed based on some parameter such as circumstances or date and time.
Time Bomb	Destructive routines that are initiated at a specific time.
Tempest	1. An unclassified codeword for the phenomenon of unintentional compromising originating from electro-mechanical, electrical and electronic processing equipment. 2. Electromagnetic originated leakage of information.
Trap Door	1. A hidden software or hardware mechanism that permits system protection mechanisms to be circumvented. It is activated in some non-apparent manner (e.g., special 'random' key sequence at a terminal). 2. A feature in a cipher or a puzzle which, given the necessary information, enable it to be solved easily.
Trojan Horse	1. A computer program with an apparently or actually useful function that contains additional (hidden) functions that covertly exploit the legitimate authorizations of the invoking process to the detriment of security. For example making a 'blind copy' of a sensitive file for creator of a Trojan Horse. 2. An entity which, when introduced to the system, has an unauthorised effect in addition to its authorised function. 3. Covert unauthorised instruction sequence hidden within legitimate code that can be triggered to attack systems in various ways.
Worm	A covertly inserted programme (Trojan Horse) that overwrites data in a computer memory.
Virus	A programme (usually destructive) that copies itself into other programme whenever its parent programme is executed.

Appendix B

CONSIDERATIONS FOR INTERNET USAGE

Ser	Threats	Security Measures
	<u>Leakage of Information</u>	
1.	Unauthorised access to classified defence information.	Internet terminal has to be as a stand alone and no information is stored in it.
2.	Leakage of information through electromagnetic pulses.	Internet terminal is separated from other computers and is isolated in a transmission protected room. Its cabling is physically separated from others.
3.	Leakage of information by own users to unauthorised recipients.	Internet terminals are limited in number, stored in locked rooms. They are used by dedicated users only. Use of diskette is not allowed.
	<u>Attack on Data</u>	
4.	Illegal extraction of data by outsiders.	Dedicated Internet terminal is not stored with data nor it is used for other purposes. The use of diskette is not allowed.
5.	Attack by foreigners on own IT system by use of logic bomb, trojan horses, time bombs and others.	Internet terminal is not netted to own IT networks. The terminal is only used for Internet and the use of diskette is not allowed.
	<u>Offensive Information</u>	
6.	Foreign psychological operations may attack by introducing negative propaganda.	Number of terminals are limited and are only used by predetermined staff.
7.	Users are exposed to pornography and offensive information.	Internet terminal users are limited to those who are authorised.
	<u>Transmission Security</u>	
8.	Transmission of classified data over the Internet.	Only authorised users are allowed to use and no classified data is to be transmitted.
9.	Transmitted data may be intercepted and modified without originator nor intended recipient knowing.	Procedures of acknowledgement and verification have to be established between originator and recipient.

REFERENCES

1. Alfin and Heidi Toffler, WAR AND ANTI WAR (New York: Warner Book, 1995).
2. Tricia Saddington, ed, SECURITY FOR SMALL COMPUTER SYSTEMS-A PRACTICAL GUIDE FOR USERS (London: Elsevier, 1988).
3. Jenifer Seberry and Josef Pieprzyk, CRYPTOGRAPHY- AN INTRODUCTION TO COMPUTER SECURITY (Sydney: Prentice Hall, 1989).
4. James Arlin Cooper, COMPUTER & COMMUNICATION SECURITY-STRATEGIES FOR THE 1990s (New York: McGraw-Hill Book Company, 1989).
5. D.W. Davies and W.L. Price, SECURITY FOR COMPUTER NETWORKS (Chichester: John Willey & Sons, 1994).
6. K.M. Jackson and J. Hruska, ed, COMPUTER SECURITY REFERENCE BOOK (Oxford: Butterworth - Heinemann Ltd, 1992).
7. DEFENCE TECHNOLOGY - A Survey, The Economist Magazine, June 10th - 16th 1995.
8. THE DUAL-USE TENDENCY - Defence Technologies, Asian Defence Journal, July 1995.
9. Professor You Ji, HIGH-TECH SHIFT FOR CHINA'S MILITARY - Special Report, Asian Defence Journal, September 1995.
10. Peter La Franchi, AUSTRALIA'S DEFENCE ACQUISITION PROGRAMME INTO THE 21 st CENTURY - Country Report, Asian Defence Journal, September 1995.



Brig Jen Mohd Zaki bin Wan Mohamad is presently the 'AKS Bahagian Komunikasi dan Elektronik Pertahanan.' He was commissioned into the Royal Signal Corp in 1964 and promoted to the rank of Brig Gen in 1996. He has held various command and staff appointments in the Signal Regiment and the Ministry of Defence.

ASSAULT ON PELELIU, WHY, WAS IT NECESSARY ?

Kol Mohd Kamal Omar

If military leaders were gifted with the same accuracy of foresight that they are with hindsight, undoubtedly the assault and capture of the Palaus would never have been attempted.

*J.B. Oldendorf
Admiral, USN*

efficiency of the U.S. Marine more convincingly demonstrated.

Are these true? Was Admiral Oldendorf trying to point-out that the assault could have been aborted? Meaning to say, that the assault was unnecessary? Or, was he trying to say that some other measures could have been executed, such as a by-pass operations being implemented? Or was he merely referring to the massive number of casualties inflicted in capturing the island of Peleliu? Otherwise, could it be that the ordered mission being executed due to poor intelligence assessment, or was it due to the failure of the planning staff in analyzing/reading and understanding correctly the rather fluid situation then? Was it due to a misconception by the military planners to look at the general situation on the whole? Or was it simply due to some self-projecting generals, as commonly do happen, in pursuit of self-glory?

If all these questions fit in, are we trying to say that all those heavy casualties inflicted were all for nothing? Before that, eventhough if these all are true, are we not trodding into quite a sensitive area? Is it of important to bring back this event, to surface it again after all these years? Should we not let those of whom have fallen and their love one, remain in peace? Yes, this

BACKGROUND

Above, a very open and brave words/ thoughts of one of several military thinkers/ strategists, that seemed to have raised some eyebrows, on the supposed to be a glorified assault of the Palaus (Peleliu) in the Pacific during the World War 11, of which now, seems to be an unnecessary mission. This goes the same with another retired U.S. Marine General, C.B. Cates, having to say:

Many factors combined to make the assault on Peleliu one of the least understood operations of World War 11. Yet it was one of the most vicious and stubbornly contested, and nowhere was the fighting

something difficult to come by. Nonetheless, the recent remarks of Robert McNamara on the Vietnam War, whereby he suddenly seems to have come up with a different opinion, of which might not be very comfortable for some, especially for those involved directly in the decision making of the so called - the war, at a wrong time, at a wrong place. Therefore, looking from afar, but more or less, from the same angle, as for Peleliu, I tend to wonder.

As for the question, whether this dreadful event should be brought back, to be discussed again, I would say it is most unfortunate, for as a professional soldier, case studies are of utmost important. *We need to read military history, study and understand their achievements, likewise, their blunders, too.* Further more, history tends to repeat itself, don't they?

Whatever, for those unfamiliar with Peleliu, especially for our Malaysian readers, you may wish to carry on reading this article and come up with your own conclusion at the end of it and be able to answer WHY the assault was carried out, or, WHY was it not supposed to be missioned.

ENROUTE TO PELELIU

To start with, let us refresh our memories on the Pacific War, of which, more or less, started with the rather amazing but embarrassing for some, on the Japanese attack of Pearl Harbour, on December 7, 1941. Since then, and until the war ended four years later, the Pacific Ocean turned into 'crimson tide'. The end of the war too, came suddenly as it had started but this time in the gruesome shape of mushrooms, amounting to an almost ever unknown, the exact figures of deaths. All these catastrophe were politically and militarily accomplished, not without Peleliu, to be part of it.

As viewed in relation to the strategic concept of the Pacific offensive as a whole, the seizure of the western Carolines, constituted a move, or less routine step, in gaining control of the approaches to Japan proper. Bases from which further attacks, ever closer in, could be mounted.

The direction of advance in the Pacific, from Hawaii and Australia, had been discussed on the highest strategic level, as early as January 1943. The two-pronged drive through the Central and Southern Pacific Theaters were planned during a series of meetings of the Combined Chiefs of Staff, namely President Roosevelt, Prime Minister Churchill and Generalissimo Chiang Kai-shek, of course, together with their respective principal advisors. The first major move to step up the speed and scope of the Pacific offensive, was issued on 12 March, largely as a result of the swift success of operations in the Marshalls. Admiral Nimitz was directed to occupy the Marianas-Palau line. It was designated OPERATION STALEMATE.

It was considered, that the Palaus, occupied with the defence of an estimated 5000 Japanese, stood as one of the key strongholds in Japan's second line of defence. Her first line were New Guinea, the Marshalls and the Carolines. The Palaus lay squarely on the flank of any attack approaching the Philippines from the southeast. It was therefore felt, that for General Douglas MacArthur, to have a successful invasion on the Philippines, the Palaus need to be seized first.

Peleliu, part of the Palaus, boasted a fine airfield long in operation, with an auxiliary strip building on the off-lying small island of Ngesebus, which, once captured, would make easier for other operations to be launched from. But, as the war prolonged in the Pacific, basing on successful sea battles, doubts seemed to play about in the planners mind on the need to seize the Palaus (Peleliu).

PELELIU ISLAND



PLANNING STAGE

At the higher echelons, the planning was largely generalized in nature and concerned mainly with top level strategic considerations. The operations to be launched on the Palaus was designated STALEMATE 11. Admiral Nimitz, designated Commander Third Fleet as over-all commander; Commander 111 Amphibious Force as Joint Expeditionary Forces Commander; and Commanding General Joint Expeditionary Troops with Major General Geiger, CG 111 AC, also designated as Commander Expeditionary Troops and Landing Forces. The 111 AC, consisting of the 1st Marine Division and 81st Infantry Division, was to assault the southern island of Peleliu and Angaur.

As had become standard practice long since in amphibious assaults, over-all plans paid due attention to all off-lying Japanese bases and facilities which might conceivably interfere with the attack on the target islands. One part of Third Fleets mission was defined thus:

Seek out and destroy hostile air and naval forces which threaten interference with STALEMATE 11 operations, in order to inflict maximum damage on the enemy and to protect our own forces.

Accordingly, the plan called for powerful strikes against Iwo Jima and Chichi Jima on 31 August - 2 September, Yap 7-8 September and Mindanao 9-14 September.

The command set-up on Peleliu and Angaur were as follows:

TG 3201: Peleliu Attack Force - TU
36.1.1: Peleliu Landing Group (1st Mar Div).

TG 32.2 : Angaur Attack Force - TU
36.1.2 : Angaur Landing Force (81 st Inf Div).

Detailed operational planning for the assault, basing on intelligence and current situation, was carried out in depth. These aspects, though of utmost important, will not be discussed here due to some limitations.

THE ASSAULT

The D-Day on Peleliu came on September 15, 1945. Naval gunfire and air strikes had softened up, presumably, the defenders for the past three days. The underwater demolition teams had cleared the approaches and scouted the reef. Under naval surface fire support, providing smoke and fire cover, the assault waves comprising the marines, infantries and the armour, moved in smoothly but later, to be surprised by the enemy well dug-in defences. This led to a long bloodied battle, lasting for more than two months, resulting in to 10000 casualties, to finally fully secure the six-mile-long, Peleliu.

At Peleliu, the enemy proved that they had profited from their bitter experiences of earlier operations, such as at Solomon's, Gilberts, Marshalls and Marianas : At Peleliu, the enemy made no suicidal banzai charges to hasten the decision; they carefully concealed their plans and dispositions; they nursed from their inferior strength the last ounce of resistance and delay, to extract the maximum cost from their conquerors. In these respects, Peleliu differed significantly from previous campaigns and set the pattern for things to come: Iwo Jima and Okinawa.

LESSON LEARNED

Peleliu, to some, brought an experience that they never ever, wished to be in again. To others, such as military leaders and military strategists, it brought out lessons to be reviewed and studied. Again, it depends on at what level,

are we looking at. Is it at the strategic, or at the tactical level. At tactical level, the following aspects brought out good lessons:

- * **good detailed planning on assault clearing of underwater obstacles**
- * **importance of naval surface fire support**
- * **close marine-infantry-armour cooperations**
- * **effective use of long-range flame throwers**
- * **new enemy tactics**
- * **and not forgetting, the courage shown.**

At the higher level, the planners, including the commanders, must be able to read the situation and must be prepared to be bold to change, according to the situation. Flexibility, as warranted in one of the principles of war, must be made use of accordingly. In this situation, the Strategy of Indirect Approach could have been implemented, of which I fail to understand why. But for one thing sure, Liddell Hart would have been very disappointed.

CONCLUSION

The incredible victory won at Midway, enabled the growing power of the US Navy to mount the largest amphibious assault in history,

projecting American Forces across the Pacific Island stepping stones to the very shores of Japan. The assault on Peleliu, however, could have turned the successful operations, sour. Must the assault on Peleliu (Palaus), be executed? Could it not be by-passed? Basing on the destroyed enemy air capabilities, was Peleliu really essential? To some, it was one of the tragedies of war ceased to be a vital objective to the Americans, long before the first Marine died on the island.

It was reported that on September 12, Admiral Halsey signaled Nimitz reporting that it appeared virtually all the enemy air capability on the islands had been wiped out and there were no shipping left to sink and the enemy's non-aggressive attitude. He urged, to no avail, that the assembling for the assault on the Palaus be switched to a full-scale invasion of Leyte in the Philippines. Nimitz and his CINCPAC planners were reluctant to call off the assault on the Palaus. They felt it was necessary to seize Palaus, for future staging point against Japan and the Philippines. Was it so?

Therefore, it is going to be with these conclusion, I will table at this juncture and it is entirely up to you, individual readers, to decide, whether the assault on Peleliu, was justified, or otherwise and you may have the privilege, to answer the question WHY?

BIBLIOGRAPHY

1. Bond, Brian - Liddell Hart, A Study of his Military Thought (London, 1976)
- 2.. Costello, John - The Pacific War (London and New York, 1981).
3. Hough, Frank O - The Assault on Peleliu (Marine HQ, 1950).
4. Wigmore, Lionel - The Japanese Imperial Thrust (Canberra, 1957).
5. Zich, Arthur - The Rising Sun (Alexandria, 1977).



