



# MILIT

## MILITARY INSTITUTE OF TECHNOLOGY

EVOLUTION SINCE 1952





# MILIT

*In pursuit of creating  
techno warriors  
for next generation  
warfare*



**ARMY**



**NAVY**



**AIR FORCE**



The Military Institute of Technology (MILIT) is a Category 'A' Armed Forces Training Institute (AFTI) under the Headquarters, Integrated Defence Staff (HQ IDS).

MILIT was carved out of the Defence Institute of Advanced Technology (DIAT) and established on 19 January 2012 as the 52<sup>nd</sup> DRDO Lab. On 01 April 2015, it was constituted as an AFTI under HQ IDS. MILIT functions under the operational authority of HQ ID/DCIDS (Doctrine, Org & Trg) and administrative support of HQ Southern Command.

The Institute conducts training courses for the Officers of the three Services, Officers from friendly foreign countries and Officers of other Central Government Organisations.





# VISION

Strive to be a Centre of Excellence for training and education of the Indian Armed Forces in the areas of military technologies and related fields.







# MISSION

To provide understanding of principles and application of military technologies, management and operational planning to selected officers of the Armed Forces of mid-career seniority to enable them to effectively tenant command and staff appointments.

To undertake foundational training of officers in select disciplines of Science, Engineering and Technology relevant to military systems.

# VICTORY



# THROUGH

# TECHNOLOGY



# Foreword

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This Coffee Table Book charts the history and growth of MILIT not only since its formation in 2012 but also includes the legacy MILIT has since its inception of Technical Staff Course in 1952 and thereafter as IAS, IAT and DIAT. The Technical Staff Course has been rechristened as Defence Services Technical Staff Course (DSTSC) since 2018.

Sources of information that have been referred to while compiling this Coffee Table Book include the following:

- History & Growth Document published by IAT in 2003 on the occasion of Golden Jubilee
- Salwan Committee Report on Restructuring of DIAT, DU, Pune and Establishment of MILIT, 2011
- Vision Document of MILIT, 2012
- Handing/Taking Over Notes of Commandants
- Annual Inspection Reports

Interviews and discussions with the following has contributed immensely in the compilation of this document and accordingly MILIT is indebted to them for their association with the organisation and contributions towards this document:

- Maj Gen Ravi Saxena, 1<sup>st</sup> Director & Commandant
- AVM PP Khandekar, 2<sup>nd</sup> Director & Commandant
- R Adm AS Sethi, 1<sup>st</sup> Commandant of MILIT as AFTI
- Brig PR Deshpande, 1<sup>st</sup> Deputy Commandant
- Brig G Venu, 1<sup>st</sup> CoA
- Cmde Vikram Sharma, HoF (Navy) during formation of MILIT
- Cdr KK Mahapatra, SO to Commandant during formation of MILIT
- R Kalaskar, Sc 'E', 1<sup>st</sup> DRDO Sc to opt for MILIT during formation
- Gp Capt V Anil Kumar, HoF (Armt) (2015-17) & DS Coord (2019-21)
- Capt (IN) D Rajeev, HoF (Navy), OiC TSG & HMMG (2016-22)





# Chief of Integrated Defence Staff to the Chairman Chiefs of Staff Committee (CISC)

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The Military Institute of Technology (MILIT) is a tri-services institution, that caters to grooming young military leaders from all the three Services, to enable them to tenant higher command and staff appointments with a clear edge on technological aspects of warfare. The institute can trace back its founder to Dr Pratik Blackett, a Nobel Laureate in physics (1948) heading the Physics Dept of Imperial College, London. The second founder was Dr Daulat Singh Kothari, SA to Defence Minister (1948-1968). The erstwhile mandate was “To impart knowledge of Weapon Technology to Technical Officers of three services and to Scientists under SA to MoD”. Since then, the institute has come of age and MILIT today can justifiably be proud of the fact that, as an AFTI, it has carved a niche for itself among all the training institutes. It is an epitome of professionalism and jointmanship among the three services.

'Victory through Technology' is the tenant on which edifice of MILIT rests. The Institute aims to bridge the gap between cutting-edge military technology and warfighting by producing

'Techno-Warriors' aligning them towards modern and futuristic warfare. The growth of MILIT as the technological hub for the armed forces is a cumulative effect of the vision and dedication of all erstwhile and current personnel who have worked relentlessly towards it. Hence, it is all but important to have its rich history documented, which shall not only preserve its evolution but will also remind and continue to motivate the future generations to never lose sight of the vision of its founding fathers. This maiden Coffee Table Book is a welcome step in portraying MILIT's splendour in an aesthetic fashion.

My compliments to Commandant and all officers of MILIT for this Coffee Table Book aimed at preserving its impressive history. I am sanguine that MILIT will remain committed to quality pedagogy, infusion of niche technologies and highest training standards; qualities that are deeply embedded in its structures.

I wish MILIT success in all its future endeavours.

*Jai Hind*

Lt Gen JP Mathew PVSM, UYSM, AVSM, VSM





MILITARY INSTITUTE OF TECHNOLOGY		
COMMANDANT		
MAJ GEN	V K PASSI, VSM	01 APR 06 - 02 OCT 06
AVM	RAJIV SHARMA, VSM	03 OCT 06 - 31 MAR 08
RADM	RAKESH BAJAJ, VSM	10 JUL 08 - 15 DEC 09
MAJ GEN	RAVI SAXENA	21 DEC 09 - 23 APR 12
AVM	P P KHANDEKAR	23 APR 12 - 02 MAY 14
RADM	A S SETHI, VSM	02 MAY 14 - 04 JUN 16
MAJ GEN	MUKESH K DUTTA	05 JUN 16 - 02 JAN 18
MAJ GEN	A K SAPRA, VSM	03 JAN 18 - 01 JUL 18
AVM	V RAJHANS, VSM	02 JUL 18 - 31 JAN 21
MAJ GEN	HARI SINGH, VSM	01 FEB 21 - 31 DEC 21
AVM	V RAJASEKHAR	01 JAN 22 - 30 JUN 23
AVM	VIVEK BLOURIA	01 JUL 23 -





# Commandant

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This Coffee Table Book was a long felt need to chronicle the journey of the Military Institute of Technology (MILIT).

From a humble beginning in 1952 as a training institute for Armament Studies to becoming the Institute of Armament Technology in 1967 and finally being carved out as MILIT in 2015 under Headquarters Integrated Defence Staff, this Institute has seen technological excellence in all three services of Indian Armed Forces and has made a distinguished mark for itself.

In the boundless tapestry of Military History, the prowess of technology has always held a prominent and compelling place. From the epoch-defining battles of old to the contemporary arenas of conflict and peacekeeping, the techno-warriors of this Institute have marvelled in all situations. It is with immense pride and profound reverence that I introduce maiden Coffee Table Book; a labour of love and a homage to the indomitable spirit of this great Institution.

As the custodian of this venerable Military Technology establishment, I am deeply honored to welcome you to the visual odyssey, a testament to the legacy of excellence that defines us. Within these pages, we have endeavoured to capture not just the tangible assets of our institution but the intangible essence of our mission 'Victory through Technology' and the unwavering commitment of the men and women who have walked through our hallowed halls.

The Coffee Table Book lovingly crafted with dedication and care, is a tribute to the countless individuals who have made our Institution what it is today. It is a celebration of our heritage, an affirmation of our values and a promise of our enduring commitment to shaping the future techno-warriors of our nation. With every turn of the page, I hope you feel the resonance of our history and the vitality of our mission.

I compliment the Editorial team for their sincere efforts in bringing out the historical, professional and social aspects of Military Institute of Technology in this maiden Coffee Table Book.

**AVM Vivek Blouria**

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# CHRONICLE OF EVENTS





# Signposts

**1952 – 1963**

**As Institute  
of Armament  
Studies (IAS)**

**1950:** Prof PMS Blackett  
Report to setup  
institute like RMCS,  
Shrivenham, UK

**1952:** Institute of  
Armament Studies  
established in CME  
Campus

**1964 – 2005**

**As Institute  
of Armament  
Technology (IAT)**

**1964:** Rechristened  
as Institute  
of Armament  
Technology

**1967:** Shifted to  
Girinagar Campus

**2006 – 2011**

**As Defence  
Institute of Advanced  
Technology (DIAT)**

**2006:** Rechristened as  
Defence Institute  
of Advanced  
Technology (DU)

**2010:** AIP of RM to  
carve out MILIT  
from DIAT

**2012 onwards**

**As Military  
Institute of  
Technology (MILIT)**

**2012:** Military Institute  
of Technology  
raised as 52<sup>nd</sup>  
Lab of DRDO

**2015:** Placed under HQ  
IDS as an AFTI

# Institute of Armament Studies (IAS) Era

- Based on Prof PMS Blackett (Royal Military College of Science at Shrivenham, UK) report in Feb 1950, Government of India agreed to establish a Defence Technical Staff College for training and research in Defence Science & Technology in lines of the RMCS Shrivenham, UK for the officers of three services and other civilian defence officers of Defence Science Organisation (DSO), now DRDO as Combined Research and Training Centre (CRTC).

► 1950

## Milestones (Detailed Timeline)



- Accordingly, 1<sup>st</sup> course was started in May 1950 in Technical Development Establishment (Ammunition) [TDE(A)], now Armament Research and Development Establishment (ARDE), Pashan.
- 1<sup>st</sup> Technical Staff Officers' Courses (TSC-01) from May 1950 – Feb 1952 and 2<sup>nd</sup> Technical Staff Officers' Courses (TSC-02) from Jun 1952 -Dec 1953 at TDE(A).



3<sup>rd</sup> Technical Staff Officers Course (Armament) started (Oct 1953 – Apr 1955) as TSC-03 at IAS, CME Campus.

- Designed & executed by mainly Army Officers ex-RMCS.
- A few weeks at DSSC added for orientation to Tac & Adm.

► 1953



► 1952

- Prof PMS Blackett's report resulted in the formation of the Institute of Armament Studies (IAS) on 01 May 1952 in the campus of College of Military Engineering (CME) at Dapodi, Pune.
- **Charter:** To impart knowledge of Weapon Technology to Technical Officers of three Services and to Scientists under SA to MoD.
- **Sept:** Mr Patrick Johnson, OBE, MA, appointed as 1<sup>st</sup> Dean.



# Institute of Armament Studies (IAS) Era

- Feb: Mr CH Smith, CBE, appointed as 2<sup>nd</sup> Dean.

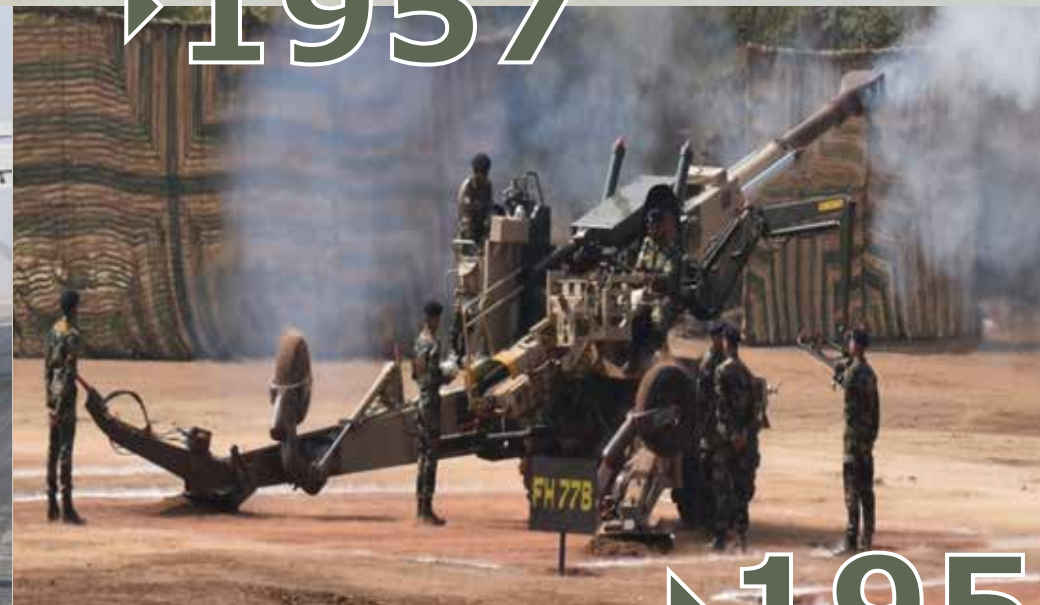
▶ 1957



▶ 1955

Advanced Air Armament Staff Course (AAASC) started (May 1955 – Apr 1957).

- Designed & executed by Gp Capt Howell, RAF
- Two years PG level course.



▶ 1959

- Armament Engineering Course (AEC) started.





Oct 60: Air Cmde OP Mehra appointed as 1<sup>st</sup> Indian & Air Force Dean.

Special Weapons Course (SWC) started

- Centred around 'Guided Missiles'.
- Two years PG level course.

► 1960



► 1962

Naval Scientific Orientation Course (NSOC) started.

- Short term (6 months) trial UG level course.

# Institute of Armament Technology (IAT) Era

- 30 Jan: Rechristened as IAT.
- Charter revised to include Defence R&D.
- Feb: Cmde MK Lele appointed as 1<sup>st</sup> Navy Dean.

- Shifted to Girinagar Campus adjoining Khadakwasla lake.
- NSOC replaced with Naval Technical Staff Course (NTSC).

► 1964



► 1967

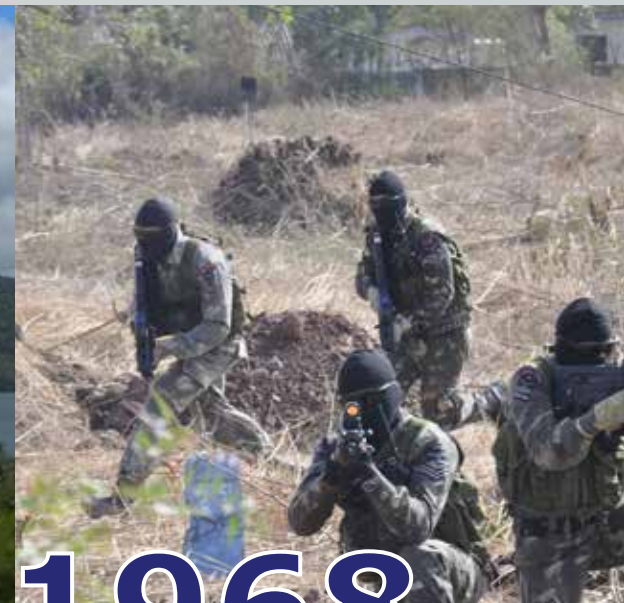


► 1965

- Guided Weapon Senior Officers' Course introduced.
- Senior Armament Apprentice Course introduced.
- Deputy Armament Supply Officers' Course introduced.

► 1968

- Feb: Brig PP Singh appointed as the 1<sup>st</sup> Army Dean.
- Senior Staff Course (Air Force) introduced.





- Indian Ordnance Service Officers Staff Course introduced.

▶ 1969



- Tank Technology Course (TTC) introduced.

▶ 1971



▶ 1970

Advanced Marine Engg Course (AMEC) started.

- Modelled after AMEC in Royal Naval College, Greenwich, UK.

Scope of IAT widened to go beyond "Armament".

▶ 1974

- Technical Staff Officers' Course (TSC) rechristened as Technical Staff Officers' Course (Army) [TSOC(Army)].



# Institute of Armament Technology (IAT) Era

Advanced Naval Weapons Systems Engineering Course (ANWSEC) started.

- Modelled on the Royal Naval College Syllabus.

► 1975



► 1980



► 1979

- Advanced Weapon Technology Course (AWTC) started.

► 1986

- Quality & Reliability Engineering Course started.
- Laser & Electro-Optics Course (LEOC) started.



- Modelling & Simulation Course (M&SC) started.

- IAT cleared for status of Deemed University by AICTE/UGC.