Kol Mohd Kamal Omar was commissioned into the Royal Armoured Corps in 1967. Attended Staff College in Quetta, Pakistan and the Armed Forces Defence College (MPAT). Other overseas stints include the Armoured Gunnery Instructor UK, the International Senior Officers Amphibious Planning Course San Diego, USA, attached to the Australian Armoured Centre, Puckapunyal and served as UN observer in Iraq and Mozambique. Earned his Advance Diploma in Strategic Studies from UKM and was in MAF staff college as a Directing Staff. Currently he is the Director of the Armoured Corps.

"As a leader, one is bound to discover some weaknesses or inadequacies. If he is brave enough he would discard the ways and devise new ones....."

"If he does this and succeeds, then he is a leader. Otherwise he is merely a follower"

Datuk Seri Dr Mahathir Mohamad

PERLAKSANAAN SISTEM LATIHAN TEKNIKAL KOR JURUTERA LETRIK & JENTERA KE DALAM SISTEM LATIHAN VOKASIONAL NEGARA

Lt Kol Safii bin MÓhammad

PENDAHULUAN

Kor Jurutera Letrik dan Jentera (JLJ) berperanan untuk memberikan bantuan JLJ bagi menentukan kebolegunaan semua peralatan Tentera Darat kecuali alat-alat semboyan dan kenderaan jenis "C". Bagi membolehkan setiap anggotanya melaksanakan tanggungjawab masing-masing dengan berkesan, Kor JLJ telah merangkakan satu sistem latihan teknikal yang terperinci untuk mereka. Para pegawai JLJ perlu menjalani latihan dalam aspek-aspek kejuruteraan dan pengurusan kejuruteraan sementara anggota lain-lain pangkat (LLP) Kor JLJ pula perlu menjalani latihan teknikal bagi membolehkan mereka diiktiraf sebagai mekanik dan juruteknik Tentera Darat yang profesional.

Sebagai sebuah organisasi kejuruteraan Tentera Darat yang terulung, Kor JLJ yang mempunyai seramai kira-kira 6000 anggota boleh dikategorikan sebagai di antara organisasi kejuruteraan terbesar negara. Namun demikian, jika dibandingkan dengan organisasi kejuruteraan utama yang lain seperti Jabatan Kerja Raya, Tenaga Nasional dan Telekom Malaysia, Kor JLJ sebenarnya mempunyai keunikan dan keistimewaan yang tersendiri. Agensi-agensi berkenaan pada lazimnya, hanya mempunyai satu jenis bidang pengkhususan tetapi Kor JLJ mempunyai bidang tanggungjawab yang luas, meliputi 11 bidang kejuruteraan. Peralatan pertahanan yang diletakan di bawah tanggungjawabnya pula berteknologi tinggi serta terdiri dari pelbagai "variant".

Dengan bidang kepakaran yang begini luas, anggota-anggota JLJ yang juga mempunyai pendedahan dan pengalaman mendalam dalam teknologi pertahanan di samping kepakaran "dual usage" adalah merupakan aset penting kepada negara. Mereka sebenarnya merupakan suatu sumber tenaga mahir terbaik negara bagi mencapai matlamat Wawasan 2020. Anggota-anggota JLJ yang bersara atau menamatkan perkhidmatan boleh diterima untuk berkhidmat dengan firma-firma perindustrian dalam bidang-bidang yang bersesuaian tanpa perlu menjalani latihan asas. Ini sudah tentu akan menjimatkan masa, tenaga dan perbelanjaan yang pastinya akan memudahkan lagi pencapaian rancangan perindustrian negara.

Persoalannya sekarang ialah adakah mampu anggota-anggota JLJ yang dilatih dalam suasana dan corak ketenteraan mencapai tahap ketrampilan yang di tetapkan di peringkat kebangsaan? Selain itu, adakah sistem latihan teknikal Kor JLJ khususnya untuk anggota LLP sekarang bersesuaian dan selaras dengan sistem latihan yang ditetapkan oleh Majlis Latihan Vokasional Kebangsaan (MLVK) yang merupakan agensi yang merumuskan piawaian kepakaran pekerja teknikal negara? Walaupun pun jawapan kepada kemusyikilan ini, Kor JLJ sebenarnya mempunyai tanggungjawab untuk menentukan bahawa setiap anggotanya mendapat tahap latihan yang terbaik dan diiktiraf agar kepakaran yang mereka perolehi semasa dalam perkhidmatan boleh terus digunakan untuk membangunkan negara.

TUJUAN

Rencana ini bertujuan untuk membentangkan pelaksanaan sistem latihan teknikal JLJ ke dalam sistem latihan vokasional negara.

SISTEM LATIHAN SEMASA KOR JLJ

FALSAFAH LATIHAN KOR JLJ

Pelaksanaan latihan bagi anggota-anggota JLJ adalah berdasarkan kepada falsafah latihan Kor JLJ yang sedia termaktub seperti berikut:

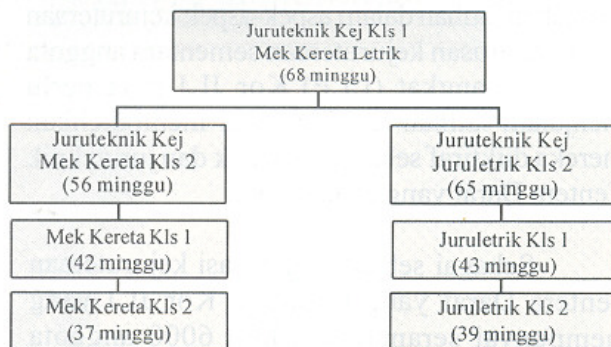
Latihan ketukangan Kor JLJ adalah satu usaha berterusan ke arah memperkembangkan potensi anggota JLJ dalam bidang kemahiran kejuruteraan mekanikal dan elektrik bermula dari latihan asas hingga keperingkat yang tertinggi yang dapat memenuhi keperluan TD serta diiktiraf oleh kerajaan. Usaha ini adalah bagi membentuk anggota JLJ yang mempunyai pengetahuan dan kemahiran yang tinggi serta daya pemikiran yang inovatif dan kreatif bagi membolehkan mereka melaksanakan tugas dan tanggungjawab Kor JLJ dengan cekap dan berkesan.

Selaras dengan falsafah latihan tersebut, matlamat Kor JLJ dalam aspek latihan teknikal sebenarnya adalah untuk melahirkan individu yang berkemahiran tinggi yang mampu menangani peralatan yang berteknologi canggih. Dalam aspek pengiktirafan pula, falsafah latihan ini memberi gambaran bahawa harapan Kor JLJ adalah supaya setiap anggotanya yang terlatih diberi pengiktirafan bukan sahaja di peringkat MLVK atau industri, tetapi juga di peringkat yang lebih tinggi seperti politeknik dan universiti.

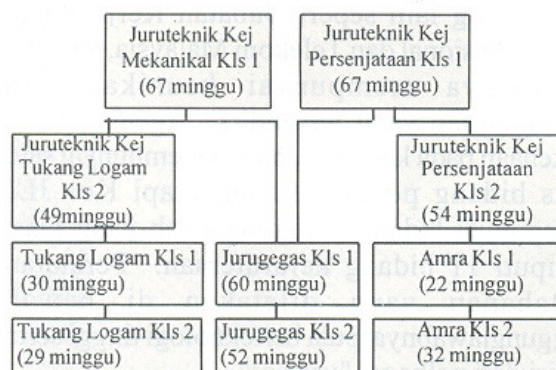
KONSEP LATIHAN TEKNIKAL ANGGOTA-ANGGOTA LLP KOR JLJ SEKARANG

Sistem latihan teknikal Kor JLJ sekarang dirangka berasaskan kepada keperluan Laporan Jawatankuasa Kabinet (CCR) yang menjadi asas kepada pelaksanaan skim gaji mengikut banci bagi anggota LLP Angkatan Tentera. Laporan ini menetapkan jenis-jenis kursus ketukangan yang perlu dihadiri oleh anggota Kor JLJ bagi kedua-dua peringkat mekanik dan juruteknik. Perkara dasar yang diberi penekanan dalam laporan ini ialah tempoh jangkamasa sesuatu kursus dan matapelajaran yang perlu. Struktur latihan teknikal bagi anggota-anggota LLP Kor JLJ sekarang adalah seperti berikut:

* Untuk Tred Mekanik Kereta/Letrik.

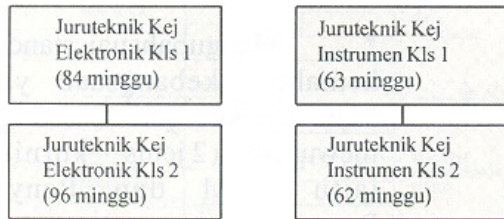


* Untuk Tred Tukang Logam, Jurugegas dan Amra

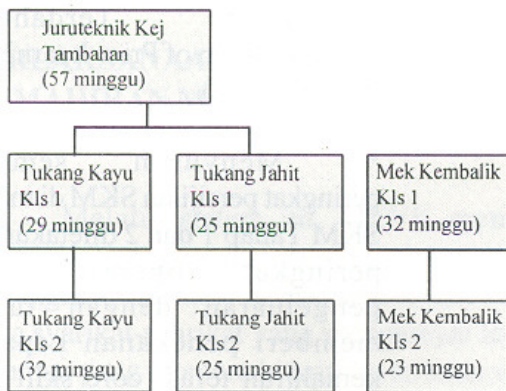


Catatan : Mek - Mekanik Kls - Kelas Kej - Kejuruteraan

* **Untuk Tred Elektronik dan instrument.**



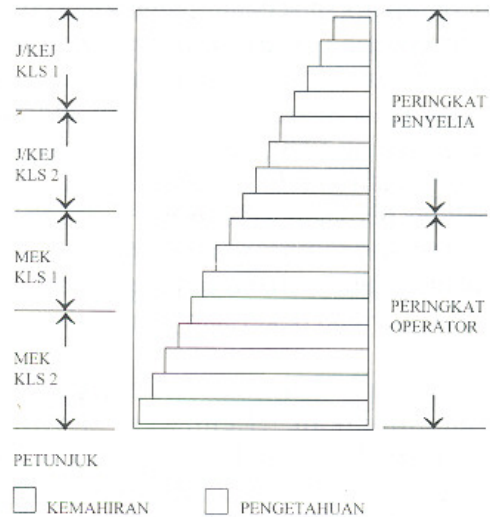
* **Untuk Tred Tukang Kayu, Tukang Jahit dan kembalik**



Kandungan latihan teknikal Kor JLJ secara dasarnya merangkumi 2 kategori matapelajaran iaitu akademik dan ketukangan. Mata pelajaran akademik meliputi matematik, sains kejuruteraan, lukisan teknik dan teknologi woksyop sementara matapelajaran ketukangan merangkumi pembelajaran teori dan amali pelbagai bidang kejuruteraan dengan penekanan kepada peralatan-peralatan Tentera Darat yang menjadi tanggungjawab Kor JLJ. Bagi peringkat juruteknik pula matapelajaran pengurusan turut diajar bagi menentukan mereka yang telah dilatih mampu menjadi penyelia yang berkesan. Struktur kandungan latihan ini mengikut hubungkait kemahiran dan pengetahuan adalah seperti rajah 1.

Selain perlu memenuhi ketetapan Laporan Jawatankuasa Kabinet mengenai sistem gaji mengikut banci, sistem latihan teknikal untuk

Rajah 1



LLP Kor JLJ juga direkabentuk untuk memenuhi keperluan Pendekatan Latihan Secara Sistem (PLSS) yang diamalkan oleh Tentera Darat sekarang. Ini bererti latihan yang direkabentuk mestilah menepati keperluan spesifikasi kerja yang bakal menjadi tanggungjawab mereka yang menerima latihan. Dengan pendekatan ini, sistem latihan teknikal untuk LLP Kor JLJ sekarang hanya perlu memberi penekanan kepada bidang-bidang kejuruteraan dan teknologi peralatan yang ada dalam perkhidmatan Tentera Darat sahaja. Bidang teknologi lain yang tidak diamalkan dalam perkhidmatan tidak perlu dipelajari, walaupun ianya mungkin bersesuaian dengan bidang kepakaran anggota-anggota berkenaan.

SISTEM LATIHAN VOKASIONAL KEBANGSAAN

PERSIJILAN KEMAHIRAN KEBANGSAAN

Semasa di peringkat awal penubuhannya, Malaysia tidak mempunyai sebarang sistem latihan vokasional secara terperinci. Latihan vokasional pada ketika itu hanya dilaksanakan oleh pelbagai institusi awam dan swasta secara persendirian tanpa sebarang pengiktirafan di peringkat kebangsaan. Negara kita juga pada

masa itu, tidak mempunyai sebarang piawaian yang boleh di jadikan sebagai pengukur kepada ketrampilan pekerja-pekerja mahirnya. Oleh yang demikian, institusi-institusi latihan tadi telah mengeluarkan sendiri sijil masing-masing mengikut piawaian yang dibentuk berdasarkan kepada keperluan sendiri. Keadaan ini telah menimbulkan berbagai kekeliruan di kalangan majikan dan pengguna tenaga mahir untuk menentukan kelulusan mana yang lebih baik dan memenuhi keperluan pekerjaan yang sedia ada.

Menyedari akan masalah ini, kerajaan telah menubuhkan Lembaga Latihan Perindustrian dan Persijilan Ketukangan Kebangsaan (LLPPKK) pada tahun 1971, untuk menyelaraskan pembangunan piawaian kemahiran bagi memenuhi keperluan sebenar pengguna tenaga mahir negara. Dua tahun kemudian, Persijilan Kemahiran Kebangsaan telah diwujudkan dan calon-calon yang menduduki ujian ketukangan kebangsaan dengan jayanya dianugerahkan Sijil Kecekapan Ketukangan. Pada tahun 1989, Majlis Latihan Vokasional kebangsaan (MLVK) telah ditubuhkan bagi mengambilalih peranan LLPPKK. Tidak lama selepas itu, Sijil Kecekapan Ketukangan telah ditukarkan menjadi Sijil Kemahiran Malaysia (SKM).

Permohonan untuk menduduki ujian SKM dibuat secara persendirian oleh calon termasuk anggota-anggota tentera terus ke MLVK. Mereka kemudiannya akan menduduki ujian yang dilaksanakan secara berjadual dan dikendalikan oleh pemeriksa-pemeriksa yang terdiri dari kalangan anggota-anggota dari agensi kerajaan dan swasta yang dilantik oleh MLVK. Sistem ujian secara "terminal" ini bagaimanapun didapati mempunyai pelbagai kelemahan kerana terlalu "rigid" serta tidak mendorong individu untuk memperkembangkan kemahiran mereka. Lanjutan dari itu, MLVK terpaksa mencari alternatif lain bagi mengatasi masalah ini dan seterusnya mengenalpasti pendekatan-pendekatan berikut:

* Mewujudkan struktur SKM meliputi bidang pekerjaan yang lebih luas.

* Mengubahsuai standard kemahiran kebangsaan yang sedia ada dari "job - based" dan mewujudkan 2 jenis kurniaan iaitu SKM dan Penyata Pencapaian.

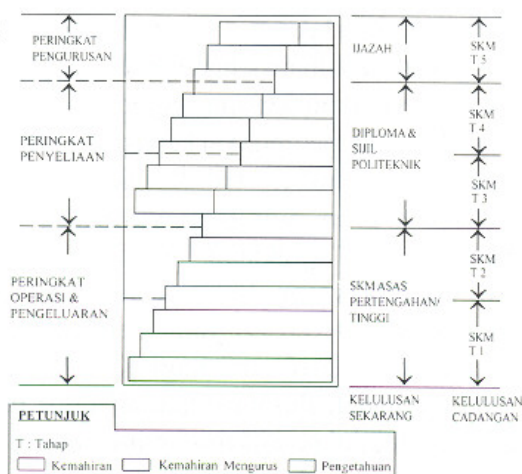
* Memperkenalkan Pentauliah Pembelajaran/ Pencapaian Terdahulu (Accreditation of Prior Learning/ Achievement).

* Menyusun semula peringkat persijilan SKM di mana SKM Tahap 1 dan 2 diletakan di peringkat operasi dan pengeluaran dengan turut memberi penekanan kepada kemahiran teras (core skill) di samping kemahiran vokasional, sementara SKM Tahap 3 diletakan di peringkat penyeliaan dengan turut memberi penekanan dalam kemahiran pengurusan. Konsep Struktur Kandungan Latihan bagi tiap-tiap tahap SKM adalah seperti di rajah 2:

* Mewujudkan suatu sistem penilaian dan verifikasi yang lebih sesuai bagi menentukan jaminan mutu.

* Melaksanakan latihan secara modul supaya aktiviti penilaian dan verifikasi dapat dijalankan dengan berkesan.

Rajah 2



PERLAKSANAAN PERSIJILAN KEMAHIRAN MALAYSIA MELALUI SISTEM PENTAULIAHAN

Melalui sistem ini, MLVK memberi pentaauliahan kepada organisasi-organisasi merangkumi institusi latihan awam dan swasta serta syarikat-syarikat yang mempunyai latihan dalaman yang memenuhi kriteria tertentu untuk menjalankan latihan dan penilaian sendiri terhadap pelatih-pelatih mereka dan memastikan mutu penilaian adalah memenuhi apa yang ditetapkan oleh MLVK. Dalam aspek ini, adalah menjadi tanggungjawab institusi yang berminat untuk memohon menjadi Pusat Bertauliah (Accredited Centre) kepada MLVK bagi melaksanakan persijilan SKM. MLVK kemudiannya akan memperakukan permohonan ini jika institusi terlibat mempunyai kesesuaian berikut:

- * Kemudahan bilik darjah dan bengkel untuk tujuan latihan dan penilaian.
- * Mempunyai fasiliti yang mencukupi dalam keadaan bolehguna dan bersesuaian dengan kehendak

kemahiran yang dinyatakan di dalam Piawaian Kemahiran Kebangsaan (PKK) atau National Occupation Skill Standard (NOSS).

- * Mempunyai tenaga pengajar yang terlatih dan berkelayakan serta mempunyai kelayakan sebagai penilai mengikut piawaian yang ditetapkan oleh MLVK.

- * Mempunyai pegawai penyelia yang bertindak sebagai Pegawai Pengesahan Dalaman untuk menjalankan verifikasi proses-proses penilaian.

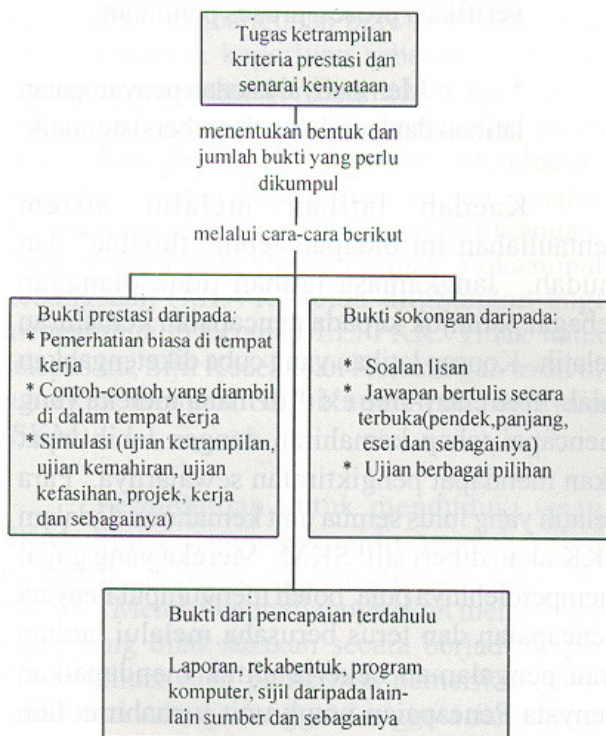
- * Mempunyai kaedah penyampaian latihan dan penilaian yang bersistematik.

Kaedah latihan melalui sistem pentaauliahan ini didapati lebih "flexible" dan mudah. Jangkamasa latihan tidak dianggap sebagai petunjuk kepada pencapaian kemahiran pelatih. Konsep latihan yang cuba diketengahkan ialah "free entry-free exit" di mana mereka yang mencapai tahap kemahiran dengan lebih tepat akan mendapat pengiktirafan sewajarnya. Para pelatih yang lulus semua unit kemahiran di dalam PKK akan diberi sijil SKM. Mereka yang gagal memperolehnya pula, boleh mengumpul Penyata Pencapaian dan terus berusaha melalui latihan atau pengalaman bekerja untuk mendapatkan Penyata Pencapaian untuk unit kemahiran lain sehingga mereka boleh memperolehi sijil penuh SKM.

Validasi atau penilaian dalam Sistem Pentaauliahan ini juga didapati berbeza dari cara konvensional yang dipraktikkan dalam kebanyakan sistem latihan vokasional sekarang. Penilaian SKM melalui sistem ini dibuat berdasarkan PKK

dan panduan penilaian yang berkaitan. Penilaian ini merupakan satu proses mengumpul bukti untuk membantu membuat keputusan bahawa kriteria prestasi telah dicapai. Laluan kepada penilaian untuk mendapatkan SKM haruslah terbuka untuk semua yang mempunyai potensi untuk berjaya. Laluan ini juga perlu bebas dari segala macam halangan seperti kaedah/kedudukan pembelajaran, had umur maksima/minima dan jangkamasa latihan. Kaedah penilaian adalah seperti rajah 3.

Rajah 3 : MODEL PENILAIAN SIJIL KEMAHIRAN MALAYSIA.



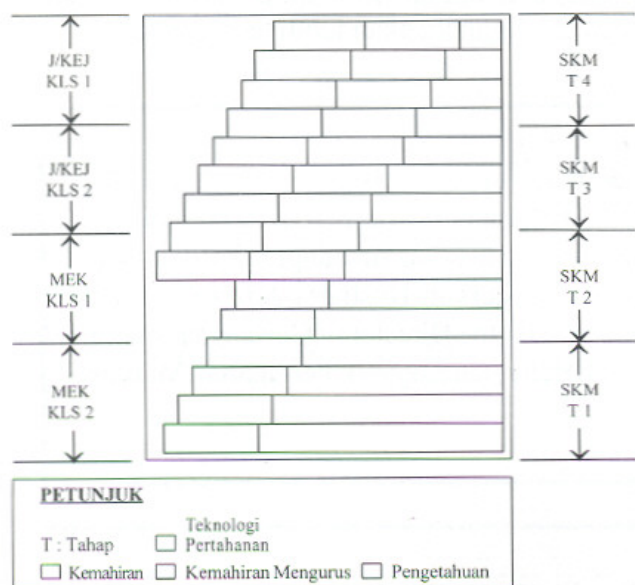
PENGUJUDAN PUSAT PENTAULIAHAN PERSIJILAN SKM BAGI KOR JLJ

Sebagai sebuah organisasi teknikal, Kor JLJ perlu menentukan agar latihan teknikal untuk anggota-anggota LLPnya dilaksanakan selaras

dengan kehendak MLVK. Perlaksanaan latihan yang tidak sehaluan dengan piawaian kebangsaan pasti merugikan kerana anggota-anggota LLP Kor JLJ yang mempunyai kepakaran tinggi dalam bidang teknikal tidak akan mendapat pengiktirafan yang sewajarnya di luar perkhidmatan Angkatan Tentera. Untuk tujuan itu, adalah wajar jika Institut Kejuruteraan Tentera Darat (IJED) yang bertanggungjawab melahirkan "krafman" bagi Kor JLJ diiktiraf sebagai sebuah Pusat Bertauliah untuk persijilan SKM. Melalui pengiktirafan ini, pelatih lepasan institut ini bukan sahaja akan mendapat pengiktirafan Tentera Darat, tetapi dalam masa yang sama akan memperolehi pengiktirafan dari badan piawaian tertinggi mengenai kemahiran.

Walaupun IJED dengan kemampuan dan kemudahannya yang sedia ada, tidak mungkin akan menghadapi masalah besar untuk berfungsi sebagai Pusat Bertauliah yang berkesan, usaha untuk menjadikannya sebagai sebuah Pusat Bertauliah Persijilan SKM bagaimanapun mempunyai pelbagai implikasi. Struktur kandungan latihan masakininya perlu diubahsuai bagi memenuhi kehendak PKK. IJED bagaimanapun tidak seharusnya memansuhkan struktur kandungan latihan ini secara menyeluruh dan menggantikannya dengan struktur kandungan latihan SKM sepenuhnya. Keadaan ini akan menjejaskan kepentingan perkhidmatan kerana pendekatan sebegini akan menyebabkan matapelajaran yang berkaitan dengan teknologi dan peralatan pertahanan terhapus. Matapelajaran akademik dan pengetahuan lain pula masih perlu dikekalkan agar wawasan Kor JLJ untuk mendapat pengiktirafan dari pusat-pusat pengajian tinggi tidak terjejas. Struktur kandungan latihan yang sepatutnya dilaksanakan di IJED dengan itu harus berbentuk seperti rajah 4.

Rajah 4: CADANGAN STRUKTUR KANDUNGAN LATIHAN GABUNGAN.



Gaji Banci juga perlu dikaji. Ketetapan laporan ini didapati terlalu ketat dan kesesuaian penggunaannya pada masa kini boleh dipertikaikan. Persoalannya, adakah sesuai untuk mengukur ketrampilan individu hanya berasaskan kepada jangkamasa latihan yang dihadiri dan seterusnya memberikan imbuhan tambahan kerana pencapaian ini? Bukankah lebih baik jika ketrampilan itu dinilai berdasarkan kemampuan melaksanakan tugas kemahiran selaras dengan piawaian yang ditetapkan? Selagi laporan Jawatankuasa Kabinet ini dianggap sebagai ketetapan yang kekal, sistem latihan teknikal dalam Kor JLJ tidak akan dapat berkembang maju.

PENUTUP

Sistem latihan teknikal bagi LLP Kor JLJ sekarang didapati telah dapat mencapai matlamat untuk melahirkan anggota-anggota yang cekap dan mahir dalam menentukan kebolegunaan peralatan-peralatan Tentera Darat. Kandungan latihan ini bagaimanapun didapati kurang bersesuaian untuk tujuan pengiktirafan sekarang kerana ia telah direkabentuk berdasarkan kepada keperluan pengiktirafan gaji dan bukannya berasaskan kepada keperluan memenuhi tahap ketrampilan anggota. Masalah ini telah menyebabkan usaha Kor JLJ untuk memperolehi pengiktirafan dari agensi awam menjadi terjejas.

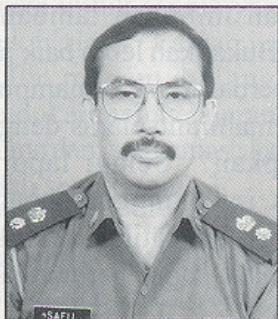
Sistem latihan teknikal anggota-anggota LLP Kor JLJ dengan itu perlu dirombakrawat sepenuhnya. Sistem ini perlu mengambilkira keperluan sistem latihan vokasional negara sekarang yang menjadi piawaian latihan bagi melahirkan pekerja mahir. Sistem ini bagaimanapun tidak boleh mengabaikan matapelajaran teknologi pertahanan yang menjadi "benchmark" kepada kepakaran anggota-anggota JLJ dan bagi menjamin kepentingan perkhidmatan sentiasa terpelihara. Dengan pelaksanaan sistem

Selain dari itu, sistem pembelajaran yang dipraktikkan di IJED sekarang perlu juga dikaji semula. Ianya perlu bersifat lebih "flexible" dan mudah. Para jurulatih dan tenaga pengajarnya pula perlu lebih terbuka, berkelayakan dan berkemahiran. Mereka mestilah memahami sepenuhnya konsep latihan berasaskan ketrampilan (competency-based-learning) selain boleh melatih, membimbing dan mendorong pelatih dalam mempelajari kemahiran. Kaedah validasi dan penilaian di IJED juga perlu dipertingkatkan. Validasi yang dilaksanakan tidak seharusnya bersifat terlalu akademik dan ketat. Apa yang penting ialah penilaian yang dilaksanakan hendaklah boleh memberi maklumbalas kepada pelatih mengenai kelemahan yang perlu diperbaiki untuk meningkatkan ketrampilan.

Untuk membolehkan IJED berfungsi sebagai Pusat Bertauliah yang cemerlang, Laporan Jawatankuasa Kabinet Mengenai Sistem

latihan teknikal yang menggabungkan keperluan kemahiran negara. Teknologi pertahanan dan aspek akademik, Kor JLJ bukan sahaja mampu melahirkan anggota-anggota yang cekap tetapi

turut menerima pengiktirafan yang sewajarnya dari agensi dan institusi awam. Peranan Kor JLJ dalam pencapaian rancangan pembangunan negara dengan itu akan lebih terserlah lagi.