- Transition from Pune University to Deemed University started.

▶ 1989

▶ 2000

▶ 2003



▶ 1994

▶ 2002

▶ 2004

- Air Force Technical Staff Officers' Course (AFTSC) rechristened as Technical Staff Officers' Course (Air Force) [(TSOC(AF))].

- Golden Jubilee celebrations of IAT.

- Transition to Deemed University completed
- Jun: First batch of PG students admitted to IAT(DU).



# Defence Institute of Advanced Technology (DIAT) Era

01 Apr: Institute granted autonomous status by GoI and rechristened as DIAT (DU).

- 1<sup>st</sup> Vice Chancellor (Prof P Ramachandra Rao) appointed.
- Senior most Service Officer (General Officer), who was Director & Dean, IAT at that time, re-designated as Pro VC & Dean (Military Technology).

## ►2006



- Senior most DRDO Officer designated as Dean (Academics).
- Gen VK Passi, VSM appointed as Dean (MT).

08 Jun: First convocation of DIAT as Deemed University with President, APJ Abdul Kalam as Chief Guest.

03 Oct: AVM Rajiv Sharma, VSM appointed as Dean (MT).

## ►2008

- 28 Mar: 2<sup>nd</sup> Vice Chancellor (Prof LM Patnaik) appointed.
- 10 Jul: R Adm Rakesh Bajaj, VSM appointed as Dean (MT).



- 21 Dec: Maj Gen Ravi Saxena appointed as Dean (MT).

# ▶2009



# ▶2010

- 17 Aug: In Principle Approval of Raksha Mantri for creation of MILIT (to be carved out of DIAT) for conduct of non-degree courses.
- 10 Sep: Maj Gen (Dr) SK Salwan (Retd) Committee set up by HQ IDS & HQ DRDO to decide on the methodology of segregation of MILIT from DIAT(DU).
- Nov: Dr Salwan Committee made recommendations on the bifurcation of MILIT from DIAT(DU).

- Feb: Salwan Committee Report issued.
- 11 Aug: 3<sup>rd</sup> Vice Chancellor (Dr. Prahlada) appointed.

# ▶2011



# Military Institute of Technology (MILIT) Era

- 25 Nov: First batch of Technical Staff Officers' Course (Navy) [TSOC(Navy)] started.

► 2013



► 2012

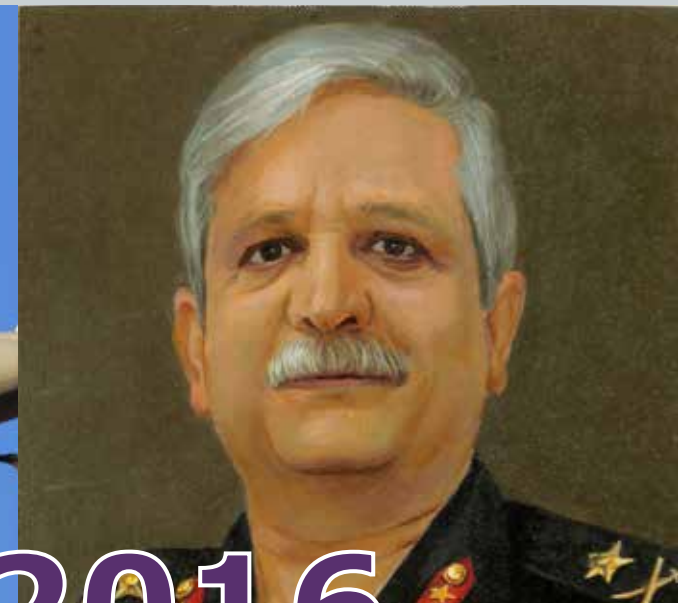
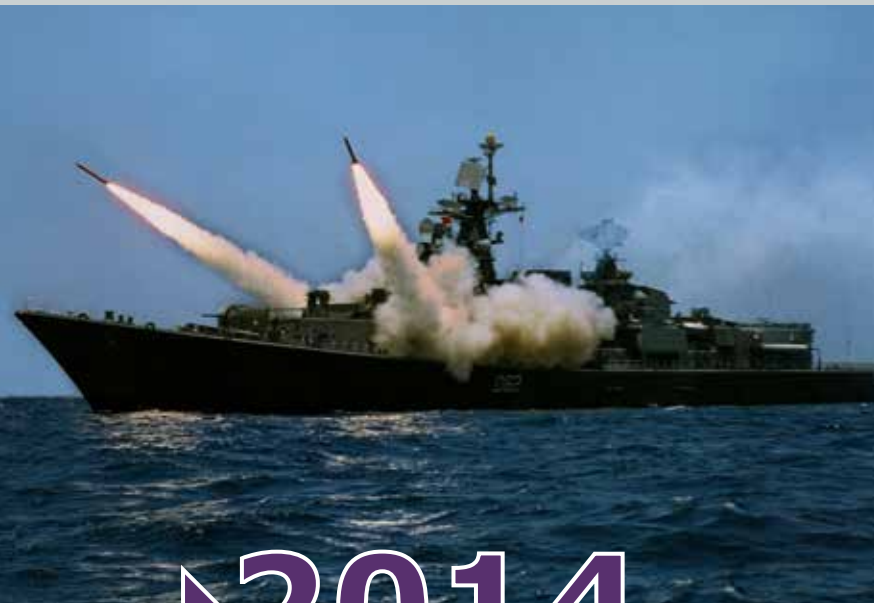
- 19 Jan: MILIT raised as 52<sup>nd</sup> DRDO Lab. Maj Gen Ravi Saxena re-designated as Director & Commandant.
- 06 Feb: MILIT formally inaugurated by GOC-in-C Southern Command.
- 23 Apr: AVM PP Khandekar appointed as Director & Commandant.





- 01 Apr: MILIT placed under HQ IDS as AFTI.

► 2015



► 2014

- 02 May: R Adm AS Sethi, VSM appointed as the first Commandant.

► 2016

- 05 Jun: Maj Gen Mukesh Dutta appointed as Commandant.

# Military Institute of Technology (MILIT) Era

- 02 Jul: Technical Staff Officers' Course (TSOC) rechristened as Defence Services Technical Staff Course (DSTSC).
- 02 Jul: AVM Vivek Rajhans, VSM appointed as Commandant.

► 2018



► 2021

- 01 Feb: Maj Gen Hari Singh, VSM appointed as Commandant.
- 15 Nov: Gen Bipin Rawat, CDS visits MILIT.



- 01 Jan: AVM V Rajasekhar appointed as Commandant.

▶ 2022



▶ 2023

- 12 Jul: Defence Services Technical Staff Course (Navy) upgraded to 46 Weeks duration.
- 01 Jul: AVM Vivek Blouria appointed as Commandant.

# NARRATIVE OF EVENTS





# Institute of Armament Studies (IAS) Era (1952–1963)



Hon Lt Col JA Moran, MBE, IOS, Chief Instructor (Seated fourth from right) with faculty and student officers of No. 1 TSC at ARDE

## History:

- Based on Prof PMS Blackett (Royal Military College of Science at Shrivenham, UK) report in **Feb 1950**, the Government of India agreed to establish a Defence Technical Staff College for training and Research in Defence Science & Technology in lines of the RMCS Shrivenham, UK for the officers of three services and other civilian defence officers of Defence Science Organisation (DSO), now DRDO as Combined Research and Training Centre (CRTC).
- Accordingly, first course was started in **May 1950** in Technical Development Establishment (Ammunition) [TDE(A)], now Armament Research and Development Establishment (ARDE), Pashan.
- 1<sup>st</sup> Technical Staff Officers' Courses (TSC-01) from May 1950 – Feb 1952 and 2<sup>nd</sup> Technical Staff Officers' Courses (TSC-02) from Jun 1952 - Dec 1953 at TDE(A).



**Establishment of IAS:** The IAS was established in the year 1952 in the premises of the College of Military Engineering (CME), Dapodi, Pune. The Institute was under DSO, the erstwhile DRDO. As per the charter given in the Gol letter dated 19 Feb 1954, IAS was to impart knowledge of Weapon Technology to Technical Officers of three Services and to Scientists under SA to MoD.







Seen above: Mr Patrick Johnson, OBE First Dean of IAS (seated at Centre) with First Faculties of IAS



Seen above: No. 3 TSC with Lt Col PP Singh, later Brig PP Singh, Dean of IAT (1968-72) (seated in centre) with Lt Col R Janardhanam, later Director of Studies (DoS) of Army Wing, IAS (1960) and Maj Gen R Janardhanam, DGQA (1973-76), to his right.

The **Technical Staff Officers' Course (TSC)-03** for the Army was **the first course** that the IAS started conducting since its inception in 1952. In the ensuing years, several courses were added to the Institute curriculum based on the needs of the three Services, DRDO, DGQA, DGO, DGAQA and PSUs.



Seen besides: Brig Thadani presenting a memento to Mr Johnson (left) during his farewell in 1955 at IAS, CME, Kirkee.

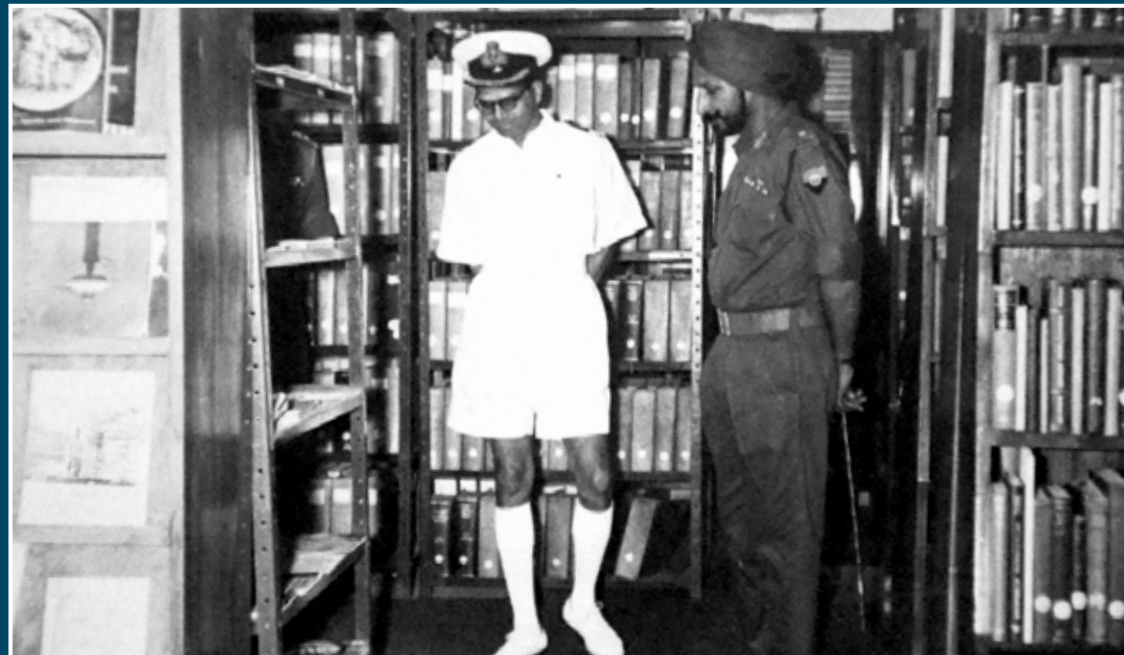
**First Office Bearers.** Col LS Anand (later Brig), an officer of the EME and a graduate of the Royal Military College of Science (RMCS), Shrivenham, UK was appointed as Military Head of the establishment with the designation of Military Director of Studies, with the sole assignment of raising the Institute from scratch. He assumed charge on 01 May 1952. Later, Mr. Patrick Johnson, OBE, MA, an Aeronautical engineer from Royal Air Force College, Cranwell, UK and former Scientific Advisor to War Council, UK was appointed as the first Dean of the institute.





**First Indian Dean (Air Force).** Air commodore OP Mehra, an ace GD Pilot from the IAF took charge as the Dean of the Institute in October 1960. He was the first Indian as well as the first Air Force Officer to adorn the chair of the Dean of the Institute. During his tenure, the Institute was awarded its Coat of Arms, Crest and the Motto. Later he became the Chief of Air Staff during 1973 - 1976.

**First Indian Dean (Navy).** After Air Cmde O P Mehra, Dr Kartar Singh officiated as the Dean from August 1963 to November 1963. On transfer of Dr Kartar Singh to Kanpur, Capt MK Lele, IN of the Naval Wing officiated as the Dean till February 1964. When he was promoted to the rank of Commodore, Cmde MK Lele formally assumed the charge as the Dean of the Institute in February 1964. He was the first Naval Dean of the Institute.





# Institute of Armament Technology (IAT) Era (1964 – 2006)

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Seen besides: Gen PP Kumaramangalam, DSO, MBE, the Chief of Army Staff (Second from right) at Construction site in technical area in 1965.

**On 30 Jan 1964, IAS is Rechristening as IAT.** The charter of IAS was revised and its name was changed to Institute of Armament Technology (IAT). From the relatively narrow scope of armament study alone, the DRDO council considerably enhanced the role of the Institute. The revised charter mandated to Train Officers of Defence Services and Defence Civilian Scientists in science & technology of Armaments, Defence Research & Development and to maintain contact with universities & scientific institutes in India & abroad.

**Shifting of Location & Initial Period Under First Army Dean.** In **Jun-Jul 1967**, the Institute was shifted to its present 500 acres site at Girinagar situated at the southern end of Khadakwasla lake. The Campus was named by the then Dean, Cmde Lele as 'Girinagar' (a city on hills).

Seen besides: View of IAT Main Building, Mehra Auditorium and Sheds in 1967.







**First Indian Dean (Army).** After transfer of the first 'Navy' Dean, Cmde MK Lele, to Jamnagar in December 1967, Brigadier Pritam Pal Singh was brought in as the first 'Army' Dean of the Institute in February 1968 on transfer from ARDE, Pune. He left IAT on retirement on superannuation in September 1972. His tenure of about four and a half years was marked with the commencement of several new courses that were kept pending for want of space in CME. Provision of requisite facilities and amenities at the new campus of Girinagar saw the initial growth of IAT under the care of Brig PP Singh. Even after retirement, Brig PP Singh built a house at the bank of Khadakwasla lake and was a regular visitor and invitee at IAT functions over the years.

**IAT Affiliation to Pune University.** On the basis of accreditation by the All-India Council of Technical Education (AICTE), Pune University recognized Six courses for the award of ME Degree in 1980 to maintain the academic standards.

**Revision of Role of IAT.** A high-level committee, which finalised its deliberations in Jun 1981, further enhanced the role of IAT by recommending a new charter to impart higher education and training in various fields of Science and Technology having bearing on Defence requirements in general and weapon systems in particular for the officers of Ministry of Defence, Public Sector Undertakings and Industrial Undertakings and to carry out research, design and development activities.





**Cleared for Status of Deemed University.** The Institute acquired the status of Deemed University (DU) in 2000. It was assumed that the establishment of a DU would be beneficial to both Services and the DRDO as it would assist in creating an environment of higher learning. The Services consented to the proposal as they shared the same vision with an understanding that the military character and ethos of the Institute would be retained.

**IAT celebrated its Golden Jubilee in the year 2002.** Courses Conducted by IAT during Golden Jubilee.

Post Graduate Courses
Advanced Air Armament Staff Course (AAASC)
Special Weapons Course (SWC)
Military Vehicles Technology Course (MVTs)
Advanced Weapons Technology Course (AWTC)
Advanced Marine Engineering Course (AMEC)
Advanced Naval Weapons System Engineering Course (ANWSEC)
Modelling & Simulation Course (M&SC)
LASER & Electro-Optics Course (LEOC)

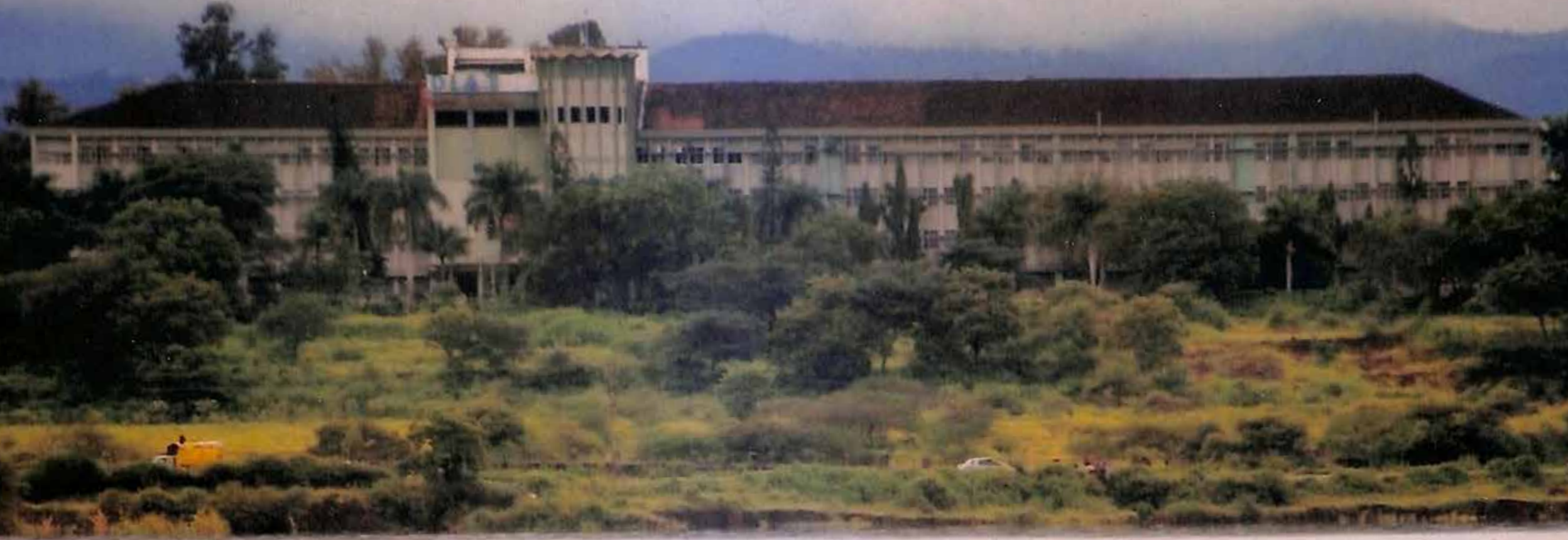
Long Courses
Technical Staff Officers Course (Army) [TSOC(Army)]
Naval Technical Staff Course [NTSC]
Technical Staff Officers Course (Air Force) [TSOC(Air Force)]
Aerospace Quality Assurance & Management Course (AQA&MC)
High Energy Materials Course

Short Courses
Indian Ordnance Factories Service Officers' Course (IOFSOC)
Armoured Vehicle Technology Course (AVTC)
Air Crew Ejection Systems Course (AESC)
Aircraft Delivery Systems Course (ADSC)
Modern Air Weapons Course (MAWC)
Air Launched Missile Course (ALMC)
Marine Propulsion Control Technology Course (MPCTC)
Guided Missiles Course for Senior Officers
Guided Weapons Introductory Course (GWIC) (Foreign Navy)
Guided Weapons Introductory Course (GWIC) (Indian Navy)
Naval Weapons & Missile Technology Course (NW&MTC)
Quality Assurance and Reliability Course
Deputy Armament Supply Officers' Course
Joint EMI/EMC Course



# Defence Institute of Advanced Technology (DIAT) Era (2006-2012)

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Seen above: View of the Main Building in monsoons of 2006.

**Autonomous Status as a Deemed University.** The Institute acquired autonomous status in 2006 and was rechristened as Defence Institute of Advanced Technology (DIAT), Deemed University (DU) on 01 Apr 2006.



# Military Institute of Technology (MILIT) Era (2012 onwards)



Seen above: Maj Gen Ravi Saxena, First Commandant & Director, MILIT (seated fourth from right) with GOC-in-C, SC on his right and other staff officers and visiting dignitaries.

**Birth of MILIT.** The Institute was formally established on 19 Jan 2012 and mandated to function as a Training Establishment (like erstwhile IAT under DRDO), concentrating on long and short courses of the three Services. The unique Tri-Services Technology Training Institute was born to meet the training aspirations and needs of the three Services in contemporary and futuristic technologies. At this stage, MILIT was raised as the 52<sup>nd</sup> Lab of DRDO. The senior most Service Officer & Dean (MT) at that time, Maj Gen Ravi Saxena was re-appointed as the Director & Commandant of MILIT.



Seen above: Maj Gen Ravi Saxena, First Commandant & Director, MILIT with GOC-in-C, SC

**Charter of MILIT on 06 Feb 2012 at Inception.** The Institute was given mandate to impart training in various disciplines of science and technology relevant to Defence requirements in general and weapon systems in particular to meet the short and the long term training needs of the officers of MoD and to maintain a close liaison with the Services and DRDO regarding the courses sponsored by them.







Seen beside: R Adm AS Sethi, VSM, First Commandant, MILIT (seated centre) with faculty.

21 Apr 15: MILIT was constituted as an Armed Forces Training Institute (AFTI) wef 01 Apr 15 under the aegis of HQ IDS.

The role & charter of duties for MILIT as per the COSC Directive 16 Mar 2016 "Military Institute of Technology (MILIT) is a tri-service training institute conducting courses related to military technology for officers of the Armed Forces, DRDO and other Central Government Organisations.

**Formation of Department of IT & Studies.** Department of IT & Studies was conceptualized and created by AVM Vivek Blouria, Commandant and Cmde Rajesh Chatterjee, DC & CI on 16 Aug 23 with the merger of erstwhile "IT Section" & "Department of Studies" with an aim to function as the "Think Tank" of the institute and also to centralize the tasks of maintenance of IT Assets, Cyber Security and act as an interface with Indian/ Foreign Universities and Industry and also to undertake relevant studies and infusion of niche technologies in the curriculum of the flagship courses.

Col RP Singh is the first HoD of this Tri-services department with an officer each from Army, Navy, & Air Force. He is assisted by Cdr Rahul Inamdar, GS01 (Academics and Industry), Wg Cdr SP Padmarajan, GS01 (Library and Publication) and Lt Col JS Rathore, GS01 (IT & Cyber Security).









# MEMOIRS OF LEADING HELMSMEN OF MILIT





# The Magnificent Magnanimous Motivating Masterclass MILIT



Air Marshal P P Khandekar AVSM (Retd)  
(2<sup>nd</sup> Director & Commandant of MILIT as DRDO Lab)

1. The acronym MILIT brings so fond memories- maybe fonder than DSSC- that we lose sense of time, immerse ourselves in the serene environs and the people then and suddenly awaken to the hard fact that these days are not going to be again, anytime. Well...time and tides wait for none and that is the order of the world.
2. I as AVM, was ACAS Maintenance Plans working in Air HQ Vayu Bhawan when in 2012, on that eventful day I was suddenly called by my boss Air Marshal Vashisht, Air Officer in Charge Maintenance (equivalent to COM and MGO) to his office. I had completed a year by then and wondered why I was summoned. He offered me a chair and said, "Khandekar, I have fought with the system and recommended your name to command MILIT at Girinagar, Pune. There were five-six Air Vice Marshals who wanted to go there but I have convinced those who matter that you are the fittest individual for that job. Don't let me down." I was non-plussed as in my perception he may not have a very good impression of me as we always argued due to differences in perception on many issues in our day-to-day interaction. He is no more but I thank him and always remember him for giving me that great opportunity to be in MILIT. I remain indebted to him forever for considering me to be most suitable for the job.
3. I had not undergone any course in IAT/ DIAT/ MILIT in my service career and had only the faintest idea about the place as in 1987, I with my wife and daughters visited my colleagues Rashid and Karuppusamy when they were posted in IAT then as instructors.
4. My positives then may have been PG, psc and commanding Air Force Station High Grounds as Gp Capt and Air Force Station Chakeri Kanpur as Air Commodore, having 10 years of instructional experience at 1 Tetra school, AFTC and CAW apart from other things.
5. MG Saxena gave me the presentation with the issues of concern related to DIAT and otherwise. Since he was Dean and Pro-VC at DIAT, it seemed that DRDO did not accept his posting as Commandant & Director of MILIT, anyway.



6. My experience at training establishments as a student officer, as a DS and as a Commanding Officer helped me immensely in adapting and adopting to the nuances of this first of its own kind tri-services technology training institute. To decide the logo for T-shirts, caps etc. I floated the idea of Tachyonan- an imaginary particle having speed more than that of light. This was gladly accepted by the TSOC officers and we made that as a logo. Another area was to give the student officers and spouses to pen down their experiences. We started a lot of magazines such as MILITgiri, MILITjournal, Ghorpad the Annual on lines similar to those of The Owl of DSSC, The Warrior, Ex-Sensor, the Stat book, etc. Many directives were issued by me because I firmly believed that the views, rationale, and logic of the commander are best explained through directives. They provide basic flexibility to the executors from time to time.
7. We made a Vision Document for MILIT in 2013. We also carried out an analysis for growth of MILIT- should it be under DRDO, or under IDS or functionally under DRDO and administratively under IDS or vice versa. Well.... that is now history. I for one always felt that if defence officers need to know and be well conversant of technologies- emerging, advanced, relevant and appropriate, it would have been best to hold hand of DRDO as through that we get access to their fifty odd laboratories handling almost everything that the defence forces need.
8. We followed many things that happened in DSSC such as May Queen, May King competitions, cultural and dramatics, entertainment, sports competitions make the life at MILIT vibrant, dynamic and interesting. Movies were started in the open air. Due to some issues with DIAT, we had to conduct our programmes and guest lectures in dilapidated Mehra auditorium. By and by, we got it repaired and it was a pleasant sight to see Mehra auditorium when I recently visited MILIT.
9. They say the captain is as good as the team. I had excellent officers in Venu, Khangarot, Takshak, Jhanji, Jaswal, Deshmukh, Captain Sharma, Manoj Kumar, Vaidya, Adhikari, Mahapatra, Sahay, Tyagi, Vishwakarma, Sonsale, Raju, Thakur, Murthy, Panda, Kalaskar, and Shivhare to name a few. We worked as

a cohesive team and developed MILIT in every aspect despite constraints and 'tu tu main main' between us and DIAT which is given when two different organisations work under one umbrella.

10. We got TSOC affiliated to Pune University for an award of degree of MSc (Technology) though Pune University was convinced that the course content was eligible for M Tech degree. During my time, there were many cases where TSOC guys made it in the board while PSC missed! Then MS branch decided to put TSOC grade one shade lower than PSC. I argued that war today is no art; it is more of science and in science either you are right or you are wrong while in art of war one can suggest we will walk on the ridge line as a creative solution!
11. We got inputs that DSSC guys were not happy as the inputs in TSOC were more technological, relevant and keeping in tune with what would happen in years to come. I ensured that sand model is always open and never covered. Also during our time, we introduced amphibious operations and restarted many courses that were no more being conducted. That brought MILIT on the map of the three services. The Navy started subscribing to TSOC initially with young officers.
12. Well...I can go on and on but constraint of space prohibits me from continuing further. We still recall our good old days at MILIT and no wonder the eyes go damp with a mix of feelings- we were there and now we can only dream to be there.

**SALAAM MILIT !**

**JAI HIND !**



# MILIT - Birth of an AFTI



R Adm AS Sethi VSM (Retd)  
(1<sup>st</sup> Commandant of MILIT as AFTI)

1. I was appointed 'Commandant and Director' of Military Institute of Technology (MILIT) end April 2014 from Project Seabird, Karwar. Over three decades of career, this was to be my first posting to Pune, though the type of work was not entirely a new one. With multiple tenures including command of sprawling 570 acres INS Valsura, the Electrical Training establishment of the Indian Navy at Jamnagar, in fact I was looking forward to this one. My wife Manpreet too was geared in a way on aspects of her role in community support leading the ladies and spouses of the uniformed personnel.
2. Our earlier brush with the Army and Air Force came primarily from our experiences at Staff Course at Wellington (1996 - 97), Naval War College at Karanja (Mumbai) in 2003 - 04 and National Defence College, Mirpur Cantt, Dhaka in 2011. However, it was soon realised that at Girinagar, the challenges in running MILIT as a tri-services training institution were more due to its umbilical connections with civilian educational/ administrative structures of DIAT than each Service-specific nuances. And this 'delivery' was to be facilitated satisfactorily in my period of two years.

## Historical Background

3. Two decades ago, with an aim of delineation of higher learning MTech, PhD courses of at least two years vis-à-vis some Armed Forces-specific non-degree courses of a week to 48 weeks duration, a case was initiated to bifurcate DIAT (DU) and to form MILIT to provide focussed attention on the latter group. In-principle approval by Hon'ble Raksha Mantri was accorded for formation of MILIT on 17 Aug 2010. Dr Salwan Committee, constituted by DRDO HQs, furnished its recommendations in Feb 2011 on almost all aspects of this bifurcation. The same has become the basis for training and accommodation at Girinagar campus.
4. The establishment of MILIT, as the 52<sup>nd</sup> DRDO Lab, was formally sanctioned by Govt of India on 19 Jan 2012. Maj Gen Ravi Saxena assumed the appointment of the first Commandant and Director of MILIT. The establishment was formally inaugurated by GOC-in-C Southern Command on



06 Feb 2012. My predecessor Air Mshl PP Khandekar succeeded him.

### Transformation as an Armed Forces Training Institution (AFTI)

5. 2012 - 14 was a rough phase when the relationship of HQ DRDO and HQIDS was in turbulence with direct impact on MILIT and DIAT on ground. In May that year, it was evident that the process of 'labour' to transform MILIT to an Armed Forces Training Institution (AFTI) had already begun in the tenures of my predecessors, but HQ DRDO continued to drag its feet in transferring this 'laboratory' to HQ IDS. It was perhaps understandable given the need to establish modalities of MILIT functioning as AFTI under HQ IDS. The main thrust on this account finally came from higher wisdom and directions of CISC and SA to RM, the apex of the two Headquarters. Subsequently, with my deliberations/ sittings at New Delhi from September 2014 onwards with the constituent members of DRDO Committee, chaired by CCR&D (HR), a way ahead emerged. Thus, MILIT became an AFTI with effect from 01 Apr 2015 through a Govt Sanction Letter (GSL) dated 21 Apr 2015.
6. Here on the sidelines, I am quite amused to share that till this GSL, the Ty Duty of Comdt & Dir MILIT was approved by HQ IDS [DCIDS(DOT)] while his leave was approved by DRDO [CCR&D(HR)] – keeping the other as an info addressee. Also, now, the designation of 'Commandant and Director' was replaced by an unambiguous and effective 'Commandant'.
7. Ensuing months led to work in conjunction with HQ IDS in drafting of Chiefs of Staff Committee (COSC) directive for the institution as an AFTI with enunciation of its Vision, Mission, Objectives and operational framework for training, administration, including aspects of command and control, discipline of all types of personnel, government stores. The COSC directive was issued on 16 Mar 2016.
8. An approach was adopted for coexistence with DIAT(DU) within same perimeter boundary, common campus facilities such as MI Room, Shopping Complex, Canteen, but earmarked

technical structures for respective institutions, earmarked Messes and POINTS Hostel, etc with minor changes to Officers Married Accommodation clusters. Common Garrison Engineer (I) and Estate Management Unit (EMU) too ensured on-ground stability of both institutions, optimal utilisation of assets and evolved understanding for future growth.