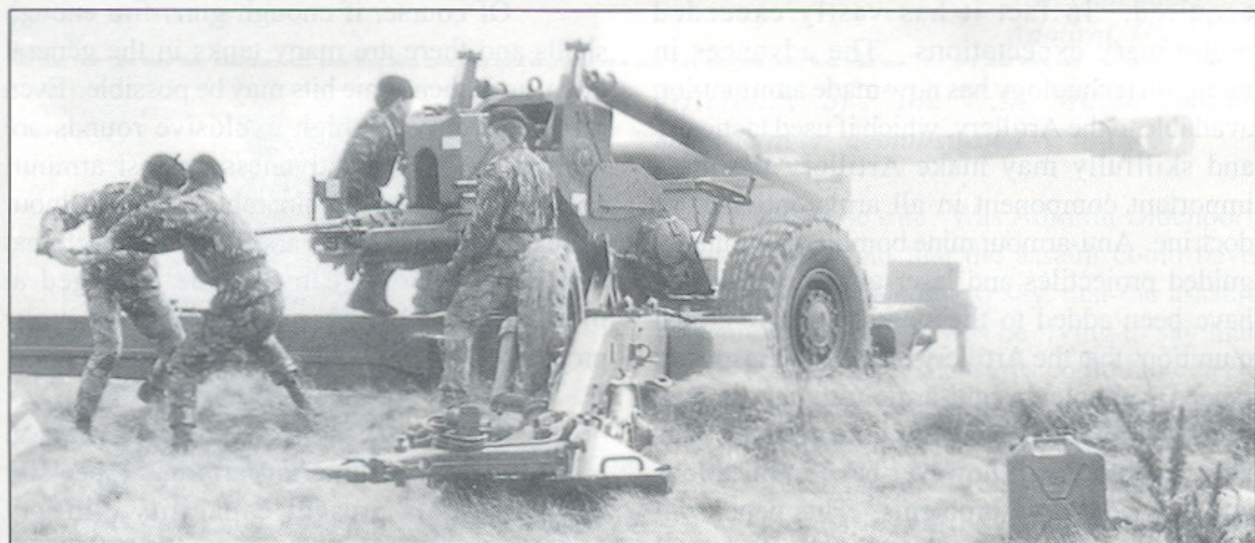
Lt Kol Mohd Safii Mohammad was commissioned into the EME Corps on 13 October 1972. He has held various staff appointments at Formations and Ministry level. He holds first degree in Electrical Engineering from UTM and Masters in Business Administration (MBA) from UKM. He is presently the Director of Cawangan Sistem Komputer Logistik (CSKL), Bahagian Logistik Pertahanan Markas ATM.

"...the thing to do is to get good people and give them responsibility which is what they like.....that's the only way they can come up, prove their worth. You have to know your people and be confident in their ability from the start".

*Tan Sri Dato' Azman Hashim
Malaysian corporate figure*

FIELD ARTILLERY IN AN ANTI-ARMOUR ROLE IN THE FUTURE-PROBLEMS AND IMPLICATIONS

Lt Kol (B) Heera Singh



INTRODUCTION

The tank is considered the centerpiece of modern warfare and is one of the major weapons of present day armies. The present battle tank with its improved mobility, sophisticated armament which allows a hit with the first shot, makes it a very dangerous adversary indeed on the modern battle field. So much so that it is now considered the back bone and workhorse of modern armies and it will remain so in the near future. Indeed it has been said that for any battle group to be effective it must be built round a hard-core of tanks and other armored vehicles.

It is for these reasons that extensive research is at present being carried out in

anti-armour weaponry. Anti-armour weapons have already been introduced, which range from shoulder fired rocket driven shaped charges to wire guided missiles like the Milan, TOW, and the Dragon. These anti-armour missiles are deadly in the hands of a trained soldier. Anti-tank helicopters have also added a new dimension to the anti-armour concept. For the present however, all experts agree that even with the advent of these anti-tank missiles and other anti-armour means, the best counter-tank weapon is still the tank.

Artillery on the other hand has never been very effective against Armour. The probability of scoring direct hits on moving targets at long range is so low that Armour can advance through conventional Artillery fire with minimal

interference. History has shown that only about one percent of tank kills in World Wars 1 and 11, Korea and Vietnam were attributed to Artillery.

It has therefore been realized that for Artillery to be effective in the modern battle field, she has to acquire an anti-armour capability corresponding to the threat. This need for an anti-armour capability by the Artillery has been acquired. In fact it has vastly exceeded preliminary expectations. The advances in munition technology has now made ammunition available to the Artillery, which if used tactically and skillfully may make Artillery the most important component in all arms anti-armour doctrine. Anti-armour mine bomblets, terminally guided projectiles and laser guided projectiles have been added to the standard conventional munitions that the Artillery has. With the greater ranges available the anti-armour threat can now be dealt with way beyond the combat zone. This new capability will however have implications and may also pose problems. This paper will therefore try to analyse these implications and problems.

In this paper the generic term armour includes the whole armoured team i.e the light, medium and heavy tanks of the armoured cavalry, the infantry in armoured personnel carriers and self propelled Artillery.

PRESENT ARTILLERY ANTI-ARMOUR CAPABILITY

Using conventional ammunition, Field Artillery has at present, a very limited anti-armour capability. This is because Artillery has a severe restriction when firing in the indirect role, and that is, it is not accurate enough to engage pin point targets effectively. At present the only way

to engage these targets like an armoured vehicle is by adhering to slow, cumbersome technical procedures that use up a lot of ammunition. The targets also need to be observed, which is a very serious limitation especially when firing deep into enemy held territory. These procedures are made even more difficult when these targets are moving.

Of course, if enough guns fire enough shells and there are many tanks in the general target area, then some hits may be possible. Even then, conventional high explosive rounds are limited in their effectiveness against armour, unless they hit certain vulnerable points. Armour technology has also advanced rapidly such that armoured vehicles can only be damaged at present by special purpose anti-armour projectiles.

Field Artillery may however play an indirect role in countering armour, especially tanks, with its present capability. In any manoeuvre where tanks are involved with infantry on foot, the Artillery with its indirect fire capability will be able to neutralize the infantry. This may then render the tanks vulnerable to hand held anti -tank weapons. The other indirect effects of conventional Artillery fire on armour especially from medium or heavy guns is as follows:

- * Armour maybe forced to close down in the face of heavy Artillery fire. This may impede their momentum and lessen their security in mobile operations.
- * Smoke and dust caused by Artillery fire will decrease the effectiveness of their main armament due to the obscuration of their control instruments.

* Severe damage can be inflicted to external ancillaries such as radio antenna, driving and gunnery optics and external fuel tanks.

* General fighting efficiency and morale will be temporarily lowered due to the constraints placed on armour operations by Artillery fire.

TECHNOLOGY INNOVATION TO ENHANCE THE ARTILLERY ANTI-ARMOUR CAPABILITY IN THE FUTURE

The anti-armour capability of Field Artillery has been enhanced to a great extent recently due to technological innovations in the field of ammunition. This new generation of ammunition will greatly enhance the anti-armour capabilities of the Field Artillery system in the future. What is also important is the fact that with this new capability, Field Artillery will be able to engage armour targets at long ranges.

ANTI-ARMOUR MINEFIELD BOMBLETS

Technical Concept. These projectiles usually have a number of anti-armour mines packaged in several mine distribution canisters. When the projectile opens in mid air the mine-distribution canisters are ejected to form an instant mine field. These mines are equipped with an electronic fuse system which can be programmed to self destruct after a pre-determined time on the ground, in accordance with tactical requirements. A target sensor in the mine will cause the mine to detonate when it makes contact with any part of an armoured vehicle.

Operational Concept. With these anti-armour bomblets, Field Artillery will be able

to deliver anti-armour mine fields deep within enemy territory. The tactical implications of this new found ability are many. Firstly, with ranges of these projectiles going up to 16,000 metres, it means the anti-armour plan can be initiated very early. Enemy armour can be engaged even as they move out of their assembly areas.

The delivery of Artillery laid minefields will also be extremely rapid. A decision to deploy mines in a given area can be made and implemented within minutes. Once laid, these mine-fields can be maintained by firing more projectiles into areas where breaching has occurred. Contingency measures can also be taken immediately, once an advancing armoured column is sighted. Mines can be laid forward of the axis of advance of the column. Attempts to clear these minefields can be made difficult by harassing fire using conventional HE or improved Conventional Munition (ICM) shells. Armoured columns can thus be easily bogged down.

The combination of the mines strategic and tactical implications, will make these Artillery delivered anti-armour minefields a very important part of the anti-armour plan. They can be a major means of slowing and ultimately stopping massive armour assaults.

Limitations. These anti-armour mine bomblets do have certain limitation however. They cover both technical and tactical situations. They are:

* **Observation.** A principle in obstacle laying is that all obstacles including minefields must be covered by fire. Although indirect fire can be brought to bear in areas around the minefields, we would still need some form of observation to indicate the presence of the enemy in those areas. Otherwise to

fire indiscriminately would both be wasteful and dangerous as it would leave the firing unit vulnerable to detection by enemy locating devices. It will also be difficult to assess the effectiveness of any minefield without it being observed.

* **Doubled edged.** The capability to lay anti-tank minefields within minutes of the decision, can be a double edged weapon. Mine laying through the Artillery process can be a very quick and clinical process. In the heat of battle, there is every opportunity for wrong decisions to be made which could prove tactically fatal. This is especially so when these minefields will not be marked. Although a self destruct time mechanism is inbuilt within these projectiles, these minefields may limit own manoeuvre during short period of time.

* **Good intelligence.** For these anti-armour mine bomblets to be effective, targets way beyond enemy forward troops must be acquired. There are however problems in trying to acquire targets deep in enemy held territory. These are:

* Own forces operating deep within enemy territory are usually special forces who have got other specific tasks. They may be able to call for these minefields to be laid but it may be at the expense of jeopardizing their own missions.

* Air photographs are useful but may be too late, as an armoured column may have moved way beyond where they were photographed, by the time the photograph reaches the correct intelligence agencies.

These anti-mine projectiles are therefore only as effective as the intelligence which acquires these targets. The intelligence will also have to be very current. Possible intelligence means would be RPV's or air observers.

LASER GUIDED PROJECTILES

Technical Concept. Laser guided projectiles are projectiles that are designed to hit pin point targets unlike conventional rounds which are basically area weapons. These projectiles are also known as Cannon-Launched Guided Projectiles (CLGP). The most well known of these projectiles is the U.S. made M712 Copperhead. These projectiles work on the technical concept of using laser designators operated by forward observers or RPV's to laser guide projectiles onto designated targets.

These laser guided projectiles do not make any special demands on the delivery means or the gun crew. When a projectile is fired it follows a normal ballistic trajectory towards the target area. A pre-set timer activates the laser seeker which scan the target area searching for the particular laser frequency that identifies its assigned laser designator. The forward observer keeps the laser designator spot on the target to be destroyed. The projectile then locks on to the designated target. The guidance unit computes the manoeuvre required for a direct hit and steers the shell directly to the target.

Operational Concept. Artillery with laser guided projectiles will provide commanders with another effective anti-armour option i.e. the ability to destroy armour beyond enemy lines. If enemy rear areas can be observed and armour targets acquired, then enemy armour might not be given the opportunity to reinforce or augment forward positions. They can also be

engaged long before their weapons are within lethal range of forward defensive positions.

CLGP's will certainly improve the accuracy of Field Artillery, in so far as the engagement of pin point targets are concerned. So long as targets are designated accurately, Artillery laser guided projectiles can hit a moving target with precision. Laser guided projectiles will also be effective as it attacks the top of the tank which is its weakest point. A direct hit by a projectile of this nature will immobilize or destroy any armoured fighting vehicle in the world.

Limitations. Limitation of these projectiles are as follows:

* **Guidance.** For laser guided projectiles to function there has to be some form of electronic guidance to designate the projectiles onto targets. These electronic designators, RPV's or even helicopters. Each designator operates on a different electronic code which is imparted to the laser beam by modulating process. If a number of designators operate with the same code in a combat zone, the projectiles will be confused and head for the strongest laser reflection, regardless of its cooperating designator.

* **Electronic Jamming.** Presently there exists laser warning receivers which can warn the enemy that laser designators are operating in the vicinity. Laser guided systems can therefore be jammed. This will disrupt fire unit/forward observer communications and thereby the fire control system

collapses. Targets are illuminated but no shells arrive or vice versa. Hence the whole system must be based on excellent and fully secure communications.

* **Line of Sight.** For the laser designer system to function effectively, targets must be designated. This means the forward observer teams with laser designators or RPV's with electronic designators must have the targets under visual of electronic observation. Failing this, targets cannot be designated and thereby the system ceases to function effectively. Visual observation is however not an easily attainable privilege on the battle field. Smoke screens, being under enemy direct or indirect fire and natural phenomena like rain, fog and mist can prevent effective visual observation and successful laser designation.

TERMINALLY GUIDED PROJECTILES

Technical Concept. These projectiles function according to the following sequence. At about 500 metres above the target area, an ejection charge scatters two or three submunitions out of the projectile. A time fuse initiates this process. At an altitude of about 150 metres the munition becomes completely functional. The munition's sensors will then scan the ground. If a target is recognized, the projectile will then set off, strike and destroy the target. The most well known projectile of this nature is the US made sense and destroy armour (SADARM) seeker fuse munition. These projectiles are delivered in a similar manner to conventional ammunition using normal delivery means.

Operational Concept. The operational implications of these projectiles are similar to those of the laser guided projectiles. These projectiles however, have the following advantages when compared to laser guided projectiles. They are:

- * It avoids the risk of the observer losing sight of the armoured target at the critical moment, as it passes behind vegetation or into dead ground. The projectile will operate even without an observer, provided sound intelligence is available on the target.

- * It avoids the risk of the observer giving away his position by use of his designator.

Limitation. The major limitation to this projectile is that it must be complemented with instant intelligence concerning enemy armour. If this is available then these projectiles become very effective indeed.

The other limitation is that its use is limited when enemy armour is in close combat or close proximity to our own armour. This is due to the fact that these projectiles do not have the ability to differentiate between friend and foe and therefore may destroy own armour.

PROBLEMS AND IMPLICATIONS FOR FIELD ARTILLERY IN THE PERFORMANCE OF THIS ANTI-ARMOUR ROLE

When the crossbow was introduced into Europe in the 10th Century AD it was said that the weapon was so lethal that it's devastating effects would put an end to the continual wars that had plagued medieval Europe. The effect of the crossbow was not the ending of war, but a change in organization and tactics of armies. The

introduction of precision anti-armour ammunition for the Field Artillery will similarly not end wars. However if it fulfills expectations, then this new weapon, will change the way that battles are fought. It will effect anti-armour tactics and doctrine. It will also affect armoured vehicle design. We therefore need to fully understand the implications, and prepare to use these ammunition to their optimum effect. At the same time a new weapon system like this is never without some inherent problems. These problems are both technical and tactical in nature.