### Salient Thrust Areas/Achievements

9. The fledgling AFTI, achieved many 'firsts' in the period of two years, May 2014 to Jun 2016. All these were accomplished through efforts of officers and staff with a sense of shared vision, professionalism, high degree of motivation, team-spirit, sound engineering / management practices. The Comdt had to just stay on course of principles-centred leadership. Salient thrust areas and achievements of the period in point-form are as follows:

#### 10. Training

- Detailed Syllabi Revision of all 22 courses with approval of Service HQs and HQ IDS and consolidation of Training Processes.
- High level of conduct of courses, especially. Flagship TSOC, TTC and CAPSTAR, with procurement of new Training Resources and creation of new Labs.
- Comprehensive preparation and offering of institution for the first Joint Training Committee (JTC) Inspection by a three-star Services officer in its six decades of history.
- Award of MSc (Mil Tech) degrees from Pune University for TSOC and NTSC officers.

#### 11. Administration & Works

- Detailed assessments of approaches, besides meetings with HQ IDS and DRDO HQs, for the formulation of draft Govt Sanction Letter (GSL) for conversion to an AFTI. And Follow-up of GSL Implementation Committee thrust areas.
- Finalisation of draft COSC Directive.



- Creation of a highly responsive Administration and thrust on HRD.
- Measures in enhancement of Health, Fire, Cafeterias, Messes and Canteen Services, addition of new 800-line Telephone Exchange.
- Dogged pursuit of deficient MT cases manifesting in receipt of 03 Nos Maruti Gypsies and 03 Nos Truck Tata 2.5 Ton end Mar 16.
- Focus on the establishment of infrastructure by institutionalising Comdt Rounds on Wednesdays (of Six Areas of Girinagar campus), thereby leading to focussed directions to CoA, GE (I) and EMU for actions.
- Initiation and close monitoring of multiple Special Repairs, Major and Other Works under Joint Staff Budget. Besides, completion of long pending maintenance / periodicals of Technical and Residential Areas.
- Surveillance Audit of ISO 9001 Certification by BIS & Cyber Security Audits by DIARA.

## 12. Finance & Material Management

- Management of transition from DRDO to HQ IDS for Financial aspects and Stores.
- Formulation of first 7-year Capital Expenditure & Annual Revenue Procurement Plans.
- Improved procurement action with increased Capital expenditure.
- First Financial Inspection of the establishment by HQ IDS.
- Streamlining of all NPFs and ensuring minimum wages to their employees.

## 13. Organisational

- First-time presentation of MILIT in Unified Commanders Conference (UCC-15).
- Enhanced medical support - equipment and engagement of civilian medical specialists.

- Regular security audit, Girinagar campus perimeter wall checks along with DIAT & GE, besides induction of half platoon of DSC by end of June 2016.
- Building and strengthening of bonds with DIAT(DU), NDA and other Services/ DRDO organisations at Pune.
- First-time Beating Retreat by a Navy Band, Republic Day Parade, regular commemorations of Army, Navy, AF, DRDO, and MILIT (Raising & AFTI) Days.
- Active community participation in environmental & socio-cultural drives, including record breaking Blood Donation Camps, Runs for Climate Change, Monsoon Tree Plantations, Swatchhta Pledge, etc.
- Upgraded sports facilities (through Works), high level of welfare measures (from Canteen Trade Surpluses), institutionalized celebrations of Diwali Melas, Holi, etc. besides festivals at Mandir-Gurudwara complex.

14. Focussed DWWA Action Groups. Rejuvenated Defence Wives Welfare Association (DWWA) ensures the community bonhomie of the new AFTI. A fully operationalised office of DWWA in Single JCOs' Quarters and all year-round work by its six focussed action groups – Jagriti (General Awareness), Prakriti (Environment), Sparsh (Outreach), Sanchar (Newsletter Communication), Arogya (Health & Wellness) Sakhi (Counselling) were the key enablers. Similarly, multi-talented spouses of Faculty and Student Officers were happily engaged through Ladies Club activities.

Insulating the Institution from Transitional Dynamics and Meeting AFTI Standards

15. Quality of Training of Major Courses. Efforts were made to insulate the establishment undertaking its core training tasks from the turbulence of the transition from under HQ DRDO to HQ IDS. The 600 student officers passing through its portals each year had to be particularly 'protected'. The courses continued to be completed as per annual training plans. The training pedagogy of TSOC, TTC, and NTSC involved



extensive guest lectures from the best experts available, visits to field formations, R&D labs and industry, student seminars, dissertations, projects and enhanced jointmanship studies. This tempo of training, discipline and extra-curricular activities were enhanced to the levels comparable to their peers in DSSC Wellington and other Cat 'A' training establishments.

16. Attention to Technical Area Sheds. Girinagar campus came up in late 60s. Most of the other 'P' structures are also old which came up organically (without Master Plan) in 80s and some in 2000s. Further, since carving of MILIT in 2012, the budget for Works services controlled by HQ DRDO was not adequate. The long years of neglect of Technical Area, especially Equipment Sheds under the DIAT years, were taken up for urgent upgradation as MILIT became an AFTI. This involved phased implementation of Special Repairs of Sheds housing treasure-trove of Guns, Combat Vehicles, Naval Armament, Aircraft, Small Arms, Workshop etc. Similarly, maintenance and periodicals of the residential quarters (allotted year after year to TSOC/ TTC student officers) were focussed by Works section and GE (I), under close monitoring by the Comdt.

17. Area Ship-Shape Efforts. Jawans, especially the married men improved the ambience of their own residential areas through weekend morning Shramdaans, duly supported by institutional efforts. Weekly Comdt Area Rounds accelerated address of irksome issues of estate cleanliness, building maintenance, all resulting in general uplift of morale of troops. Photographs of unmanaged garbage points, ignored litter, concrete rubble dumps and overflowing drains observed during my silent walks were part of my personal feedback.

18. Continued Attention to Remaining DRDO Civilian Employees. The remaining 60-odd DRDO civilian's technical and ministerial cadre employees, most of whom had spent all their service life with DIAT/ MILIT at Girinagar campus were being posted out in a phased manner to nearby DRDO labs in Pune, such as ARDE, HEMRL, R&DE (Engrs). Cases were taken up with DRDO to temporarily reattach such transferred employees

and delayed the rest for benefit of both these employees as well as establishment, till MILIT's own civilian recruitments under HQ IDS were completed. However, where required, meticulously transfer of service records was undertaken to new labs. Highest respect was ensured for these employees who formed the foundational human resource of this fine training establishment, with rich historical legacy.



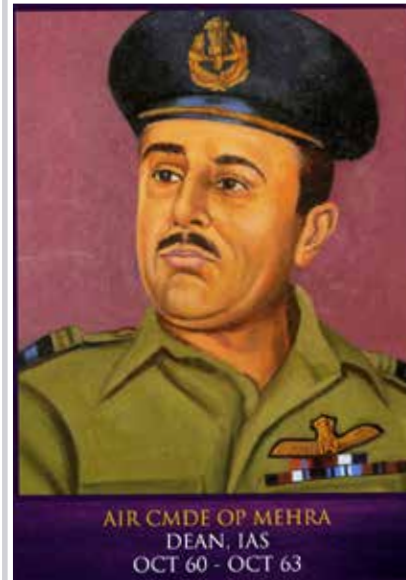
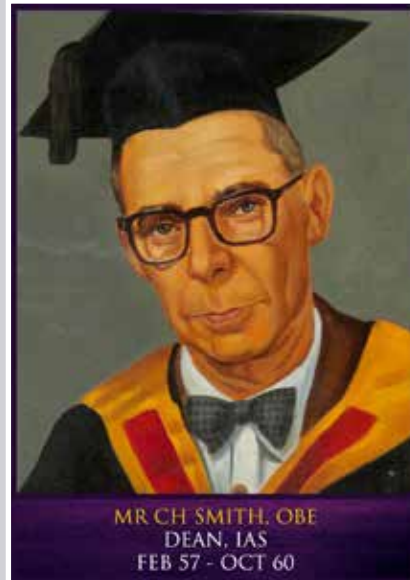
# ROLL OF HONOUR





# Dean of IAS

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# Dean of IAT

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# Director & Dean of IAT

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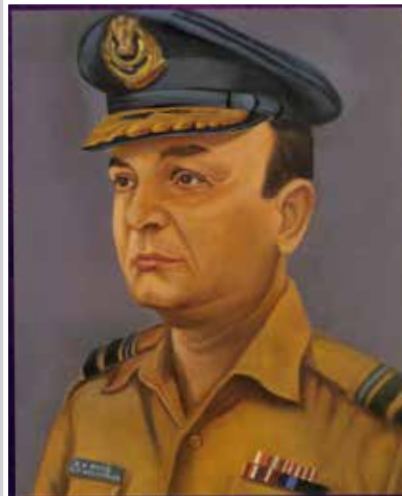


# Director & Dean of IAT

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DR E BHAGIRATHI RAO  
DIRECTOR & DEAN, IAT  
APR 86 - APR 90



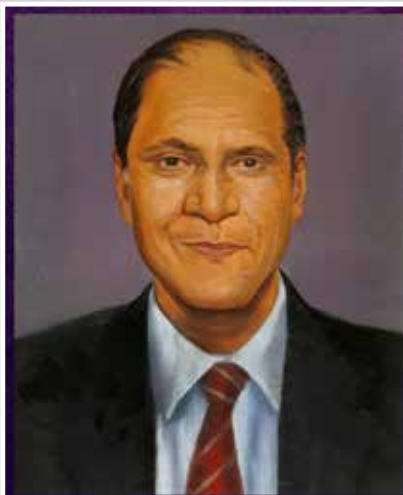
AVM UA DESHPANDE  
DIRECTOR & DEAN, IAT  
APR 90 - JUN 92



R ADM AJAY SHARMA, AVSM  
DIRECTOR & DEAN, IAT  
JUN 92 - JUN 94



MAJ GEN AP PALTA  
DIRECTOR & DEAN, IAT  
JUL 94 - JUL 96



PROF UC DURGAPAL  
DIRECTOR & DEAN, IAT  
JUL 96 - NOV 96



PROF GS MANI  
DIRECTOR & DEAN, IAT  
DEC 96 - DEC 2001



R ADM AK HANDA, VSM  
DIRECTOR & DEAN, IAT  
MAR 02 - MAY 04



MAJ GEN UK JHA  
DIRECTOR & DEAN, IAT  
SEP 04 - MAR 06



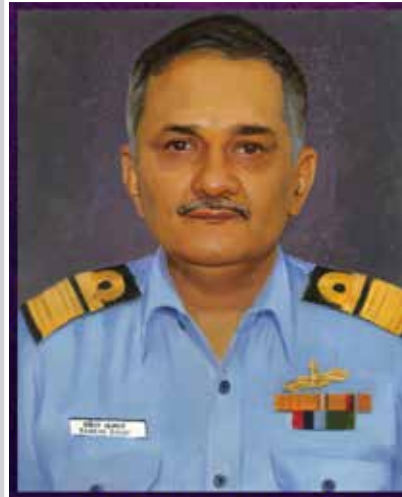
# Dean (Military Technology) DIAT \_\_\_\_\_



MAJ GEN VK PASSI, VSM  
DEAN (MILITARY TECHNOLOGY), DIAT  
APR 06 - OCT 06



AVM RAJIV SHARMA, VSM  
DEAN (MILITARY TECHNOLOGY), DIAT  
OCT 06 - MAR 08



R ADM RAKESH BAJAJ, VSM  
DEAN (MILITARY TECHNOLOGY), DIAT  
JUL 08 - DEC 09



MAJ GEN RAVI SAXENA  
DEAN (MILITARY TECHNOLOGY), DIAT  
DEC 09 - JAN 12

## Director & Commandant MILIT

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MAJ GEN RAVI SAXENA  
DIRECTOR & COMMANDANT, MILIT  
JAN 12 - APR 12



AVM PP KHANDEKAR  
DIRECTOR & COMMANDANT, MILIT  
APR 12 - MAY 14



# Commandant MILIT

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R ADM AS SETHI, VSM  
COMMANDANT, MILIT  
MAY 14 - JUN 16



MAJ GEN MUKESH K DUTTA  
COMMANDANT, MILIT  
JUN 16 - JAN 18



MAJ GEN AK SAPRA, VSM  
COMMANDANT, MILIT  
JAN 18 - JUL 18



AVM V RAJHANS, VSM  
COMMANDANT, MILIT  
JUL 18 - JAN 21



MAJ GEN HARI SINGH, VSM  
COMMANDANT, MILIT  
FEB 21 - DEC 21



AVM V RAJASEKHAR  
COMMANDANT, MILIT  
JAN 22 - JUN 23



AVM VIVEK BLOURIA  
COMMANDANT, MILIT  
01 JUL 23 - TILL DATE



# Roll of Honour

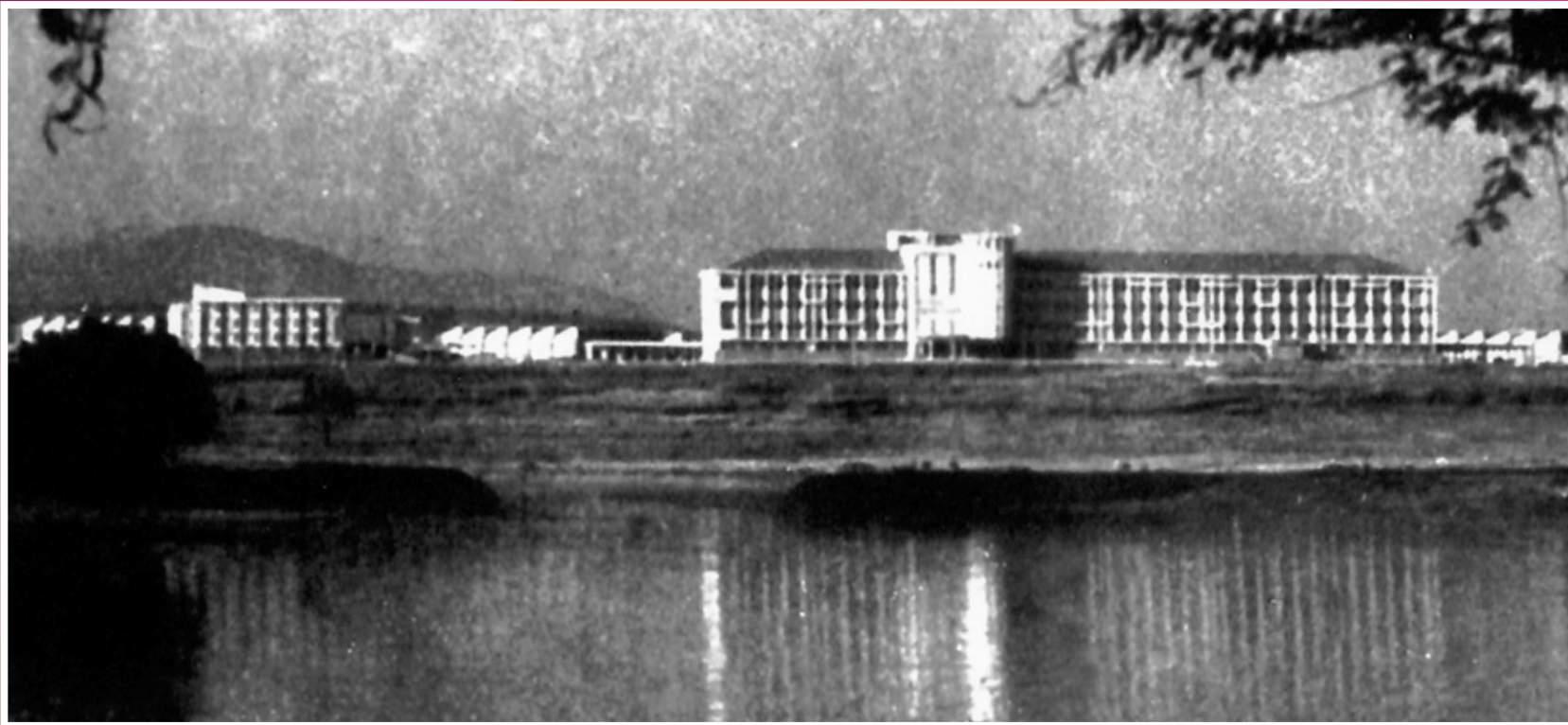
	From	To
Dean, IAS		
Mr Patrick Johnson, OBE	Sep 1952	Jul 1955
Mr C H Smith, CBE	Feb 1957	Oct 1960
Air Cmde O P Mehra	Oct 1960	Oct 1963
Cmde M K Lele	Feb 1964	Dec 1967
Dean, IAT		
Brig Pritam Pal Singh, AVSM	Feb 1968	Sep 1972
Director & Dean, IAT		
Dr. J. N. Nanda	Jan 1973	May 1977
Air Cmde S K Nair, AVSM	May 1977	Aug 1979
R Adm S S Venkateswaran	Oct 1979	Oct 1982
Maj Gen N Subbarao	Mar 1983	Apr 1986
Dr E Bhagirathi Rao	Aug 1986	Apr 1990
AVM U A Deshpande	Apr 1990	Jun 1992
R Adm Ajay Sharma, AVSM	Jun 1992	Jun 1994
Maj Gen A P Palta	Jul 1994	Jul 1996
Prof U C Durgapal	Jul 1996	Nov 1996
Prof G S Mani	Dec 1996	Dec 2001