PRIORITY OF ROLES

Artillery has not characteristically been used as an anti-armour weapon. The arrival of precision guided munitions in all its forms will change this concept. However, will this mean abandoning its present primary roles of close support and counter battery fire? The answer is a definite "No". There is no substitute for Artillery close support fire that can be obtained from other weapon systems like the mortars, attack helicopters or air strikes. Each of these weapon systems have their inherent weaknesses and will be utilized in certain tactical circumstances to complement Artillery fire. Artillery fire is a source of combat power that is available twenty four hours a day in all weather conditions. It would be naive to even think of replacing this source of fire power with another.

Based on this premise, how will the Artillery then take on this new anti-armour role? Obviously there has to be some form of compromise. However it must be clear that Artillery will not abandon it's primary roles. It will augment the anti-armour means in a combat zone but not at the expense of providing close fire support or counter battery fire.

FIELD ARTILLERY COMBAT REORGANIZATION

Artillery is a scare resource. There will always never be enough Artillery to support all units on the battlefield. This is in it's primary roles of close fire support and counter battery fire. Therefore to add a new anti-armour role will mean that the Artillery system is likely to be saturated with requests for fire missions in the future battlefield. While an Artillery battery can carry out all these tasks, it cannot do all of them simultaneously. The increased capabilities and consequently increased role therefore require more Artillery for maximum effectiveness.

A way out of this dilemma would be to establish an anti-armour battery in a general support regiment. This battery would have the anti-armour role as it's primary role. A step further would be to have an Artillery anti-armour regiment as part of Divisional Artillery. This regiment could have three anti-armour batteries which could be tasked on anti-armour roles in a Divisional area of operations. The number of guns in a firing unit may also be increased, say from six to eight guns. Guns can then be dispersed in half batteries of four pieces, each of which constitute an effective firing unit. This may allow one firing battery to engage on two diferent tasks simultaneously. It must be clarified here that this will only be done when necessary, and will not be the norm. There are advantages and disadvantages to all these solutions, and only a great deal of debate will find the optimum solution. The implications are however clear. Field Artillery may need to reorganize current combat organizations if it is to perform the anti-armour role effectively in the future.

LOGISTIC/AMMUNITION PROBLEMS

One of the major problems that Field Artillery faces in the modern battelfield is ammunition resupply. Firing at an intense rate of three rounds per minute, an Artillery battery will have depleted it's first line stock of one hundred and fifty rounds per gun, in fifty minutes. In the present day battlefield, it may be usual for an Artillery firing battery to expend three or four first line ammunition stocks to support any offensive or defensive manoeuvre as was clearly shown in the initial Egyptian offensive over the Bar-Lev line during the Yom Kippur war.

The addition of this new anti-armour role will add to this logistics problem. To carry out this new role, precision ammunition may have to be added to the first line ammunition stock. Conventional ammunition stocks will definitely remain the same. To decrease the stock to accommodate non-conventional ammunition would be detrimental to the effective performance of the fire support role in the combat zone. Commanders at all levels will therefore have to decide on how much more non-conventional ammunition to be brought to the combat zone. Logistics doctrine may perhaps be re-written to accommodate this extra ammunition load.

There will also be the cost factor that has to be taken into consideration when discussing precision anti-armour ammunitions. It is estimated that each of these new anti-armour projectiles will cost about US \$36,000/- (at the 1987 rate). It does not need an imaginative mind to conclude that it will be very expensive to train and be equipped with these types of ammunition. The question is, will most Armies with limited budgets be willing to have this weapon system at the expense of other arms and equipment like tanks and infantry?

It can however be debated that this precision ammunition will prove to be a more cost effective way of destroying enemy armour, than by tank engagements. This especially so in relation to its accuracy. If the fired projectile is a laser guided weapon, the hit probability over a range of 20 kilometers on a 6 foot square target would be 96%. This is a value impossible to achieve with standard ammunition. Therefore it may be argued that it is more cost effective to use a US \$36,000/- projectile to destroy a multi-million dollar tank rather than risk own tanks being destroyed in a tank to tank confrontation.

VULNERABILITY

This revolutionary new capability of the Field Artillery will have one adverse effect and that is, it will attract a great deal of unwelcome attention. Commanders at all levels will place the neutralization of Field Artillery high on the priority list since the effective and skillful use of Artillery can not only neutralize the opposing Field Artillery but now even the opposing armour. It is therefore clear that in the future battle field, Artillery firing units will undoubtedly be subjected to heavy counter battery fire and intense air strikes. This unwelcome attention will therefore increase the vulnerability of Field Artillery firing in the combat zone. To ensure survivability, there will have to be significant increase in the number of times that firing units will have to redeploy in certain tactical situations. This constant moving will affect the level of fire provided, because when moving, no firing can be done and thus no fire support can be provided.

CONCLUSION

The advent and arrival of precision munitions into the Field Artillery system, offers

an alternative anti-armour means that is at present showing great promise. These new Artillery precision projectiles offer a revolutionary advance in Field Artillery anti-armour capability. With this new anti-armour capability, the role of Artillery will be dramatically extended to embrace a completely new range of targets in the future. These new targets will cover all types of armour which may be engaged by the Artillery before they can even reach the main combat zone. This is especially so if Field Artillery is complemented by accurate target acquisition means.

These new projectiles are not paper concepts. They have been demonstrated and tested. The result have shown great promise and in certain instances have exceeded preliminary expectations. With this new capability, Field Artillery will play an important role in the all arms anti-armour doctrine.

This new capability and thus new role will however not be at the expense of the primary roles of Field Artillery, which is the provision of close fire support and counter battery fire. These roles will not be compromised. To effectively undertake this new role without jeopardizing its primary roles, Field Artillery may need to reorganize and restructure. Otherwise it will not be able to cope. As it is, in any battle field the Field Artillery system is normally saturated with requests for fire missions. More firing units would probably be an answer. So will a restructuring on the lines of eight gun batteries or anti-armour batteries or even Artillery anti-armour regiments. The message is however clear, Field Artillery will perhaps be the major threat to armour in the future battlefield. This will remain so, until and unless there is a corresponding increase in armour technology and effective counter measures for these anti-armour projectiles.

BIBLIOGRAPHY

ARTICLES AND PERIODICALS

Antoniotti, Joseph, Field Artillery - Its Role in Ground Warfare before 1990, NATO's Sixteen Nations, August - September 1983.

Backofen, Joseph E., Armor Technology Armour, May - June 1982.

Bishop, Richard M., Captain, Multiple Launch Rocket System Tactics, Field Artillery Journal, May - June 1985.

Burke, John T, Col, The Firepower Revolution, Army Nov 1988.

Devers, Jacob L., General, The Future of Armour, Armour, May June 1985.

Dodd, Norman L., Col, Stopping the Juggernaut - An all Arms anti-tank doctrine, Asian Defence Journal, 10/87.

Dodd, Norman L., Col, Armour in Battle, Asian Defence Journal, 2/85

Ellis, Andrew G., Major, Smart Weapons System for Engaging Second Echelon Forces, Field Artillery Journal, Dec 1989.

Feisenheyner, Stefan, Magic for the Artillery, Asian Defence Journal, 3/83.

Glanz, Meinhard, Lieut Gen, Degeating Enemy Armour, NATO's Sixteen Nations, Special 1/1983.

Leahy, James B., Major, Killing Enemy Armour, Infantry, Nov - Dec 1989.

Malone, Daniel K., Colonel, The Breakthrough in anti-tank warfare, NATO's Fifteen Nations, Feb - Mar 1982.

Rogers, Patrick F., The New Artillery, Field Artillery Journal, Nov - Dec 1980.



Lt Kol (B) Heera Singh was commissioned from the Indian Military Academy Dehradun, into the Royal Malaysian Artillery Corps in December 1975. Attended MTAT in 1990. He has served as a staff officer in the Mixed Military Working Group in UNTAC HQ in Phnom Penh, Cambodia in 1992/93. He also served in the UN HQ New York as UNTAC liason Officer in 1993. His last appointment in the Army was Commanding Officer 21 Arty Medium Regiment.

"A platoon leader doesn't get his platoon to go by getting up and shouting and saying, "I am smarter, I am bigger, I am stronger, I am the leader. "He gets men to go along with him because they want to do it for him and they believe in him"

Dwight David Eisenhower

PEMANSUHAN 'INITIAL SPARES REQUIREMENT' BAGI PERALATAN KAPITAL DI DALAM TENTERA DARAT

Oleh Lt Kol Khairuddin Hj Abu Bakar

PENDAHULUAN

Amalan menyediakan 'Initial Spares Requirement' (ISR) Kepada setiap peralatan yang diperkenalkan di dalam tentera adalah bertujuan membekal alatganti keperluan peralatan yang digunakan dalam tempoh masa dua tahun sebelum pengalaman penggunaan diperolehi. ISR atau Sukatan Alatganti Permulaan disediakan berasaskan kepada cadangan pembekal memandangkan pengguna berkurangan pengalaman dan kepakaran di dalam membuat ramalan yang tepat dan menyeluruh di dalam menyediakan skala. Alatganti yang disenaraikan sebagai 'schedule' dalam kontrak induk (kontrak peralatan kapital) akan dibuat penghantaran bersama dengan peralatan kapital berkenaan.

Jumlah alatganti dalam ISR berbeza mengikut jenis peralatan kapital yang dibuat perolehan. Namunpun begitu, pada hakikatnya 10% daripada peruntukan kontrak induk disediakan untuk pembelian ISR yang terdiri dari komponen utama dan yang terpenting dalam menjalankan sistem peralatan kapital.

Mengikut pengalaman pengguna, kebanyakan alatganti yang disenaraikan dalam ISR tidak digunakan sepenuhnya. Dengan demikian, maka timbulah beberapa isu yang berkontroversial iaitu siapa yang akan bertanggungjawab kepada alatganti ISR yang tidak bergerak apabila terdapat teguran dari pihak audit. Dalam situasi begini, sebagai 'custodian'

kepada aset kerajaan pihak Ordnans sering dipersalahkan menyimpan stok yang berlebihan dan tidak bergerak.

TUJUAN

Untuk mencadangkan pemansuhan ISR peralatan kapital dalam perkhidmatan tentera dan menggantikan dengan kontrak alatganti.

PERBINCANGAN

PERSEDIAAN SUKATAN ALATGANTI DALAM ISR

Sepertimana yang telah dijelaskan, ISR berbeza di antara satu sama lain kerana ianya tertakluk kepada peralatan kapital yang dibuat pembelian. Perlu dinyatakan bahawa bukan semua pembelian peralatan kapital dilengkapi dengan ISR. Ianya tertakluk kepada persetujuan di antara pihak pembekal dengan kerajaan sebelum sesuatu kontrak dimeteraikan. Pada dasarnya 10% daripada kos kontrak induk akan diperuntukkan untuk keperluan ISR. Pihak MK PL TD-Kumpulan JIJ dengan cadangan yang disyorkan oleh pihak pembekal akan menyediakan satu senarai alatganti termasuk kuantiti yang diperlukan beserta kos untuk satu item mengikut komponen utama. Sebagai contoh kepada komponen utama dalam sebuah kenderaan ianya merangkumi perkara-perkara seperti injin, gear box, transmission, clutch, distribution box dan axle.

Mengambil kesempatan dari kedaifan pengguna di atas kesahihan kebolegunaan alatganti tersebut, pihak pembekal akan mencadangkan beberapa alatganti yang mempunyai kosnya tinggi, kurang laris penggunaannya dan alatganti yang bakal dikeluarkan dari inventori pegangan mereka.

OBJEKTIF ISR

Objektif ISR bagi setiap peralatan kapital boleh dirumuskan seperti berikut:

Menetapkan secara kasar jenis alatganti peralatan kapital yang diperlukan dalam tempoh 2 tahun sebelum SAGAS dikeluarkan.

Untuk dijadikan sebagai ukuran dalam membuat perolehan perbekalan alatganti.

KEBAIKAN ISR

Kebaikan ISR boleh dihuraikan seperti berikut:

Menemui Keperluan Segera.

Di dalam tempoh masa 2 tahun (sebelum kontrak alatganti diwujudkan) ISR berupaya menampung keperluan segera sekiranya alatganti tersebut diperlukan. Ianya merupakan satu perjanjian pakej (package deal) dalam membantu pengguna memperolehi alatganti tertentu dalam tempoh masa 2 tahun sebelum kontrak alatganti ditandatangani

Tidak Perlu Kontrak Khusus.

Adalah difikir memadai kalau alatganti yang diperlukan dibuat penelitian dengan betul (if properly vetted), ianya tidak memerlukan satu kontrak khusus diikat

untuk alatganti senggaraan. Secara amnya, alatganti ini hanya khusus bagi keperluan peralatan kapital kegunaan pertahanan sahaja.

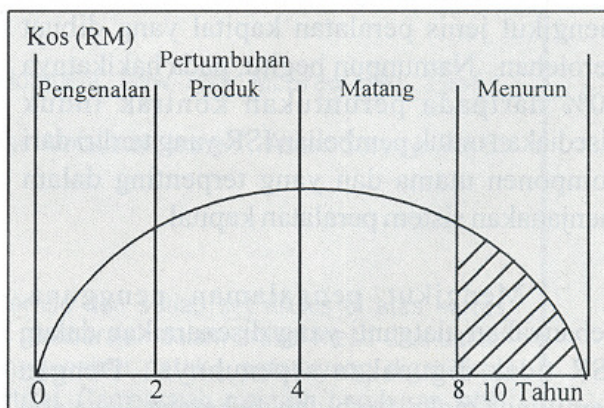
Tidak Memerlukan Peruntukan Kewangan Berasingan. Alatganti yang disenaraikan dalam ISR tidak memerlukan peruntukan kewangan berasingan. Hanya peruntukan pembangunan 'DE' sahaja digunakan.

KELEMAHAN ISR

Ketetapan dan kekerapan alatganti yang disenaraikan dalam ISR adalah diragui kegunaannya. Dari pengalaman yang lepas, kebanyakan alatganti yang disyorkan oleh pihak pembekal jarang digunakan. Kalau ianya digunakan sekalipun, kegunaannya hanya berlaku apabila peralatan kapital (produk) mencapai umur menurun dalam kitaran hayat produk. Lihat Rajah 1 di bawah.

Rajah 1

KITARAN HAYAT PRODUK



Beberapa kelemahan yang diutarakan di bawah perlu diberi perhatian serius. Antara kelemahannya adalah:

Kekerapan Penggunaan. Dari semakan yang dibuat, boleh dianggarkan di antara 60%-70% alat ganti ISR yang dibekalkan bersama dengan kontrak induk tidak digunakan dalam tempoh masa 2 tahun. Di atas kekurangan pengalaman dan kepakaran penggunaan, syor dari pembekal diterima secara total.

Tahap Pembaikan. Alat ganti yang disyorkan bercampur aduk di dalam semua tahap pembaikan. Seharusnya ianya diberi fokus kepada penggunaan untuk jangka masa 2 tahun pertama sahaja. Sebagai contoh:

Alat ganti Kenderaan

Mengambil contoh kenderaan Refrigeration Truck Type 10 FFR P 2 R 19 215 PFA (6x6, alat ganti yang disenaraikan dipecahkan kepada komponen utama seperti berikut:

* Engine Assembly

Nama Barang	Kuantiti	Harga Satu (RM)
Cylinder Liners	12	300.00
Piston	12	500.00
Crankshaft	01	600.00
Cylinder Head Gasket	03	200.00
Turbo Blower	01	200.00
* Clutch		
Clutch Disc	01	100.00

Sleeve	01	20.00
Cylinder Receiver	01	10.00
Gasket	03	10.00

Ram	02	10.00
-----	----	-------

* Gear Box		
Gear Box	01	5,000.00
Sleeve	08	20.00
Pneumatical Cylinder	01	100.00

* Distribution Box		
Distribution Box	01	3,000.00
Oil Pump	01	200.00
Pneumatical Cylinder	01	100.00
Absorber Block	04	200.00

* Transmission		
Cardan Shaft	04	180.00

* Axle		
Compling Device	01	200.00
Shaft	01	475.00
Planetary Shaft	01	300.00
Steering Geer	01	500.00
Eaton Pump	01	500.00

Kebanyakan alatganti yang disyorkan diatas adalah bagi kegunaan pembaikan barisan ketiga ke atas dan tidak ditumpukan khusus untuk rawatan sahaja. Lihat Rajah 2 di bawah.

Rajah 2

Tahap Barisan Pembaikan			
Pertama	Kedua	Ketiga	Keempat
Pasukan (DBK)	Wilayah Medan	WKSP Wilayah	WKSP Pusat

Bagi kontrak tambahan seperti Korean Jeep Infantry Fighting Vehicle, ISR untuk kenderaan tersebut tidak perlu lagi disenaraikan. Ini kerana diperingkat awal kontrak yang ditandatangani (kontrak pertama) telah pun menyenaraikan alatganti ISR yan diperlukan. Tambahan pula, terdapat banyak perbezaan alatganti yang disenarai pada setiap kontrak tambahan yang ditandatangani. Cadangan alatganti yang dibuat tidak munasabah dan praktikal untuk digunakan dalam tempoh 2 tahun. Contohnya adalah seperti berikut:

Nama Barang	Kuantiti	Harga Satu (USD)
Road Wheel	60	1,250.00
Band Assembly, Brake	22	280.51
Strainer, Filter	02	388.80
Fan Belt	12	115.37
Track Adjuster Assy	02	419.53

Alatganti Senjata Berat (Meriam).

Alatganti yang dicadangkan agak mustahil digunakan dalam tempoh masa 2 tahun. Tambahan pula, senjata tersebut masih lagi dalam tempoh waranti. Contoh alatganti adalah seperti berikut:

Nama Barang Kuantiti Harga Satu (RM)

Index		
Mechanism	36	15.85
Pin Firing	72	9.54
Spring Friction	72	4.69
Screw Cap Rnd Head	540	1.55
M 4 x 0.7 x 6		
Spring Helical Tortion	72	12.78

Alatganti Mesin Secure Facsimile.

Alatganti yang dicadangkan kurang bersesuaian dan mesin tersebut masih lagi dalam tempoh waranti. Contohnya alatganti adalah seperti berikut:

Nama Barang Kuantiti Harga Satu (RM)

Encryption Motherboard	01	8,800.00
RS-232C Interface Board	02	2,000.00
Scanner Block	01	875.00
Roller Head	02	145.00
Roller Exit Transmitting	02	52.00

Bagi item Encryption Motherboard, mungkin ianya diperlukan apabila terdapat peningkatan kepada 'memory' sahaja. Mengikut pada perkembangan teknologi, alatganti yang dicadangkan mungkin menjadi 'obsolescence' selepas peralatan tersebut diperkenalkan dalam inventori.

Membekal Alatganti Lewat.

Pada kebiasaan, sepatutnya penyerahan alatganti ISR dibuat semasa penerimaan peralatan kapital. Kadangkala terdapat alatganti yang dibekalkan telah melebihi 2 tahun selepas peralatan kapital diterima.

Alatganti Tidak Bergerak.

Dari cadangan yang dibuat oleh pembekal, terdapat sebahagian besar alatganti ISR tidak bergerak walaupun pembelian peralatan telah melebihi 5 tahun. Sebagai contoh:

Sibma	62 jenis item	RM2,226,843.00
Condo	97 jenis item	RM1,124,125.00
Hino	43 jenis item	RM 392,566.85

Mungkin cadangan dibuat oleh pembekal bertujuan untuk menghapuskan alatganti tersebut dari pegangan inventori mereka.

CADANGAN

Untuk menentukan tidak berlakunya kepincangan di dalam pentadbiran kontrak, usul berikut dicadangkan:

Setiap dokumen kontrak peralatan kapital yang diwujudkan mestilah berpandukan kepada 'Integrated Logistic Support' yang merangkumi aspek-aspek berikut:

Government's Technical Specifications

Senarai 'Special Tools'.

Latihan(yang berkaitan kepada peralatan kapital yang diberi seperti kenderaan,radar, senjata, missile dan optronik)

Inspection and Test Protocol.

Pre-delivery Inspection and Acceptance Certificate.

Final Delivery Inspection and Acceptance Certificate.

Cara pembungkusan

'Logistics Support Analysis'.

Prosedur untuk 'Purchase In Default'.

Setiap kontrak peralatan kapital mestilah ditandatangani bersama dengan kontrak alatganti.

Kontrak alatganti hendaklah diwujudkan selewat-lewatnya enam bulan selepas kontrak peralatan kapital ditandatangani

Senarai alatganti yang disertakan dalam kontrak mestilah yang diperlukan sepanjang hayat peralatan.

Hanya pembelian alatganti rawatan (Servicing item) sahaja dibuat melalui peruntukkan DE untuk tempoh dua tahun pertama.

JOMINI'S "DECISIVE POINTS" AND CLAUSEWITZ'S "CENTRES OF GRAVITY: AN ANALYSIS ON THE SIMILARITIES AND DIFFERENCES AND THEIR APPLICATIONS IN THE 1991 GULF WAR

Mej R. Anthony Raja Gopal

SYNOPSIS

Modern Warfare exacts detailed planning to wage. It aims to derive maximum results with minimum resources in both men and material. Jomini's concept of "Decisive Points" and Clausewitz's concept on "Centres of Gravity" in essence tells us the need to identify these centres and points to achieve decisive victory. This essay analyses the similarities and differences of both concepts and they were applied in the 1991 Gulf War.

INTRODUCTION

The nature of warfare in the eighteenth century as has been recorded by many a military historians, had been highly destructive in terms of men and material. The methods of waging war, were very much dependent upon prevailing military thoughts of the time which in essence were evolved and fine tuned from the lessons learnt from successes and failures of preceding campaigns. The evolution of warfare brought to the fore the military thoughts of the likes of Henry Lloyd, Templehof, Von Bulow, St Just, Antoine Henri Jomini and Clausewitz. Of all historians of 18th century, only Jomini and Clausewitz appear to have contributed vastly and effectively to the systematic evolution of military thoughts.

Antoine Henri Jomini (1779-1869) was born in the Vaud Canton, French Switzerland. He began his life's work in a quite unexciting manner as a banker in Paris. At the age of seventeen, he joined the French Army and later became Chief of Staff for Marshal Neve at Bantzen, held the rank of "general de brigade" in the French Army, joined the allied forces in August 1813 serving Alexander of Russia, and

held the Russian rank of General till his death.¹ Jomini was instrumental in the formation of the Nicholas Military Academy in Moscow in 1832 whilst in the Russian service. "Traite de grandes operations militaires."² was Jomini's first essay in military theory; but his greatest theoretical treatise was the "Precis de l'art de la guerre",³ or the "Precis" first published in 1838.

Carl Von Clausewitz (1780-1831) was born in Burg, Prussia and was the son of a retired lieutenant. A soldier in the Prussian Army having seen combat at the early age of twelve, Clausewitz was a student of Gerhard Von Scharnhorst, aide-de-camp to Prince August of Prussia, a Russian Colonel when he was Chief of Staff of the Russo-German region, and was a Major general as director of Military Academy in Berlin.⁴ In 1819, Clausewitz began the writing of "On War"⁵ which was never completed. "On War" in eight books, was published by his wife after his death.

AIM

This essay aims to analyse the similarities and differences between Jomini's concept of "

Decisive Points" and Clausewitz's concept of "Centres of Gravity" highlighting the examples of their applications in the 1991 Gulf war.

CONCEPTS

One of Jomini's principles expounded in the "Precis" is *"manoeuvring the mass of an army so as to threaten the decisive points in a theater of war and then to hurl all available forces against a fraction of the enemy force defending these points....."*⁶ Jomini's elaborated that a decisive point *"is a point", whose attack or capture would imperil or seriously weaken the enemy. It could be a road junction, a river crossing, a mountain pass, a supply base or an open flank of the enemy army itself"*⁷ In a sense, decisive points are critical areas (often vulnerable because it is envisaged that a large force will be thrown against a small enemy force at the decisive point) whose loss would ultimately lead to the defeat of enemy in battle. This concept centres on wars between armies and is about strategy and tactics.

The application of this concept was evident in the 1991 Gulf War where the Iraqi Republican Guards were dug in near the border of Iraq and Kuwait. The coalition forces, who wanted to destroy the Republican Guards, identified their supply and communication lines as decisive points. These lines (Convoys, bridges, bottlenecks and other communication nodes) were the main targets for the coalition airforces for weeks. The bombing of these targets resulted in the Guards being isolated, and eventually defeated during the final land assault.

Clausewitz wrote in Newtonian physics term *"A centre of Gravity is always found where the mass is concentrated most densely. It presents the most effective target for a blow:*

*furthermore, the heaviest blow is that struck by the centre of gravity. The same holds true in war. The fighting forces of each belligerent - whether a single state or an alliance of states, have a certain unity and therefore some cohesion. Where there is cohesion, the analogy of the centre of gravity can be applied,"*⁸

Jomini's concept of decisive points and Clausewitz' a concept on centre of gravity appear, at a glance, to be identical concepts. While Jomini was very much interested in identifying how battles were won and land captured vis-a-vis strategy and tactics, Clausewitz was thinking on a higher plane when he wrote *"For Alexander, Gustavus Adolphus, Charles XII and Frederick the Great, the centre of gravity was their Army. If the army had been destroyed, they would all have gone down in history as failures. In countries subject to domestic strife, the centre of gravity is generally the capital. In small countries that rely on large ones, it is usually the army of their protector. Among alliance, it lies in the community of interest, and in popular uprisings it is the personalities of the leaders and public opinion. It is against these that our energies should be directed."*⁹ Clearly the common denominator of these examples is cohesion : in this case the unifying forces holding society together. Clausewitz understood the relationship between war, politics and society well. To him, warfare was not the exclusive domain of the military. Clausewitz's concept of centre of gravity takes into account the political, social and economic factors. Needless to say, Clausewitz's concept was fundamentally different from Jomini's - its applications to war between nations. Clearly Clausewitz was thinking at the grand strategy level.

Decisive Points" and Clausewitz's concept of "Centres of Gravity" highlighting the examples of their applications in the 1991 Gulf war.

CONCEPTS

One of Jomini's principles expounded in the "Precis" is *"manoeuvring the mass of an army so as to threaten the decisive points in a theater of war and then to hurl all available forces against a fraction of the enemy force defending these points....."*⁶ Jomini's elaborated that a decisive point *"is a point", whose attack or capture would imperil or seriously weaken the enemy. It could be a road junction, a river crossing, a mountain pass, a supply base or an open flank of the enemy army itself"*⁷ In a sense, decisive points are critical areas (often vulnerable because it is envisaged that a large force will be thrown against a small enemy force at the decisive point) whose loss would ultimately lead to the defeat of enemy in battle. This concept centres on wars between armies and is about strategy and tactics.

The application of this concept was evident in the 1991 Gulf War where the Iraqi Republican Guards were dug in near the boarder of Iraq and Kuwait. The coalition forces, who wanted to destroy the Republican Guards, identified their supply and communication lines as decisive points. These lines (Convoys, bridges, bottlenecks and other communication nodes) were the main targets for the coalition airforces for weeks. The bombing of these targets resulted in the Guards being isolated, and eventually defeated during the final land assault.

Clausewitz wrote in Newtonian physics term *"A centre of Gravity is always found where the mass is concentrated most densely. It presents the most effective target for a blow:*

*furthermore, the heaviest blow is that struck by the centre of gravity. The same holds true in war. The fighting forces of each belligerent - whether a single state or an alliance of states, have a certain unity and therefore some cohesion. Where there is cohesion, the analogy of the centre of gravity can be applied,"*⁸

Jomini's concept of decisive points and Clausewitz' a concept on centre of gravity appear, at a glance, to be identical concepts. While Jomini was very much interested in identifying how battles were won and land captured vis-a-vis strategy and tactics, Clausewitz was thinking on a higher plane when he wrote *"For Alexander, Gustavus Adolphus, Charles XII and Frederick the Great, the centre of gravity was their Army. If the army had been destroyed, they would all have gone down in history as failures. In countries subject to domestic strife, the centre of gravity is generally the capital. In small countries that rely on large ones, it is usually the army of their protector. Among alliance, it lies in the community of interest, and in popular uprisings it is the personalities of the leaders and public opinion. It is against these that our energies should be directed."*⁹ Clearly the common denominator of these examples is cohesion : in this case the unifying forces holding society together. Clausewitz understood the relationship between war, politics and society well. To him, warfare was not the exclusive domain of the military. Clausewitz's concept of centre of gravity takes into account the political, social and economic factors. Needless to say, Clausewitz's concept was fundamentally different from Jomini's - its applications to war between nations. Clearly Clausewitz was thinking at the grand strategy level.