	From	To
R Adm A K Handa, VSM	Mar 2002	May 2004
Maj Gen U K Jha	Sep 2004	Mar 2006
Dean (Military Technology), DIAT		
Maj Gen VK Passi, VSM	01 Apr 2006	02 Oct 2006
AVM Rajiv Sharma, VSM	03 Oct 2006	31 Mar 2008
R Adm Rakesh Bajaj, VSM	10 Jul 2008	15 Dec 2009
Maj Gen Ravi Saxena	21 Dec 2009	18 Jan 2012
Director & Commandant, MILIT		
Maj Gen Ravi Saxena	19 Jan 2012	23 Apr 2012
AVM PP Khandekar	23 Apr 2012	02 May 2014
Commandant, MILIT		
R Adm AS Sethi, VSM	02 May 2014	04 Jun 2016
Maj Gen Mukesh K Dutta	05 Jun 2016	02 Jan 2018
Maj Gen AK Sapra, VSM	03 Jan 2018	01 Jul 2018
AVM V Rajhans, VSM	02 Jul 2018	31 Jan 2021
Maj Gen Hari Singh, VSM	01 Feb 2021	31 Dec 2021
AVM V Rajasekhar	01 Jan 2022	30 Jun 2023
AVM Vivek Blouria	01 Jul 2023	Till Date



# OVER THE YEARS IN PIXELS

IAT in 1967







**MILIT in 2024**



# Crests and Mottos

## IAS

Air Cmde Mehra brought into use a Coat of Arms since 1962, especially designed for the Institute. The Coat of Arms had the Greek torch of learning and an atom depicted by a nucleus around which electrons were orbiting. The shape of the Coat of Arms was that of a shield which had a background of colours of the three Services: Red for Army, Sky Blue for Air Force and Deep Blue for Navy.



## IAT

The crest had a circular shape with a wreath of lotus petals at the periphery painted in golden colour. At the top, there was the Ashok Lions statue also in Golden colour. Inside the ring, on the background of three horizontal stripes of the Services colours there was a lamp of knowledge in golden colour with a white flame. Above the flame, there was the 'Sudharshan Chakra' in steel grey colour with twelve spokes. Below the crest, there was a scroll in steel grey colour on which the following Motto of the Institute was written "SUNISHITAM SHASTRAM YOJYAM" which meant that 'Only the well sharpened weapon is fit to be used'.



## DIAT

The crest of IAT was ingrained in a wreath and re-written as "Defence Institute of Advanced Technology". Below the crest there was a scroll in copper colour on which the following Motto of the Institute was written "SHASTREN SHASTRA PRAKRETI RAKSHAAM" which meant that 'A scientifically developed weapon provides security against a threat'.







## MILIT as DRDO Lab (2012):

The crest on formation of MILIT was basically derived from Tri-Services theme used in HQ IDS crest and a gear wheel in the centre and a background of four colours of Army, Navy, Air Force and DRDO. The inscription read 'Technology Always Wins'.



**MILIT** under HQ IDS (2015): Upon being placed under HQ IDS as an AFTI, the crest was modified in 2015 to a circular shape with only three background colours (Army, Navy and Air Force) and the motto was 'Victory through Technology'.



**MILIT** in 2019: The crest was changed to a new formation insignia, highlighting jointness in training among the three services viz Army, Navy and Air Force at MILIT was formally adopted on Raising day on 01 Apr 2019, which depicts interlocked rings in three service colours resting on the top of nib of a fountain pen highlighting jointness and the significance of knowledge ("Pen is mightier than Sword"). Three service rings are also interlinked with a 'gear flame' motif at the top, which highlights 'Technology in Pursuit of Excellence' in consonance with the MILIT's motto i.e. 'Victory through Technology'.



# Institute events over the years

1950-1960



**Jul 1955:** Farwell Party to P Johnson Dean IAT.



**08 May 1956:** 4 TSC Graduation Dinner Dance.



**08 Feb 1958:** Chinese Armed Forces Delegation visited IAS at CME, Kirkee. Seen above: Mr CH Smith, OBE, then Dean, IAS (extreme right) welcoming the Delegation.



**27 Feb 1958:** Visit of Gen Sir Francis Wogan Festing, GCB, KBE, DSO, C-in-C Far East British Land Forces, later Field Marshal of the British Army to IAS, CME, Kirkee.





**30 May 1958:** Visit of Shri Krishna Menon, then Defence Minister of India to IAS, CME, Kirkee.



**03 Jul 1958:** Visit of Air Marshal Subroto Mukherjee, then Chief of Air Staff, Indian Air Force to IAS, CME, Kirkee.



**1958:** Visit of Sir Owen Haddon Wansbrough Jones, KBE, CB, (Fourth from right) then Chief Scientist, Ministry of Supply, UK. On his Conceptual advice, the DSO was set up. Seen above with Mr. CH Smith, OBE, Dean, IAS (third from left).



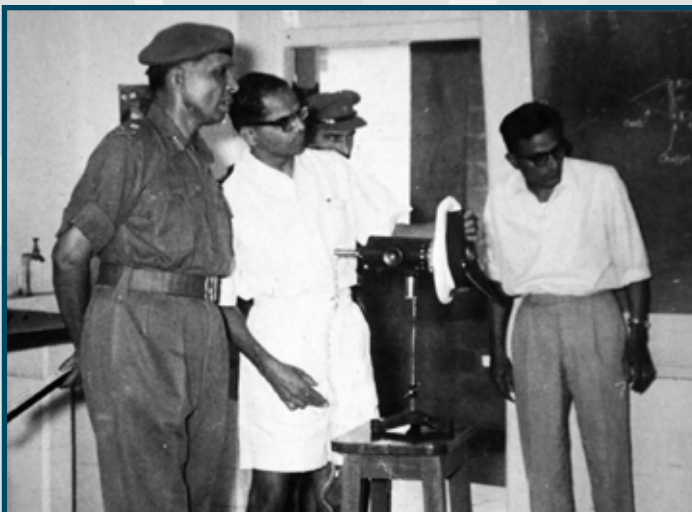
**01 Jun 1959:** Visit of Shri O Pulla Reddy, Secretary, MoD



**1959:** Visit of Deputy High Commissioner UK.



# 1961-1966



**1962:** IAS became truly joint services training centre when Capt. (IN) MK Lele became first DoS of the Naval Wing.

Seen above: Capt. MK Lele (Centre) in a lab at IAS, CME, Kirkee with a visiting General.



**1965:** Renamed as Institute of Armament Technology (IAT) in Feb 1964, and being tasked with New Charter related to operational research in defence, construction for setting up new facilities of the institute on south banks of Khadakwasla lake commenced.

Seen beside: Gen PP Kumaramangalam, DSO, MBE, the Chief of Army Staff (Second from right) at Construction site in technical area in 1965.



**1965:** Shri VP Naik Chief Minister of Maharashtra Chief Guest for Val Function



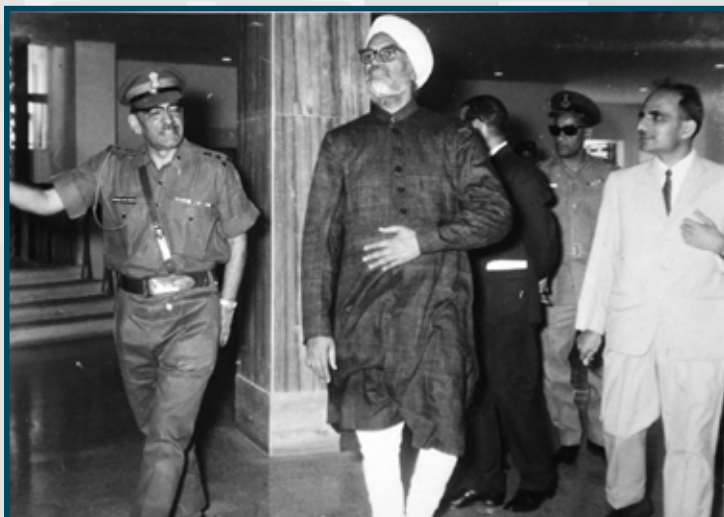
**1966:** Visit of Vice Adm Adhar Kumar Chatterji, then Chief of Naval Staff to IAS, CME, Kirkee. Seen Above with Cmde MK Lele, Dean, IAS (Centre).



**1966:** Model of proposed IAT building shown to Admiral AK Chatterji Chief of Naval Staff.



0861-0261



**1968:** Visit of Sardar Swaran Singh, then Defence Minister of India to IAT, Girinagar. Seen here with Brig PP Singh, Dean, IAT (extreme left) at the ground floor foyer of the main building at Girinagar.



**1971:** Brig Pritam Pal Singh was awarded AVSM.

Seen besides:  
Brig PP Singh  
(extreme right) with  
Mrs Indira Gandhi,  
then Prime Minister  
of India on 06 Oct  
71 during Investiture  
Ceremony at New  
Delhi.



**1971:** Admiral SM Nanda PVSM, AVSM Chief of Naval Staff addressing the convocation. Brig Pritam Pal Singh, AVSM Dean IAT sitting right.



**Nov 1972:** Air Chief Marshal PC Lal DFC Chief of Air Staff during Convocation Ceremony.



**Jan 1973:** Prof. JN Nanda took over as first DRDO Dean of IAT. Seen above: Prof Nanda at the crease with main building in the background.





1974: Revised Technical Staff Course was started under the name of Technical Staff Officers Course with syllabi and instructional material from DSSC, Wellington.

Seen besides: Student Officers of first TSOC(Army) Batch with their spouses at their Dining-out at IAT Officers' Mess.

# 1980-1990



IAT in 1980



Jun 1980: General Sir Thomas Lovett Morony, KCB, OBE, Commandant of RMCS (1978) and Vice Chief of Imperial General Staff, UK (1980) visited Girinagar.

Seen besides: Cmde and Mrs. SS Venkateswaran, then Dean IAT, welcoming the General (extreme left) and his spouse at IAT Main Building.



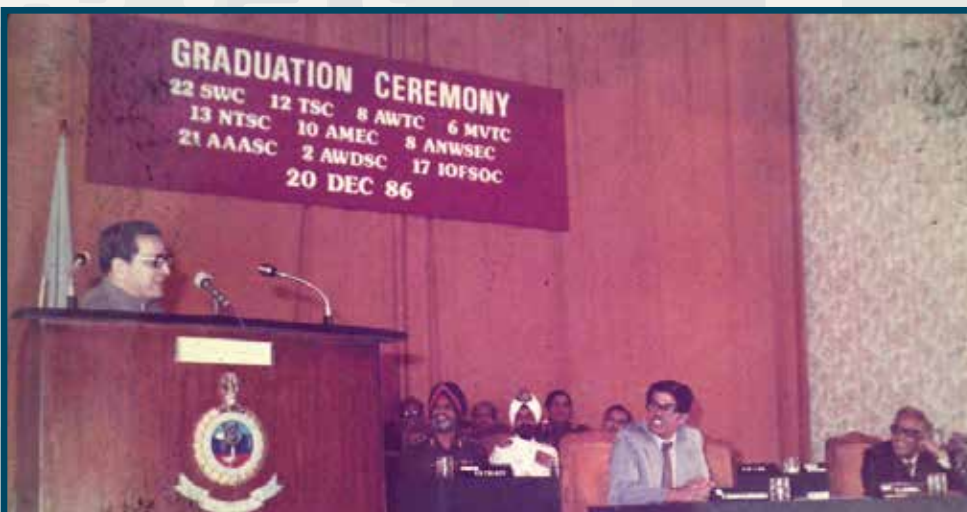


1982: IAT Grew into a post-graduate teaching centre conducting ME courses of University of Pune.

Seen above: On 24 May 82 Naval Experimental Bay was inaugurated by R Adm SS Venkateswaran, then Dean IAT.



May 1983: Visit of Egyptian delegation. Maj Gen N Subbarao Director & Dean, IAT presenting a memento to Head of Egyptian Delegation.



Dec 1986: Graduation Ceremony all PG courses was held.

Seen Above: Prof PC Rath Chief Guest of the function addressing the course participants. Dr E Bhagirathi Rao Director & Dean, IAT seated at second from right.



Mar 1987: 36<sup>th</sup> Foundation Day Sports event was conducted for families of IAT

Seen above: Families participating in musical chairs.



1990-2000



IAT Building during 1990s.



Jun 1991: Visit of Chinese Delegation.

Seen above: AVM U A Deshpande Director & Dean, IAT receiving the delegation.



Jan 1991: IAT Sports Day

Seen above: AVM U A Deshpande Director & Dean, IAT with prize winners.



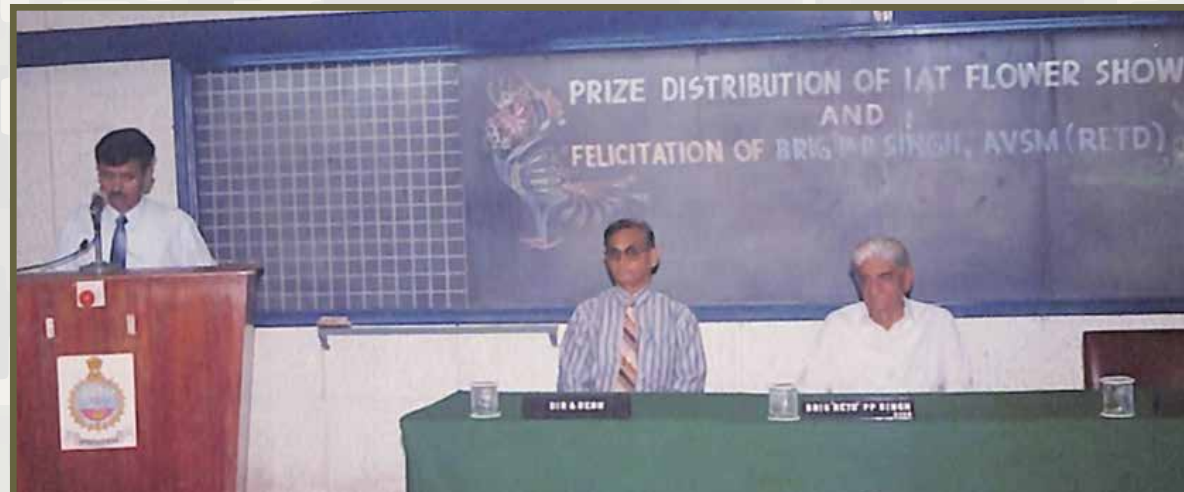
Aug 1993: Visit of the Chinese delegation at IAT. R Adm Ajay Sharma, AVSM Director & Dean, IAT with the delegation.





Apr 1994: Directors meet on Vision 2020 was held at IAT from 21-24 Apr 1994.

Seen above: Bharat Ratna Dr APJ Abdul Kalam SA to RM (Sitting Centre) (Former President of India) Chaired the meeting  
R Adm Ajay Sharma, AVSM Director & Dean, IAT sitting third from right.



Oct 1997: Felicitation of Brig PP Singh AVSM (Retd) former Dean IAT on his 80<sup>th</sup> Birthday at IAT.

Seen above: Prof G S Mani Director & Dean, IAT at centre with Brig PP Singh AVSM (Retd) extreme right.



Jun 2002: IAT Golden Jubilee Celebrations.

Seen above: R Adm A K Handa, VSM Director & Dean of IAT receiving Air Chief Marshal OP Mehra (Retd) former Chief of Air Staff (1973-1976) and Former Dean (1960-1963) for the Golden Jubilee Celebrations.



08 Jun 2006: First convocation of DIAT as Deemed University was held with President of India, Bharat Ratna Dr APJ Abdul Kalam as the Chief Guest.



08 Jun 2006: His Excellency Bharat Ratna Dr APJ Abdul Kalam signing the Roll of Honour book.





Aug 2003: INFO MILAN conducted at IAT Girinagar

Seen Above: R Adm A K Handa, VSM Director & Dean, IAT sitting at the centre



Dec 2009: Farewell to R Adm Rakesh Bajaj, VSM Commandant MILIT



# 2010-2020



Nov 2011: First visit of CSIC, HQ IDS. Vice Admiral Sekhar Sinha AVSM, NM & Bar (Centre) delivered a talk on 'Functioning of HQ IDS and Jointness' to all officers of DIAT(DU) towards bifurcation of MILIT from DIAT(DU) from Jan 2012 onwards.

Seen above: Vice Admiral Sekhar Sinha AVSM, NM & Bar (Centre), CSIC, HQ IDS with Dr Prahalada Vice Chancellor, DIAT(DU) (to his left) and Maj Gen Ravi Saxena, Pro Vice Chancellor, Dean (Military Technology), DIAT(DU) (to his right).



Oct 2012: First cultural programme of MILIT 'JHANKAR-12' by Student Officers of TSOC-38.

AVM PP Khandekar Director & Commandant, MILIT being received by Lt Col Rajesh Kapoor of TSOC-38 (Present HoF of Army) at CV Raman Auditorium.



May 2014: AVM PP Khandekar Director & Commandant handing over the Baton to R Adm AS Sethi, VSM, First Commandant of MILIT.



# 2010-2020



May 2016: Valedictory Function of TSOC (Army-41, Navy-03, Air Force-24) and NTSC-34 was held at Mehra Auditorium.

Seen beside: R Adm AS Sethi, VSM Commandant MILIT handing over MILIT memento to the Chief guest, Air Chief Marshal Arup Raha PVSM, AVSM, VM ADC, Chairman of the Chiefs of Staff Committee & Chief of Air Staff.



Apr 2018: MILIT participated in Defence Expo-2018 held in Chennai.

Seen above: Maj Gen AK Sapra, VSM Commandant MILIT handing over memento to a visiting dignitary.



Jan 2019: Visit of Air Chief Marshal BS Dhanoa PVSM, AVSM, YSM, VM, ADC at Air Hangar MILIT. Wg Cdr Ajay Mahajan (Third from right) briefing the dignitary. AVM V Rajhans, VSM Commandant MILIT standing second from left.



# 2021 ONWARDS



Nov 2021: Lecture by Gen Bipin Rawat PVSM, UYSM, AVSM, YSM, SM, VSM ADC Chief of Defence Staff.

Seen besides: MILIT memento being presented to Gen Bipin Rawat PVSM, UYSM, AVSM, YSM, SM, VSM ADC Chief of Defence Staff by Maj Gen Hari Singh, VSM Commandant, MILIT.



Apr 2023: Visit of Air Mshl AP Singh PVSM, AVSM Vice Chief of Air Staff.



Aug 2023: Visit of Lt Gen Virendra Vats YSM, SM, VSM Commandant DSSC Wellington.





Aug 2023: Visit  
of Vice Admiral  
Dinesh K Tripathi  
PVSM, AVSM,  
NM FOC-in-C, HQ  
Western Naval  
Command



Sep 2023: Lt Gen Manjit Kumar, Chief of Staff, HQ Southern Command with officers from Friendly Foreign Countries during Annual Adm Insp of MILIT



## From the Visitors' Book

MILIT		
Date	Name & Address	Remarks
23 June 2015	Mr. Manohar P.P. Khandekar Security Maintenance Staff Office Mandwadekar Maintenance Compound, CPE Village Seta Mangar, Talimang, HSB Munggaon - 440002	21 May 2015, I handed over the papers of MILIT to RA As I am not my colleague of 2nd batch at SMC. After more than a year, I have shifted MILIT and the program is very encouraging to say the least. G.S. Madhav, Technology Ministry Training, PMS-BMC Lab, NEB Addition of Training module of Advanced Maintenance of Weapons, Spacing, Spacing, CR Lico Place a Mission, along a Mission! "Technology Always Wins" for this Armed Force Training Institute in Military Technology
		At Seta Mangar, I would have definitely, continuation and that means sending all to exist. Continuation of using being interested in MILIT and SMC as a whole delight Good Job! Team MILIT, work the day and night and work hard along to RA, I will be responsible for the 1st and 2nd batch would not be a stopping time for further expansion of MILIT in range with them too! I am proud of you all. I'm Hina! Rajendra Khandekar

MILIT		
Date	Name & Address	Remarks
11-05-2016	Thomas Antony, SE-2 Programmer, District (ASST), MPSC, Kochi	I am highly pleased by the hardware extension of Command, R. Let it be better in time and effort. I also see all the very best in all the effort in their development of Technology is the 7th Avenue. R. Antony
12 May 2016	AR, MSAL, ASST, SHARAD, ANAND OPG, CMC, HAWES & DOODS, (OCT)	Enlightened in at MILIT which is a frontier Technical Institute of the Armed Forces and poised to flourish to greater heights of academic pursuit & excellence. R. Antony
3 May 16	ACM Anup Raha Chairman, CMC & CAS	My first visit to MILIT. The Institute is performing well in preparing the mid-level & junior officers for shouldering important tasks in the field. Staff appointments, towards exploitation of technologies. Best wishes & keep up the growth trajectory of MILIT. R. Antony

MILIT		
Date	Name & Address	Remarks
15 Nov 2021	General Bipin Rawat, Pwson, Myson, Pwson, Vcsm, Son, Vcsm, JSC, USG	Visit to MILIT and interaction with faculty and students to exchange views on the relevance of technology in future technology, has been most inspiring. The institution will set the stage for adaptation of technology and prepare our Armed Forces, as a combat ready force for the future. Do well and keep the forces going.
		Tai Hinda <u>Brown</u>

A historic occasion  
- The birth of a  
great Institution  
- "MIT" which  
will guide and  
use the technology  
aspirations of the  
three Services.

My compliments  
to Mr. B. Ravi  
Saxena & his team  
for an outstanding  
piece of work.

A historic occasion - The birth of a great Institution - "MILIT" which will guide and meet the technology aspirations of the three Services. My compliments to Maj Gen Ravi Saxena + his team for an outstanding piece of work.

Annotations by Lt Gen AK Singh, PVSM, AVSM, SM, VSM, ADC, GOC in C, Southern Comd during the MILIT Inaugural Function on 06 Feb 2012

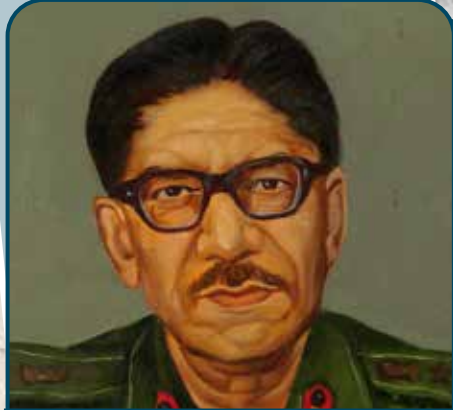
MILIT		
Date	Name & Address	Remarks
20/5/2016	Amal Sehgal, Secy, DADO House	MILIT has great importance in my career as I was involved in its establishment. I am proud the way MILIT has grown & achieved. I wish best for future.
31/5/2016	G. SATHISHA RAO, Sakin	Excellent presentation of the history of ZAT, IAT, DIAT, MILIT which took me to my days spent in ZAT during 1985. MILIT is providing excellent training to our Armed forces and I wish the institute to emerge as a world class institute delivering success to our Armed forces from all over the world.





# Rise from Trainee to Trainer

Lt Col Pritam Pal Singh as a student during 3 TSC, Oct 1953 – Apr 1955



Brig Pritam Pal Singh,  
AVSM as Dean, IAT  
Feb 1968-Sep 1972

Lt Cdr S S Venkateswaran as a student during First Special Weapons Course, Feb 1960- Aug 1960



R Adm S S Venkateswaran  
as Director & Dean, IAT  
Oct 1979- Oct 1982

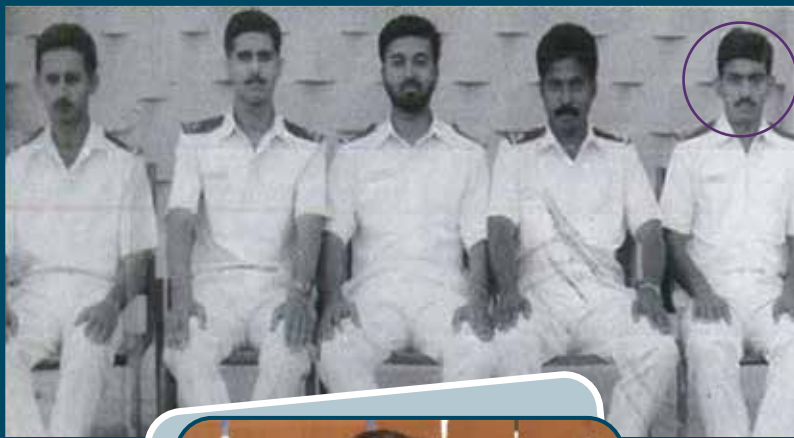
Wg Cdr Vivek Blouria as a student during TSOC(AF)-14, 07 Jul 05 - 07 Jun 06



AVM Vivek Blouria  
as Commandant  
01 Jul 2023 to till date



Lt B Vashishta as a student during 17 NTSC, 1992-1993



S Lt Rajesh Chatterjee as a student during 21 NTSC, 1996-1997



Cmde B Vashishta  
as DC & CI  
Jun 2017-Jun 2019



Cmde Rajesh Chatterjee  
as DC & CI  
15 Jun 2023 to till date



# TRAINING SPECTRUM





# Training Objectives

01

To impart high quality training through:

- Fostering comprehensive understanding of concepts of modern technologies and related fields.
- Continuous development of state-of-art training infrastructure.
- Adoption of modern training methodologies and tools.
- Continual improvement of faculty expertise.

02

To develop multi-dimensional capabilities of officers through:

- Augmentation of their core competencies with understanding of nuances of other Arms and Services.
- Enhanced development of intellectual discipline and imaginative thinking to cope with the technologically intensive environment.
- Emphasis on centrality of strength of character and integrity in the changing social milieu.

03

To promote Jointmanship by enhancing common training of officers of the three Services in technologies, tactics and staff duties.

04

To provide research support to Services on applications of modern military technologies and synergy between military doctrines and technologies.

05

To continually update the content, duration and conduct of the courses sponsored by Services and other organisations by maintaining a close liaison with them.

## Courses Conducted at MILIT

Course	Duration (in wks)
<b>ARMY COURSE</b>	
Defence Services Technical Staff Course (DSTSC) - Army	46
<b>NAVY COURSES</b>	
Naval Technical Staff Course (NTSC)	52
Defence Services Technical Staff Course (DSTSC) - Navy	46
Indian Naval Armament Service Officers Foundation Course (INASOFC)	10
Marine Propulsion Control Technology Course (MPCTC) (twice a year)	10
Guided Weapons Introductory Course (GWIC)	02
Naval Weapons & Missile Technology Course (NW&MTC) (twice a year)	02
Naval Technology Update Course (NTUC)	04
<b>AIR FORCE COURSE</b>	
Defence Services Technical Staff Course (DSTSC) – Air Force	46
<b>TRI-SERVICE COURSES</b>	
Aircraft Weapon Delivery and Aircrew Ejection Systems Course (AWDESC)	05
Space Operation and Spatial Technology Course (SOSTC)	05
Advanced Communication Technology Course (ACTC)	05
Capsule on Science Technology and Applied Research (CAPSTAR)	03 Days
Nuclear Electromagnetic Pulse (NEMP)	02



# Defence Services Technical Staff Course (DSTSC)

## FLAGSHIP COURSE

The flagship Course of DSTSC is conducted for a duration of 46 weeks by the three service faculties for selected/nominated mid-level officers of the Army, Navy & Air Force. The training imparted is aimed at enabling the mid-career officers to hold command and staff appointments in their respective services as well as in the tri-service environment.

The course is also subscribed by officers of friendly foreign countries & Indian Coast Guard. On successful completion of the course, the officers are awarded a Post Graduate Degree of M Sc (Military Technology) by Savitribai Phule Pune University.

The Course facilitates enhanced jointmanship within the faculties as well as the student fraternity, by the virtue of common training imparted in the fields of Technologies, Tactics and Staff Duties. The student officers undertake technical dissertations during the course including some live technical projects as desired by respective services.



# Typical Day at MILIT



0750 hrs at MILIT



Theoretical Class Under Progress



Guest Lectures by Subject Matter Experts



Evenings



Demonstration Class on Air Armaments at Air Hangar



Guest Lecture by eminent speaker



# Industrial Demonstration Tour (IDT)



IDT of DSTSC (Army)-06 Officers to Society for Applied Microwave Electronics Engineering & Information Technology (SAMEER) at Vizag



DSTSC (Navy)-06 Officers at MDL visit to expose nuances of shipbuilding. An under-construction INS Udaygiri seen in background



Exposure to AI: DSTSC (Navy)-05 Officers visiting Bit Mapper Integration Technologies Pvt. Ltd.



DSTSC Officers at Heavy Vehicles Factory, Avadi



DSTSC (Navy)-06 Officers at ship lift facility at NSRY, Karwar



# Joint Industrial Demonstration Tour: (Vishakhapatnam, CME, ACC&S & Arty College)





# Forward Area Tour (FAT)



DSTSC (AF)-06 Officers at Dras



DSTSC (Navy)-06 Officers at Kargil War Memorial



DSTSC (AF)-05 Officers at ANC



DSTSC (AF)-06 Officers at Leh



DSTSC(Navy)-06 Officers at Pangong Lake. World's highest brackish water lake shared between India and China, where it can be seen in a frozen state.





Cycling Expedition during Mid-Term



Golf



Cycling Expeditions during Weekends



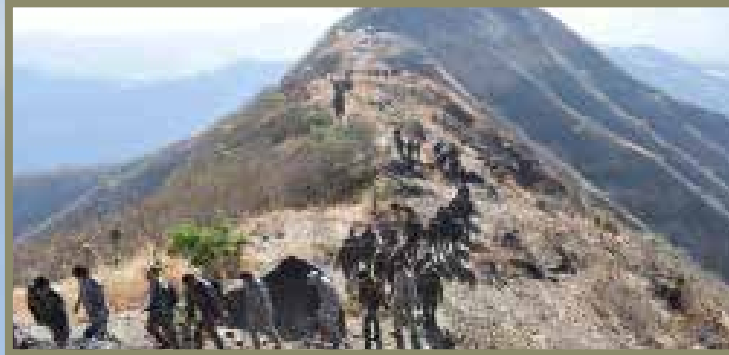
Cultural Programme by DSTSC Officers



# Tac and SD Phase



Briefing: Tac and War Gaming



War Gaming Exercise



Class on Tac and War Gaming



Posting Time

# Valedictory Function



Valedictory Function



Chief Guest with Prize Winners





# Naval Technical Staff Course (NTSC)

## FLAGSHIP COURSE

The course provides in-depth knowledge to Naval Armament officers of the Naval Armament Inspectorate Cadre, with emphasis on the technological design aspects and quality management of various types of Naval Armament stores. Upon completion of the course, M Sc (Military Technology) is awarded to the officers by Savitribai Phule Pune University.