In the Gulf War of 1991, the centres of gravity of Iraq were its airforce, the Republican Guards, the oil based economy, Saddam Hussein and his military advisors. The US led coalition forces attacked these centres by bombing the air bases, installations and the Republican Guards, embargoed its oil exports and invited the Iraqi military to rise against its leadership.

The centre of gravity of the coalition forces were their common interests, the absence of direct Israeli involvement, the political will of the participating governments, public opinion (some may argue that this was hyped up in the media) and the armed forces of the allied countries. The Iraqi government used religion (Islam) in its attempts to break up the coalition, tried to involve Israel by using its Scuds, and attempted to sway western public opinion by parading captured prisoners of war on television. Throughout the conflict, both sides having correctly identified the centres of gravity of their opponents, sought very hard to destroy them. However, neither had the means to be completely successful in neutralising all of them.

IDENTIFYING DECISIVE POINTS AND CENTRES OF GRAVITY

Both Jomini and Clausewitz, placed great importance on identifying decisive points and centres of gravity. The similarities in theories of Jomini's "Decisive Points" and Clausewitz's "Centres of Gravity" essentially lays the ground rule for identifying weak points and the subsequent concentration of mass on these points to achieve decisive victory. Jomini wrote *"the great merit of Napoleon as a strategist lay in not simply manoeuvring for some limited advantage, but in identifying those (decisive) points."*¹⁰ Clausewitz on the other hand wrote *"The first task, then, in planning for a war is*

*to identify the enemy's centre of gravity, and if possible trace them back to a single one."*¹¹ To both theorists, the correct identification of these points and centres is the first and vital step to victory.

The task of identifying these centres and points lies in the leaders and planners. For the Iraqis, Saddam Hussein, running and authoritarian state, understood the importance of identifying the points and centres and subsequently decided on them. This approach was evident in his highly centralised command military structure. However, the same cannot be said for the US led coalition. The task of identifying and subsequently neutralising these points and centres was rightly left to the military commanders and strategists.

ABSENCE OF DECISIVE POINTS AND CENTRES OF GRAVITY

Due to the basic differences in concept, both theorists rightly differ in their arguments when there is a possibility that there is no decisive point or centre of gravity. Jomini in fact, admits one great exception to fundamental principle of massed, offensive action against a single point. Quoting from the French invasions of Spain and Russia, he wrote, *"In the campaign, it was literally pointless to mass forces because, there was no decisive point to attack : the enemy was everywhere, usually concealed behind a screen of popular hostility that blinded the invader."*¹²

After the initial successes over Kuwait, the Iraqi leadership failed to identify a decisive point in the militarily superior coalition forces. The US led coalition forces were to the West and South of Kuwait. The US Navy blockaded the Eastern coast. The Iraqi military's rear (to

the North) was constantly being bombed from the air. In frustration, the Iraqi infantry attacked Kafji, the border town just inside Saudi Arabia. This proved futile when the coalition forces recaptured the town a few days later.

In contrast, Clausewitz disregards the notion that there is no centre of gravity. He wrote, *"The first principle is that the ultimate substance of enemy strength must be traced back to the fewest possible sources, and ideally to one alone. The attack on these sources must be compressed into the fewest possible actions - again ideally into one."*¹³ Thus, to Clausewitz, there must be one or more identified centres of gravity.

The Iraqi leadership was able to identify correctly the common interests of the coalition forces as the most important centre of gravity. However, attempts to destroy this centre of gravity by exalting the Muslim partners and firing scuds into Israel proved unsuccessful. The coalition identified the Iraqi leadership as the most important centre of gravity. Saddam Hussein's command and control centres were constantly bombed. The coalition too was unsuccessful in destroying this centre of gravity. That the coalition was eventually victorious in my opinion, merely illustrates Jomini's concept of massing forces on the decisive point i.e. neutralising the Iraqi airforce.

COURSES OF ACTION

Both theorists in broad agreement to the courses of action required to be taken once the decisive points and centres of gravity are identified. In Jomini's words, *"The art of war consists of putting into action the greatest number of forces at the decisive point in the theatre of operations, the means of*

*accomplishing that is the choice of the correct line of operation."*¹⁴ (Using the correct line of operation was central to Jomini's theories. A discussion in this area is beyond the scope of this essay).¹⁵ Clausewitz does not differ from Jomini's views in that he asserts *"The second task is to ensure that the forces be used against that point are concentrated for a main offensive."*¹⁶

Having identified the decisive points and the centres of gravity the US led coalition forces employed all conventional forces available including strategic bombers, stealth fighters and cruise missiles onto Iraqi targets. Massive day and night air strikes were carried out prior to the ground assault by the coalition forces. The Iraqi leadership on the otherhand resorted to mainly battlefield defensive actions, propaganda and limited attacks by firing the scuds. In this the Iraqi's failed to use their armed forces effectively, particularly the airforces to the fullest.

ENEMY COALITION FORCES

Jomini appears to be single minded when fighting against a coalition force. He wrote *"With such an interior position, it is impossible to strike first one part of the enemy force, then the other defeating each in turn, although the enemy - if united - might be the stronger side."*¹⁷ The emphasis was first dividing the enemy by any means and subsequently defeating the fragmented force in succession.

A philosopher he is, Clausewitz offers alternatives in strategic terms on ways to deal with enemy coalition forces. He wrote *"In small countries that rely on large ones, it (the centre of gravity) is usually the army of their protector. Among alliance, it lies in the community of interest....."*¹⁸ He advocated

either a direct attack on the stronger force or at the invisible force holding the coalition. The Iraqi leadership, in the Gulf War wisely choose to attack the common interest of the coalition rather than to confront the principle military force in the coalition.

CONCLUSION

Jomini's concept of decisive points is a strategy to winning military battles. Essentially, identification of these points are pre-requisites to winning and competent leaders will be able to identify these points. Jomini identifies the decisive points in relation to strategy and geographycal features and approaches the subject in a mathematical manner.

Clausewitz's concept of centre of gravity is about grand strategy and winning wars. He

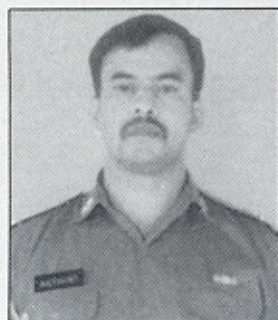
takes into consideration the political, economic and social factors in the formulation of his concept. While Jomini seeks the *physical destruction* of the enemy, Clausewitz emphasise the *destruction of enemy's will*.

The 1991 Gulf War has ample examples of application of these two concept. The genius of the leadership of the two adversaries is evident in the way they understood both concepts and applied them. Each concept has its own merits and demerits. This essay merely attempts to highlight the similarities and differences between the two concepts and their application as has been witnessed in the 1991 Gulf War.

Endnotes

1. For a more complete life history of Jomini see Crane Brinton, Gordon A Craig, Felix Gilbert, 'Jomini', in *Makers of Modern Strategy*, ed. by E.M. Earle (Princeton: Princeton University Press, 1971), Ch. 4, pp.81 - 83.
2. "Traite des grantes operation militaires" translates to Treatise on major military operations. It is mainly about the seven Year War, first published in 1805 and again in 1811.
3. Antoine Henri Jomini, "Precis de l' art de la guerre", new ed., 2 vols (Paris, 1855, repr. osnabruck, 1973), is available in an American translation by Major O.F Winship and lieutenant E.E. Mclean, *Summary of the Art of War* (New York, 1854).
4. For a more complete life history of Clausewitz see Peter Paret, Clausewitz', in *Makers of Modern Strategy*, ed. by Peter Paret (Oxford: Clarendon Press, 1986), ch. 7, pp. 188 -197.
5. The English edition used in the writing of this essay is Carl Von Clausewitz, on war, ed. and trans, by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984)
6. John Shy, 'Jomini' in *The Makers of Modern Strategy*, ed. by Peter Paret (Oxford: Clarendon Press, 1986), pp. 154.
7. Ibid., pp. 154.
8. Carl Von Clausewitz, *On War*, ed. and trans by Michael Howard and Peter Paret (Princeton: Princeton University Press, 1984). pp. 485 -486.
9. Ibid. pp. 154.
10. Shy, pp. 154.
11. Howard - Paret, pp. 617.

12. Shy, pp. 170
13. Howard - Paret, pp. 617
14. Quoted from *Precis* by Brinton, pp. 86.
15. For a more detailed study on lines of operations see Jomini and his summary of the Art of War-Condensed Version, ed. by Brig Gen J.D Hittle (Stockpole books, Harrisburg, PA), pp. 79-84.
16. Howard - Paret, pp. 619.
17. Shy, pp. 169
18. Howard-Paret, pp. 596.



Mej R. Anthony Raja Gopal was commissioned into the Royal Malaysian Artillery Corps on 16 December 1976. He has attended various courses both locally and overseas. He has held various regimental appointments as well as instructor at RMC and Directing Staff at PULADA. Attended Singapore Command and Staff College (SCSC) in 1992. Currently he is Second in Command of 2nd Regiment Royal Malaysian Artillery.

"The difference between a moral man and a man of honour is that the latter regrets a discreditable act even when it has worked"

Henry louis Mencken

KONSEP PERANG TERHAD

Kapt Saiful Anwar Md Ali

PENDAHULUAN

Apabila memperkatakan tentang Perang Terhad, persoalan yang akan timbul kepada kita ialah bolehkah perang dihadkan. Ini adalah kerana kita menggambarkan akan suasana dan akibat peperangan yang sungguh dasyat di mana ianya boleh memusnahkan segala-segalanya dan memusnahkan manusia dan tamadunya jikalau senjata nuklear digunakan. Perang Dunia Pertama (1914- 1918) yang bermula dalam bulan Ogos 1914 telah menunjukkan kepada dunia apa yang dikatakan "total war" di mana seluruh rakyat dikerahkan untuk berperang dan segala apa yang ada digunakan untuk tujuan tersebut. Negara Perancis dalam bulan pertama peperangan tersebut telah memobilisasikan 1,300,000 anggota dan dalam bulan tersebut juga 600,900 anggota telah terbunuh dan cedera. Pada 1 Julai 1916, British telah melancarkan serangan dengan menggunakan 140,000 anggota dan pada hari yang sama mereka mengalami seramai 60,000 anggota terkorban dan cedera. Dalam kes yang lain Perancis mengalami kecelakaan apabila 160,000 anggota tenteranya terbunuh dan cedera hanya untuk menguasai kawasan 7000 ela dan di Passchendaele 370,000 tentera British mengalami perkara yang sama dengan tidak mendapatkan apa-apa¹. Perang Dunia Pertama ini melibatkan keseluruhan Eropah dan di peperangan ini senjata-senjata gas beracun mula digunakan oleh Jerman keatas Perancis dan mengakibatkan 1.3 juta anggota yang cedera dan terkorban².

Seorang pakar sejarah British membuat kesimpulan bahawa Perang Dunia Pertama ditentukan oleh jadual pergerakan keretapi. Ini

adalah kerana pengangkutan ini boleh digunakan untuk membawa tentera dengan ramai dan dalam masa yang terhad. Dalam ertikata lain siapa yang banyak mempunyai keretapi, peluang untuk memenangi peperangan adalah besar.

Timbul juga pendapat yang menyatakan bahawa, perang tidak dapat menyelesaikan masalah. Terdapat juga semangat anti tentera yang muncul di Perancis pada ketika ini yang berpendapat bahawa peperangan hendaklah dihadkan dengan tidak menggunakan senjata-senjata gas dan kimia.

Dalam Perang Dunia Kedua (1939-1945) pula, teknologi dan taktik telah bertukar. Ianya adalah lebih luas. Negara yang tidak terlibat bagaimanapun terpaksa memilih untuk menyokong kepada salah satu pihak sahaja. Pada 6 Ogos 1945, Amerika Syarikat (AS) telah menggunakan bom atom yang pertama ke atas Hiroshima dan 9 Ogos 1945 ke atas Nagasaki. Ini menyebabkan Jepun menyerah kalah kepada Amerika Syarikat dalam masa tidak sampai seminggu selepas itu³. Ini menunjukkan betapa dasyatnya senjata tersebut dan akibat daripada Perang Dunia Kedua ini perubahan terhadap struktur dunia politik telah berlaku.

PERMULAAN KEPADA PERANG TERHAD

Apabila munculnya senjata nuklear, berbagai bagai konsep telah diperkenalkan antaranya termasuklah cegahrintangan (deterrence), perang terhad (limited war), gencatan senjata dan kawalan senjata (disarmament and arms control) dan lain-lain.

Manusia sememangnya tahu akan akibatnya daripada melakukan sesuatu kesalahan, tetapi ia tetap juga hendak melakukannya. Contoh, mengedar dadah merupakan suatu kesalahan dan boleh dikenakan hukuman mandatori gantung sampai mati, tetapi masih ada lagi manusia yang melakukannya. Nyatalah di sini bahawa cegahrintangan itu tidak semestinya berjaya dilakukan. Di dalam konteks peperangan sekiranya gagal konsep cegahrintangan ini, maka perang nuklear akan berlaku sehingga boleh meletusnya Perang Dunia Ketiga dan menghapuskan segala-galanya di muka bumi ini, oleh yang demikian ianya perlulah dihadkan. Walau bagaimanapun kebanyakan pendapat bersetuju dengan strategi cegahrintangan ini boleh mengurangkan berlakunya peperangan.

Walaupun cegahrintangan dikatakan boleh mengelak dari berlakunya peperangan, kesilapan penggunaan dan kegagalan peralatan yang berteknologi tinggi itu juga boleh mencetuskan peperangan sepertimana yang telah berlaku di dalam tahun 1950an di mana maklumat radar kepunyaan Amerika Syarikat telah di salah tafsirkan sekumpulan angsa yang menyeberangi Lautan Artik, sebagai satu skuadron kapal terbang pejuang Soviet menghala ke arah mereka⁴. Bayangkanlah sekiranya pengendalian sistem persenjataan nuklear berlaku sedemikian rupa, yang sudah pastinya akan mencetuskan peperangan, di mana strategi cegahrintangan tiada mempunyai kuasa untuk mencegah daripada berlaku.