Theory class in Class room



Demonstration Class in Mechatronics Lab



Games and Workout in the Evening



Health Run in the morning





Weekend Cycling



Run for Unity- Josh Run



Local IDT to Bharat Electronics



Outstation IDT to BrahMos Aerospace Ltd. at Nagpur



# Training Infrastructure



Class Room for War Gaming Exercise



Sand Model for War Gaming



Audio Visual Room





Artillery Shed



IC Engine Lab



Combat Vehicle Division





# Labs



Artificial Intelligence Lab



Big Data Analytics Lab



Communication Lab





Automation and Control Lab



Armament Technology Lab



Naval Armament Bay (NAB)



Naval Experimental Bay (NEB)





# Training Models



SU-7 Aircraft



HAL Marut Aircraft



Akash Missile Cut Model



BrahMos Missile Cut Model



Ejection Seat Simulator



ASTRA Missile



## Mehra Auditorium







**Demonstration class to International Officers**



**MILIT Library**



**Inauguration of Campus Wide Network Project**



# International Presence



Sri Lanka



Myanmar



Bangladesh



Kenya



Nigeria



Ghana



Benin



Maldives



Mozambique



Mauritius



Thailand



Papua New Guinea



Sudan



Fiji



Tanzania



Vietnam



Seychelles



Cameroon



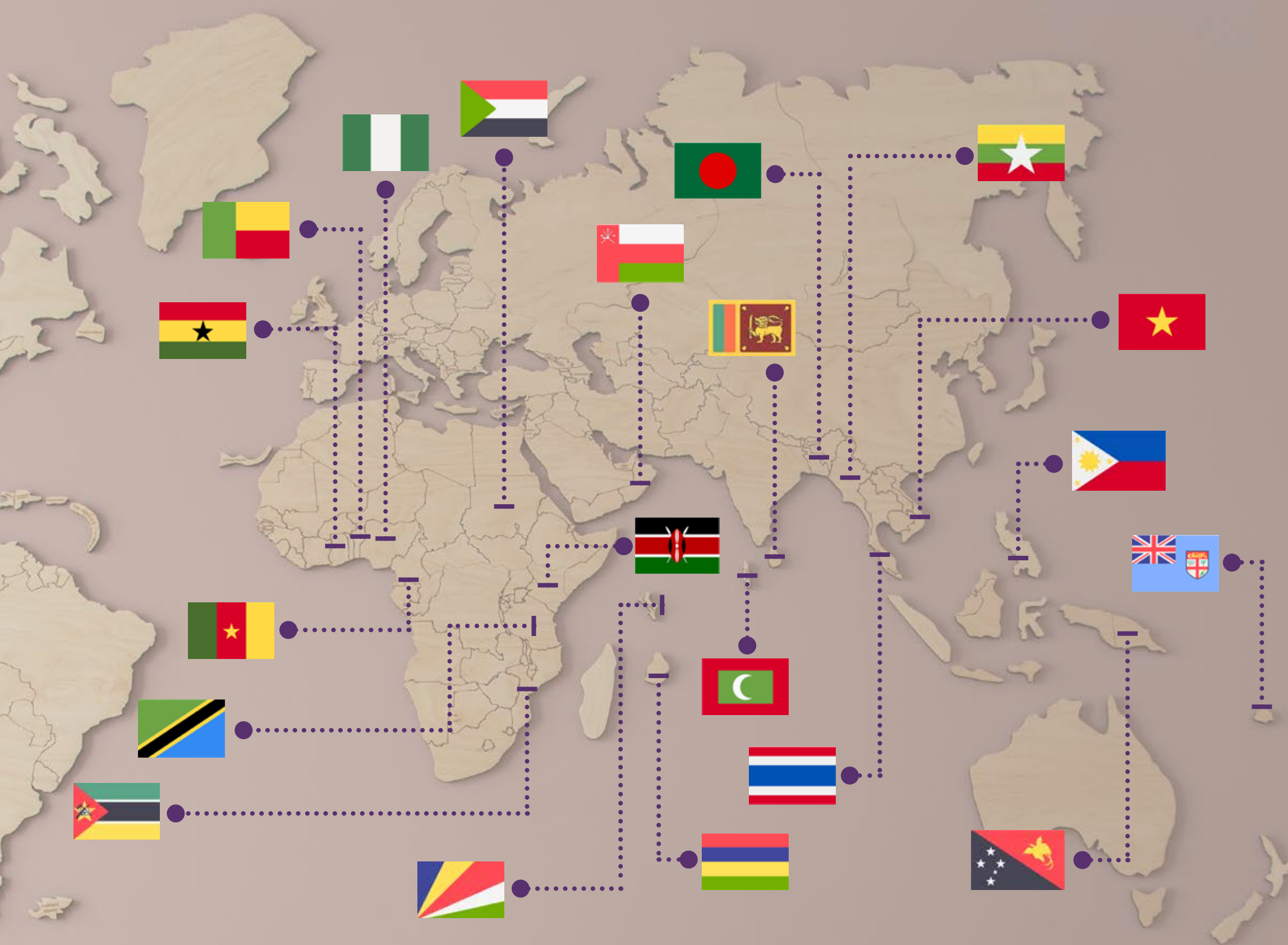
Oman



Philippines









# Overseas Visits by Our Faculties



MILIT delegation at Defence Services Command and Staff College Batalanda Sri Lanka (07-12 Nov 2022)



Nov 2022: Visit of MILIT delegation to Sri Lanka. Wg Cdr BP Tripathy (far right) and Lt Col A Mohiley (second from right) from MILIT at Defence Services Command and Staff College, Batalanda, Sri Lanka.



Nov 2022: Visit of MILIT delegation to Sri Lanka.  
Seen above: MILIT delegation at the Indian Embassy at Sri Lanka.

Wg Cdr BP Tripathy (second from right) and Lt Col A Mohiley (extreme left) from MILIT and Col Avinash Bisht (extreme right) and Col Vinayak Ramasamy (Second from left) from DSSC, Wellington with Capt (IN) Vikas Sood Defence Attache at Indian Embassy in Sri Lanka.





**Nov 2023: Visit of MILIT delegation to Sri Lanka**  
 Seen above: Cmde Rajesh Chatterjee DC&CI MILIT (Centre) with Maj Gen Lasantha Rodrigo, Commandant DSCSC Sri Lanka (Second from Left), Col (Dr) Rajesh Kapoor HoF (Army) (Extreme right) and Gp Capt AK Shrivastava HoF (Air Force) (Second from Right) from MILIT and Col Ashish Uprethi from DSSC Wellington (Extreme Left).



**13 Nov 2023: Visit of MILIT Delegation to Sri Lanka-** Cmde Rajesh Chatterjee DC&CI, MILIT with Maj Gen Lasantha Rodrigo, Commandant, DSCSC, Sri Lanka.



**14 Nov 2023: Visit of MILIT Delegation to Sri Lanka**  
 Cmde Rajesh Chatterjee DC&CI MILIT (centre) with Rear Admiral HGU Dammika Kumara, Vice Chancellor of General Sir John Kotelawala Defence University Sri Lanka (Right) and Gp Capt AK Shrivastava HoF (Air Force) (Left).



**MILIT Delegation at Defence Services Command and Staff College, Batalanda, Sri Lanka (13-15 Nov 2023).**





Sep 2019: AVM V Rajhans, VSM, Commandant MILIT visited the UK  
Seen above: AVM V Rajhans with Ms Anne Marie Trevelyan, Minister for Defence Procurement of the United Kingdom at DSEI 2019-London.



Seen above: AVM V Rajhans with first public display of Tempest by BAE Systems at DSEI Boulevard London-2019.

## Visits Foreign Delegation



Oman Delegation on 09 Mar 23.





Visit of Sri Lankan Delegation, Sep 23.



Study Tour: DSCSC Sri Lanka, Sep 21



Study Tour: Army School of Lgs, Sri Lanka, Feb 22



# MILIT KALEIDOSCOPE



Army Day 2024



Navy Day 2023



CAPSTAR 2023



Air Force Day 2023



# Sports Facilities







Oct 2023: AVM Vivek Blouria, Commandant MILIT felicitating the Shramjivis



Oct 2023: AVM Vivek Blouria, Commandant MILIT felicitating meritorious students on Air Force Day



Hindi Pakhwara 2023: Commandant & DC&CI with the Winners



Unity Run on 31 Oct 2023



Deepawali Mela: 2023





Dr CV Rama Narayanan, Vice Chancellor of DIAT and AVM Vivek Blouria Commandant MILIT during Deepavali Mela: Nov 2023



Tree Plantation in Memory of Late General Bipin Rawat, The First CDS: 06 Dec 2022



MILIT Golf Cup Tournament at NDA on 12 Nov 2022



Visit of Students of Pawar Public School



Oct 2023: Visit by Students of Parul University





Visit to Historical Places in Pune: 04 Feb 2023



Trek to Sinhagad Fort: 04 Mar 2023



Tree Plantation Drive: 21-28 Jun 2023



Nov 2022 : Tree Plantation by Vice Chancellor DIAT and Commandant MILIT





Ganesh Pooja Celebrations



Celebration of International Yoga Day: 21 Jun 2023



Students Performing during Cultural Evening



# CAPSTAR-09

Inauguration and visit to various Artificial Intelligence based Stalls at Air Hangar MILIT by Gen Anil Chauhan PVSM UYSM AVSM SM VSM Chief of Defence Staff during CAPSTAR-09 on 17 Jan 2024.





Inauguration of Heritage Hall by  
Gen Anil Chauhan PVSM UYSM AVSM SM VSM  
Chief of Defence Staff on 17 Jan 2024.





Release of MILIT Journal Gen Anil Chauhan PVSM UYSM AVSM SM VSM  
Chief of Defence Staff during CAPSTAR-09 on 17 Jan 2024.







MoU Signed between IIT Bombay and MILIT on 19 Jan 2024.



MoU Signed between Bit Mapper Integration Technologies Pvt. Ltd. and MILIT on 19 Jan 2024.



MILIT raising day celebrations 19 Jan 2024.





Visit and Inauguration of Armament Technology Laboratory by CAS on 09 Feb 24





Indian Air Force has gifted one Total Technical Life Expired (TTLE) MiG-21 aircraft to MILIT for training purposes. The aircraft has been assembled with the support of Western Air Command, Training Command and MILIT staff units.

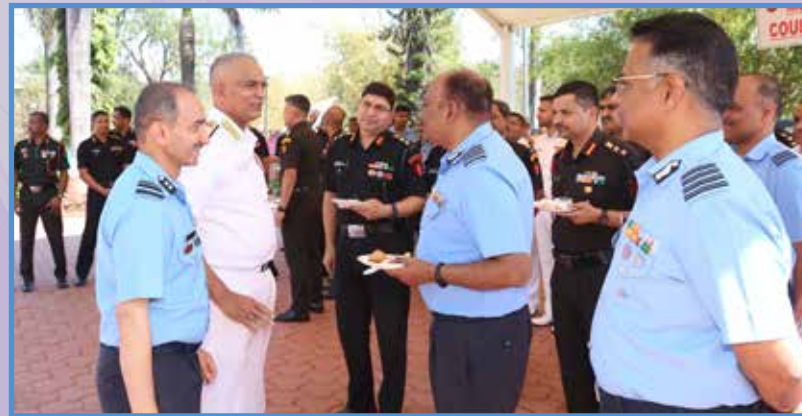








Visit of Lt Gen Ajai Kumar Singh PVSM AVSM YSM SM VSM, GOC-in-C, SC on 14 Feb 2024



Visit of CNS on 19 Feb 2024





Golf Tournament Feb 2024



MILIT Lake View Half Marathon on 04 Feb 2024



# MILITARY INSTITUTE OF TECHNOLOGY



JTC Inspection Team Dec 2023



# President DWWA (MILIT) Mrs Anjali Blouria



Mrs Anjali Blouria joined the IAF family as Sangini in Dec 1993, since then she has been an active member of AFWWA at various IAF stations over the last three decades. She has done her B.A from Guru Nanak Dev University, Punjab and B.Ed. from Jammu University. She has been an educationist throughout and taught in various AF Schools. She held the post of Principal of the Air Force School, Ojhar (Nasik).

As an active Sangini, she has participated in all AFWWA events. She has handled the responsibility of Secretary Ladies Club twice. During her tenure at HQ EAC IAF, she rendered active support to President AFWWA (R). As the spouse of Commanding Officer during her tenure

at HQ EAC, she rendered active support to President AFWWA (R). As the spouse of Commanding Officer during her tenure at Bengaluru and as President AFWWA (L) at Air Force Station Kanheri Hills, she minutely monitored the well-being of Sanginis of the stations and motivated them to contribute towards strengthening the organisation. She loves cooking, an avid reader and enjoys travelling and exploring new places. Music is her first love. Her motto in life is “LIVE AND LET LIVE”.

Mrs Anjali Blouria is blessed with two sons. Elder son Arjun is an Engineer and employed with a reputed American Firm and younger one, Aryan is a Computer Engineer working with a British firm.



# DWWA Activities



MILIT Defence Wives Welfare Association (DWWA) plays an active part in several social causes for the community. MILIT DWWA functions with the sole objective of welfare of all its members through a range of activities, including providing assistance and counselling. It strives to develop confident, socially aware and responsible 'Sanginis' by providing avenues for thinking, creativity and performance. Under the aegis of DWWA and through funds earmarked for welfare measures under CTS, personal development, health and wellness-oriented Art of Living programs have been planned and conducted on a regular basis. Various activities like Karate, Skating, and Classical Singing classes for children are being conducted under the aegis of DWWA.



DWWA Meet on 03 Nov 2023



Inauguration of the new Sangini Shop by Mrs Anjali Blouria President DWWA



Inauguration of OR Guest room ASHIYANA by Mrs Anjali Blouria President DWWA



# DWWA Activities

Skating Class



Art of Living Programs



Karate Class



Children's Day at Tiny Tots School



# Flora & Fauna of Campus

## Khadakwasla Lake Hosting Winged Guests

In winter, Pune and its the surrounding areas, with catchment areas, lakes, etc., witness full migratory bird activities until Feb-Mar. There are places to spot them, such as Kamala Nehru Park, Pashan Lake, Mula-Mutha River, Katraj, and not to forget Khadakwasla Lake within a radius of 30 kms. However, there are other places more than 50 kms away to look for migratory birds in Pune (Bhigwan, Veer Dam).

As per the eBird website records, there are 161 species of birds in and around Khadakwasla Lake. The lake supports a good avian species population. However, there has been a decline in the count of migratory birds at Khadakwasla Lake. Compared to 2019, 2020, & 2021, the number of migratory birds has reduced, which is not a good sign.

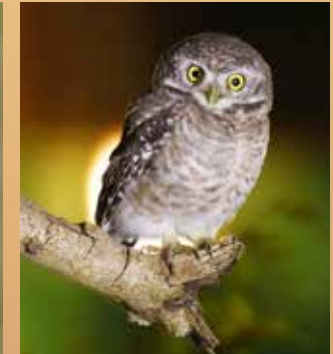
We conducted a circumnavigation of the entire lake, starting from Girinagar-Panshet and back to Girinagar, covering 45 km to count birds and species near the lake. To our surprise, the number of migratory birds visiting the lake has reduced drastically. The reasons for this decline include the construction of hotels/lake-facing guest houses/resorts near the lake by locals, agricultural land expansion, etc.