Secara rasional, peperangan tidak boleh berlaku tanpa sebab, tetapi ada juga mereka yang mahu berperang walaupun tiada sebab-sebab yang tertentu dan kadangkala perang berlaku dengan tidak sengaja. Jadi bagaimanakah boleh dihadkan supaya tidak merebak? Selepas Perang Dunia Kedua, berlaku kemelut di mana dunia terpaksa mengambil tindakan contohnya ke atas

Perang Korea. Perang ini hanya berlaku di Semenanjung Korea sahaja tetapi yang mengambil tindakan ialah Pertubuhan Bangsa-Bangsa Bersatu yang diketuai oleh Amerika Syarikat. China juga campurtangan dalam hal ini dengan menyebelahi Korea Utara. Ianya boleh mencetus peperangan yang besar dan akan merebak sekiranya Amerika Syarikat mengikut nasihat Panglima Pertubuhan Bangsa-Bangsa Bersatu pada ketika itu Jen Mac Arthur yang mengesyorkan supaya mengebom sasaran-sasaran di China dengan menggunakan senjata nuklear tetapi ianya telah ditolak oleh Amerika Syarikat kerana ditakuti merebak ke seluruh dunia. Akibatnya beliau telah di tarik balik penugasannya dari Pertubuhan Bangsa-Bangsa Bersatu.

Konsep perang terhad boleh dilihat dari segi keupayaan perang terhad dan berbagai-bagai segi termasuklah cara beroperasi. Persoalan yang timbul ialah bagaimana kita memastikan keupayaan yang digunakan terhadap kekerasan tidak mendatangkan malapetaka yang besar. Apakah keupayaan minima yang boleh digunakan? Bagaimana kalau keupayaan minima yang digunakan pun tidak boleh memenangi peperangan? Pakar strategis berpendapat bahawa perang terhad ini boleh digunakan sekiranya cegahrintangan gagal dan ramai percaya bahawa keupayaan perang terhad sebenarnya menambahkan lagi cegahrintangan. Bagaimanapun terdapat dua golongan yang berpendapat terhadap perang terhad ini iaitu golongan pesimis dan optimis. Golongan pesimis berpendapat bahawa perang terhad adalah perlu supaya boleh mencegah peperangan yang besar berlaku. Ianya tidak percaya cegahrintangan boleh berlaku dan dengan sebab itu perang terhad mestilah diadakan. Golongan optimis pula berkehendakkan keupayaan yang terhad supaya mencegah perang dari berlaku. Dengan keupayaan yang minima sahaja boleh menghalang

peperangan berlaku dalam ertikata lain melalui strategi cegahrintangan. Herman Kahn berpendapat bahawa patut ada senjata nuklear untuk digunakan semasa perang dan keupayaan perang terhad adalah diperlukan untuk selamat⁵.

JENIS-JENIS PERANG TERHAD

* **Geografi.** Dalam keadaan ini perang tersebut hanya dihadkan kepada kawasan-kawasan yang tertentu sahaja di muka bumi supaya tidak merebak keluar. Ianya bergantung kepada bentuk geografi itu sendiri sebagai contoh Perang Indo-Pakistan (1968), Perang Korea, Perang Vietnam, Perang Yom Kippur (1973), Perang Iran/Iraq dan perang Falkland. Kesemua ini adalah perang terhad. Perang Dunia Kedua bukanlah merupakan perang terhad kerana pihak-pihak yang berseturu berada di dalam konflik yang global di antara benua-benua. Perkara-perkara yang menjadi persoalan di dalam kriteria geografi ini ialah penglibatan kuasa-kuasa besar dalam perang ini misalnya seperti Perang Korea dan Perang Indo-Pakistan. Kedua-dua pihak yang berperang dibantu oleh kuasa-kuasa besar sama ada secara langsung atau tidak langsung. Perang terhad kadangkala dipanggil "local war" di mana tiada kuasa luar terlibat.

* **Objektif.** Perang terhad digunakan dalam mendapatkan objektif yang terhad. Apabila sesuatu pihak itu telah mencapai objektifnya maka perang boleh ditamatkan. Perang Dunia Kedua bukanlah merupakan perang terhad kerana ianya masih mempunyai objektif. Dalam kes ini Perang Vietnam merupakan perang terhad kerana objektif Amerika Syarikat adalah terhad kepada

mengekalkan kedaulatan Vietnam Selatan. Bagaimana pula tentang objektif Vietnam Utara? KEPADANYA merupakan satu peperangan dengan objektif menegakkan ideologi dan kedaulatan bangsa dan negara, meskipun akan mengalami risiko kemusnahan. Yang menjadi isu di sini siapakah dan pihak manakah yang akan menentukan definisi dan objektif yang terhad ini.

* **Cara.** Cara yang terhad (limited means) adalah berbalik kepada keupayaan. Ini bergantung kepada bilangan dan mutu persenjataan yang digunakan. Perang menjadi terhad bukanlah disebabkan tujuan telah tercapai tetapi apakah cara yang digunakan untuk memaksanya menjadi terhad. Dalam konteks ini, Perang Korea dikatakan perang terhad kerana walaupun kedua-dua pihak mempunyai senjata nuklear tetapi tiada siapa yang menggunakannya. Ini berlawanan dengan Perang Vietnam di mana pihak Amerika Syarikat tidak menggunakan sepenuhnya kekuatan senjata yang ada padanya tetapi bagi Vietnam ia menggunakan segala persenjataan mereka yang ada. Perkara yang menjadi persoalan mengenai penggunaan senjata yang terhad dalam konteks perang terhad ini, ialah sama ada mereka boleh bertahan daripada penggunaan senjata yang tidak dibenarkan di dalam memenangi konflik mereka. Dalam Perang Dunia Kedua yang dikatakan perang total itu, kesemua pihak telah menggunakan keseluruhan persenjataannya untuk memenangi peperangan tetapi mereka tidak menggunakan senjata gas beracun walaupun mereka mempunyai senjata berkenaan. Adakah kesedaran yang kecil

ini iaitu tidak menggunakan senjata gas-beracun boleh dikatakan bahawa Perang Dunia Kedua sebagai perang terhad? Bolehkah di zaman nuklear ini dikatakan perang terhad kepada penggunaan senjata nuklear yang terhad? Siapakah yang akan menentukan penggunaan cara yang terhad ini? Bagi pihak yang kuat (kuasa-kuasa besar) ia bolehlah mengatakan bahawa ianya menggunakan cara yang terhad. Bagaimana pula dengan pihak yang satu lagi sedangkan ia telah menggunakan segala cara yang mereka ada. Ini adalah antara beberapa isu yang ada.

* **Sasaran.** Selain daripada menentukan bilangan dan kualiti persenjataan yang digunakan dalam perang terhad, sasaran yang dipilih untuk melancarkan serangan juga mestilah terhad. Ianya terbahagi kepada dua iaitu sasaran awam (counter value) seperti penduduk, bandaraya, kilang, stesen janakuasa dan lain-lain dan sasaran tentera (counter forces) iaitu seperti tentera, pengkalan-pengkalan tentera dan sebagainya. Dalam perang Vietnam Amerika Syarikat telah mengebom Hanoi dan Haifong untuk memberi amaran kepada Vietnam Utara supaya tidak meyerang Vietnam Selatan. Penggunaan kaedah ini mungkin menarik minat kepada kuasa-kuasa besar.

Jadi jelaslah kepada kita bahawa terminologi perang terhad ini sukar untuk ditakrifkan kerana terhad itu melibatkan penilaian terhadap sesuatu had itu dan pandangan atau pendapat seseorang, dan negara dalam konteks yang besar. Unsur yang terpenting di dalam perang terhad ini ialah kawalan yang mana sukar untuk dilaksanakan apabila peperangan berlaku.

Perang mungkin terhad kepada suatu pihak tetapi tidak kepada pihak lain terutamanya apabila negaranya diceroboh. R. Osgood mendefinisikan perang terhad seperti berikut: "*A limited war is generally conceived to be a war fought for end far short of the complete subordination of one state's will to another's and by means involving far less than the total military resources of the belligerents, learning the Civilian life and the armed forces of the belligerents largely intact and leading to a bargained termination* ⁶."

MASALAH PERANG TERHAD

Kebanyakan negara-negara sukar untuk mengenalpasti objektif yang terhad dan menggunakan cara yang terhad di dalam peperangan. Apabila peperangan berlaku, maka timbullah moral dan emosi yang tinggi di dalam menentang sesuatu kejahatan yang tidak boleh dikompromi sama sekali. Di dalam Perang Dunia Pertama dan Kedua, Kaiser dan Hitler melaksanakan tugas syaitan di mana kompromi langsung tidak difikirkan. Terpaksa menyerah kalah adalah merupakan suatu penghormatan tetapi lari dari menerima risiko peperangan adalah merupakan pembelot yang tidak bermoral.

Pihak yang bermusuhan terpaksa lah berfikir secara lebih rasional dan mengamalkan sikap fungsional terhadap peperangan bagi membolehkan mereka menerima keputusan, walaupun tidak memuaskan. Kemungkinan ini adalah kerana keputusan kepada objektif yang terhad dan kompromi merupakan suatu keadaan yang tidak selesa dan mendapati sukar untuk menahan diri daripada peperangan. Semasa melepaskan jawatannya dalam pemerintahan Perang Korea, Jen Douglas Mac Arthur telah berkata "*tiada penggantian kepada kemenangan*". Ini jelas menunjukkan bahawa beliau sendiri mendapati betapa sukarnya untuk

menyesuaikan dengan idea yang dirancang bagi menahan diri daripada menggunakan sumber dan cara yang ada di dalam memenangi peperangan. Pada suatu ketika Amerika Syarikat mengalami kasualti yang tinggi disebabkan oleh serangan udara yang berpangkalan di Selatan China dan beliau hendak memusnahkan pengkalan tersebut. Beliau mempunyai kuasa untuk berbuat demikian dan boleh menyelamatkan banyak nyawa tetapi Presiden Truman berkeras tidak melancarkannya. Jika ini berlaku sudah pasti akan menimbulkan perang yang dahsyat dan mungkin meletusnya Perang Dunia Ketiga. Pada pandangan Mac Arthur Amerika Syarikat sengaja membiarkan tentera mereka terkorban. Beliau tidak memikirkan tentang fakta yang asas mengenai perang terhad yang mana merupakan proses politik yang dilakukan dengan cara ketenteraan, suatu tawar-menawar yang mencabar di mana tujuannya bukan untuk kemenangan dan bukan juga untuk kekalahan tetapi berperang dalam mana pihak musuh akan menyesuaikan dengan cara kompromi ke arah keamanan.

Tentera di dalam perang terhad ini mestilah mempunyai minda yang terbuka di mana perang ini merupakan suatu undang-undang yang baru dalam pertempuran. Apabila mempunyai peluang dan kuasa untuk berperang, pengawalan yang teliti adalah diperlukan supaya tidak digunakan sepenuhnya. Mara untuk mengejar musuh adalah tidak diperlukan kerana apabila berbuat demikian, ia akan terdesak dan berkemungkinan akan menggunakan segala bantuan yang ada dan ini akan mencetuskan peperangan menjadi lebih besar. Ini adalah kerana konsep perang terhad adalah rumit dan selalunya perang terhad akan mencetuskan kepada perang total.

Peningkatan (Escalation) terhadap peperangan juga dikaitkan dengan tahap

penggunaan kekerasan. Apabila keamanan (intensity) ini tercapai pada suatu tahap yang kritikal (critical point), pihak yang bertahan akan memohon untuk menamatkan peperangan. Keamanan perang ini juga dikatakan suatu strategi yang merbahaya di mana Herman Kahn menyatakan: "*The skillful player may get into the car quite drunk, throwing whisky bottles out of the windows to make it clear to everybody just how drunk he is. He wears very dark glasses so that it is obvious that he cannot see much, if anything. As soon as the car reaches high speed, he takes the steering wheel and throws it out of the window. If his opponent is watching, he has won. If his opponent is not watching he has a problem likewise if both players try this strategy*".

Di dalam perang terhad kualiti sedemikian mungkin digunakan dengan menunjukkan penggunaan kuasa yang ganas, tidak terkawal dan tidak mengambil kira akan sebab dan akibatnya. Inilah sebabnya perang terhad merupakan suatu persaingan yang mengambil risiko yang besar di mana kedua-duanya cuba mengatasi antara satu sama lain dalam permainan yang merbahaya ini. Taktik ini sekiranya tiada pengawalan akan merebak kepada perang total. Apa yang perlu dalam mencapai tujuan ini ialah suatu keamanan yang jitu di mana suatu tahap keganasan yang digunakan boleh menyebabkan satu atau kedua-dua pihak merasakan tidak boleh bertoleransi antara satu sama lain dan akhirnya bergerak kepada kedamaian.

PENUTUP

Perang terhad ini ialah suatu konsep yang sukar ditakrifkan dan bolehlah dikatakan bahawa ianya hanya ditakrifkan oleh pihak yang mempunyai kuasa besar sahaja. Ianya juga merupakan suatu keadaan yang susah untuk

berkompromi di mana kedua-dua pihak menyatakan bahawa perang mereka hanya terhad kepada objektif atau penggunaan senjata yang tertentu sahaja. Sukar untuk berkompromi ini adalah kerana kedua-dua pihak mempunyai objektif dan penggunaan senjata yang tersendiri di dalam menentukan tujuan mereka di dalam peperangan.

Pada dasarnya perang terhad ini hanya dapat digunakan oleh kuasa-kuasa yang besar sahaja kerana merekalah yang akan menentukan had-had atau limitasi yang ada pada mereka. Negara-negara kecil sudah tentunya akan berjuang demi kedaulatan negara mereka.

Akhir sekali, faktor yang paling utama dalam perang terhad ialah kawalan supaya perang terhad ini tidak merebak dan seterusnya menjadi perang global.

Nota Kaki

1. Ziegler, David W. 1984. War, Peace and International Politics. Canada. Little Brown and Company Ltd, ms 21.
2. Ibid, ms 26
3. Ibid, ms 40
4. Baylis, John. 1987. Contemporary Strategy Theories and Concepts. London. Croom Helm Ltd. ms 189.
5. Ibid, ms 190
6. Ibid, ms 194
7. Ibid, ms 201
8. Ibid, ms 203



Kapt Saiful Anwar Md Ali telah ditauliahkan kedalam Rejimen Askar Melayu DiRaja pada 23 Feb 85. Berkelulusan Diploma Pengajian Strategik dan Keselamatan dari UKM dan pernah menjadi jurulatih dan Ajutan di PUSWATAN. Pada masa ini beliau bertugas di 23 RAMD menjawat jawatan sebagai Ajutan.