By Cdr AS Bishoni

## Birds

The water birds found near Khadakwasla Lake include Ashy Prinia, Asian Brown Flycatcher, Baya Weaver, Blackbird, Blue Oakleaf, Blue Tiger, Brown-headed Barbet, Commander, Common Mormon, Common Sailor, Copper Smith Barbet, Giant Wood Spider, Indian Nightjar, Indian Paradise Flycatcher, Indian Peacock, Indian Peafowl, Indian White-eye, Jezebel, Luna Moth, Lime Butterfly, Mottled Wood Owl, Plain Tiger, Purple Sunbird, Red Pierrot, Red-whiskered Bulbul, Scaly-breasted Munia, Spotted Owlet, Tailorbird, Tawny Coaster, Tickell's Blue Flycatcher, Verditer Flycatcher, White-breasted Kingfisher, White-throated Kingfisher, Yellow Pansy, and Yellow-throated Sparrow.

Other resident birds include Black Kite, Eurasian Marsh Harrier, Brahminy Kite, Pied Kingfisher, Common Kingfisher, Laughing Dove, Intermediate Egret, Rose-ringed Parakeet, Long-tailed Shrike, White Wagtail, Paddy Field Pipit, Western Yellow Wagtail, Blyth's Reed Warbler, etc.





# MILIT RATNAS



**Capt (IN) Ashutosh A Pednekar:  
World Champion Racketlon**

Capt Ashutosh A Pednekar, a Naval Officer, created history in sport of Racketlon for India several times. Firstly by becoming the first Indian to bag the World Champion title in the 16<sup>th</sup> World Racketlon Championship held in Zurich in 2018, followed by bagging four World titles in the 19<sup>th</sup> World Racketlon Championship in Vienna. In an unparalleled and unprecedented feat he won Gold medals in over 50 Singles, Doubles, Mixed and Teams Open categories.

Capt AA Pednekar is an alumnus of MILIT having done his Naval Technical Staff Course NTSC 21 during 1995-1997 and presently posted as Instructor at the Naval Faculty in MILIT.

Despite his stellar achievements this unassuming naval officer, prefers to keep a low profile and is quietly preparing to repeat his performances at the next World Racketlon Championship in Aug 2024.



## Lt Col Swaroop Singh Kuntal: Ultraman



Lt Col Swaroop Singh Kuntal's odyssey in the world of extreme sports is nothing short of extraordinary. Renowned as the victor of the "Ultraman India" challenge, his relentless pursuit of excellence has unfolded in a tapestry of achievements, post the gruelling Ultraman event.

The journey begins with Lt Col Kuntal's triumphant conquest of Ultraman India—a monumental challenge involving a 10,000 meter swim, a 424 km cycling, and an 84 km double

marathon—all completed in a staggering 27 hours and 46 minutes. His achievement garnered not only the title but also the prestigious COAS Commendation Card from then Chief of Army Staff, Gen Bipin Rawat.

Before Ultraman, Lt Col Kuntal showcased his mettle in Ironman, Malaysia. It consists of 3.8 km sea swimming, 180 km cycling and 42.2 km running with an elevation gain of around 3000 meters. Competing with 2,000 athletes from 70 countries, he conquered a gruelling course of sea swimming, cycling, and running, emerging as the fastest Indian in 12 hours and 14 minutes, securing the coveted title of Ironman Malaysia.

One of the monumental chapters in Lt Col Kuntal's journey is the Azadi Ka Amrut Mahotsav—a 350 kms run from Gwalior to Delhi. This tri-services event, held from October 15 to October 21, 2021, witnessed Lt Col Kuntal's indomitable spirit as he conquered the challenging course in just seven days. The run symbolized not just a physical feat but a patriotic odyssey, commemorating India's rich heritage during the 75<sup>th</sup> year of its independence.

A true soldier, Lt Col Kuntal is unstoppable and is continuously challenging himself for greater accomplishments. He has excelled in academics as well as proven himself in the field of sports. His journey as a triathlete, Ultramarathoner, Cyclist, Paratrooper and an IITian is an inspiration and motivation for one and all.



## Lt Amrutendrini: Shooting Champion

Lt Amrutendrini DC (10205-T) is serving as an officer in Indian Navy. The officer has undergone Naval Technical Staff Course (NTSC-41) in Military Institute of Technology. She is National Level Shooter Represented WNC in Indian Naval Annual Musketry Championship – 2023.

She has Qualified in shooting for prenational during 2022, 2023 and State player (4<sup>th</sup> position in 25m Standard Pistol) and participated in District Shooting Competition during 2023 and Won Gold in 10m air pistol & 25m sports pistol, Silver in 25m Standard pistol & 50m Free Pistol and achieved Silver in Ernakulam District Olympics Shooting Competition in 2022.



She is a Full Marathon runner. Her achievements includes Winner Pune Full Marathon (42 kms), Winner in AmiBolt Half Marathon (21 kms), Finisher (Fifth) in NDA Full Marathon (42 kms), Finisher in TATA Ultra Marathon (Challenge Run – 35 kms) and Pune International Half Marathon.

Recently she has participated from Western Naval Command in Annual Musketry Championship and won two gold and one silver medal.



# MEMOIR BY MRS HIMANI SINGH: MRS MAHARASHTRA 2023

## Embracing Dreams Beyond Marriage: My Journey from MILIT to Mrs Maharashtra

The amalgamation of my roots in Uttar Pradesh with the honour of being crowned Mrs Maharashtra stands as my greatest achievement. It signifies the beauty of diversity and the richness that surfaces when cultures and aspirations intertwine.

In the echoes of Pune City, amidst the responsibilities of being an Army Wife and managing household duties, I stumbled upon an unforeseen chance that fulfilled my lifelong aspiration: participating in a beauty pageant. I've perpetually held a keen interest in the glamorous world, having previously worked as a Flight Attendant at Jet Airways for five years. As I matured, the prospect of beauty pageants seemed like a distant fantasy, which my mother envisioned for me.

However, destiny took its course when my husband's nomination for DSTSC led us to Pune. It was in this city that everything fell into place, offering an unexpected opportunity. I wholeheartedly embraced this moment to venture into a journey that transcends the conventional roles of a wife and homemaker.

Participating in the pageant was a conscious choice to step beyond my comfort zone. Amidst the allure and glitz, there existed a foundation of discipline and commitment behind the scenes. I adhered to a strict regimen of diet and physical fitness, with yoga proving immensely beneficial both physically and mentally. This journey wasn't solely about sticking to a routine; it was about fostering a mindset of self-discipline and restraint.

### Essence of My Journey

The day of the pageant marked a culmination of various emotions: nervousness, excitement and a profound sense of purpose. Stepping onto the stage, I carried within me the stories and resilience of every Army wife and homemaker I've been fortunate to encounter. This expedition has imparted invaluable lessons on embracing individuality, discovering strength in vulnerability, and cherishing the richness of diversity. Wearing the crown of Mrs Maharashtra 2023 fills me with pride, and I dedicate this accomplishment to every woman who tirelessly serves her family and country with unwavering commitment.

By Mrs Himani Singh,  
w/o Maj Dushyant Singh, SM  
DSTSC-06







# MILIT Sundrive: Hybrid Solar Vehicle

At MILIT, our guiding principle of 'Victory through Technology' propels us to fully embrace and seamlessly integrate technology into all facets of our existence.

The 'MILIT SUNDRIVE: Hybrid Solar Vehicle' epitomizes our unwavering commitment to leveraging the vast potential of solar energy for sustainable mobility solutions through relentless efforts of MILIT staff and student officers. This innovative vehicle operates on electrical batteries, which are charged by solar cells ingeniously integrated into the vehicle's roof. Typically, it takes approximately six hours to fully charge the batteries using solar power. However, in



instances of cloudy weather or low sunlight, the vehicle can also be charged conventionally through an electric charger. Moreover, to ensure uninterrupted operation even in the absence of solar or electric charging options, the vehicle is equipped with a built-in generator.

Beyond its practical applications, 'MILIT SUNDRIVE' embodies MILIT's profound respect for heritage within the Armed Forces. By seamlessly integrating solar power technology into a heritage vehicle, we symbolize the harmonious coexistence of tradition and innovation. This vehicle not only serves as a tangible representation of this synergy but also functions as an invaluable educational tool. Through training and technology demonstrations, it enables student officers to grasp the intricacies of continuously evolving technologies.

In essence, 'MILIT SUNDRIVE' is more than just a hybrid solar vehicle; it is a testament to MILIT's unwavering commitment to technological advancement, sustainability, and the preservation of our esteemed military legacy. With its pioneering design and multifaceted utility, 'MILIT SUNDRIVE' stands as a beacon of progress, ingenuity and perseverance.





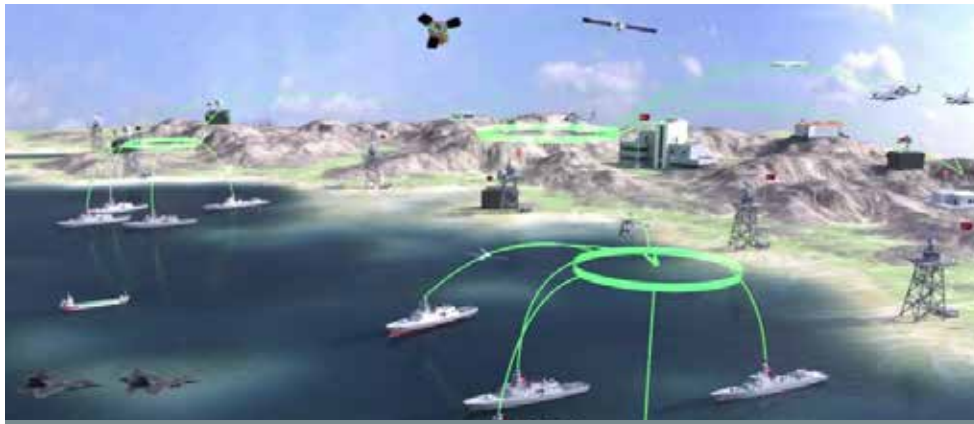
# ROAD AHEAD Niche Technologies



AI and Big Data Analytics



Cyber Security



Network Centric Operations



Green Technology



Aerial Swarm Agents



AR, VR and Simulation Technologies



Underwater Swarm Agents





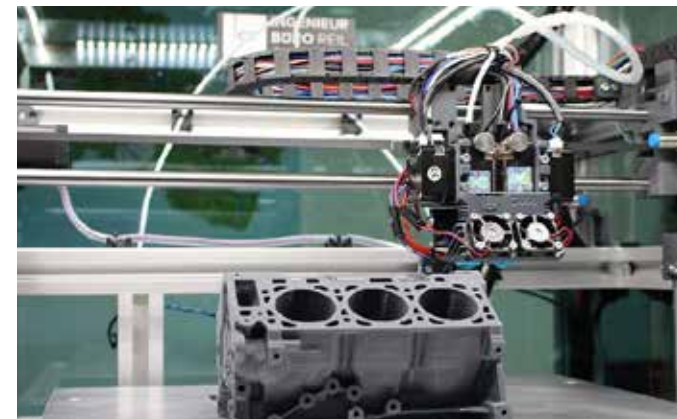
Smart Munitions



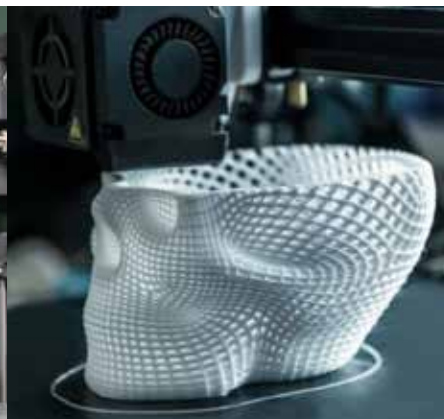
Hypersonic Technology



Military Applications of Blockchain Technology



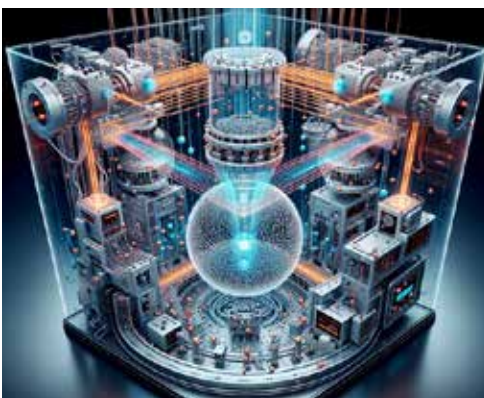
Additive Manufacturing



Nano-satellites



Electromagnetic Rail Gun



Quantum Computing



Next Generation Torpedoes



Directed Energy Weapon



Precision Guided Munition



# MILT ALUMNI







**First Technical Staff Course  
TSC (Armaments) - 1952**



**First Advanced Air Armament  
Staff Course (AAASC) - 1955**



**First Armament Engineering  
Course (AEC) - 1959**



**First Special Weapons Course  
(SWC) - 1960**



**First Basic Air Armament Course  
(BAAC) - 1961**



**First Naval Scientific Orientation  
Course (NSOC) - 1962**



**First Compressed Special Weapons  
Course (CSWC) - 1963**



**First Naval Armament Inspection  
Course (NAI) - 1963**



**First Army Scientific Orientation  
Course (ASOC) - 1964**





**First Junior Armament Apprentice Course (JAAC) - 1964**



**First Guided Weapon Officers' Course (GWOC) - 1964**



**First Senior Officers' Guided Weapon Course (SOGWC) - 1965**



**First Naval Armament Supply Officers' Course (NASOC) - 1965**



**First Senior Armament Apprentice Course (SAAC) - 1965**



**First Senior Apprentice Electronics Course (SAEC) - 1965**





**First Nuclear Physics Introductory Course (NPIC) - 1968**



**First Naval Technical Staff Course (NTSC) - 1968**



**First Naval Long Gunnery Course (NLGC) – 1968**



**First Senior Staff Course (SSC) - 1968**



**First Advanced Marine Engineering Course (AMEC) - 1970**



**First Tank Technology Course (TTC) - 1971**





**First Guided Weapon Course (GWC) - 1974**



**First Technical Staff Officers Course (Army)  
TSOC (Army) - 1974**



**First Advance Naval Weapon System  
Engineering Course (ANWSEC) - 1975**



**First Deputy Armament Supply Officers'  
Course (DASOC) - 1975**



**First Basic Electronics Introductory  
Course (BEIC) - 1975**



**First Advance Weapon Technical  
Course (AWTC) - 1975**



**First Technical  
Staff Officers  
Course (Air Force)  
[TSOC (AF)] - 1980**





First Technical Staff Officers Course TSOC (Navy) - 2013



First Capsule on Science Technology and Applied Research (CAPSTAR) - 2013



First Advanced Communication Technology Course (ACTC) - 2013



First Space Operation and Spatial Technology Course (SOSTC) - 2017



First Defence Services Technical Staff Course, DSTSC (Army) - 2018





First Defence Services Technical Staff Course, DSTSC (Navy) - 2018



First Defence Services Technical Staff Course, DSTSC (AF) - 2018





First Aircraft Weapon Delivery and Ejection System Course (AWDESC) - 2019



First Nuclear Electro Magnetic Pulse Course (NEMP) - 2022



# Team MILIT - 2024



**Standing (Left to Right):** Lt Col Alok Tomer, Lt Cdr Nikhil Tomar, Cdr Paresh Dhasmana, Wg Cdr N Praveen, Cdr Vikrant Vinay Gokhale, Maj Manu Murali V, Lt Col JS Rathore, Lt Col Ramesh Prakash, Lt Col Tarang Pande, Lt Col Sangram Sawant, Lt Col KRS Shankla, Cdr Ankush Kumar Singh, Lt Col R Ahluwalia, Lt Col NK Mishra, Wg Cdr SP Padmarajan, Lt Col Ananya Mohiley, Cdr Manoj M Kulkarni, Lt Col Sanjay Salunkhe, Lt Col BS Sodhi, Cdr RK Bhardwaj

**Sitting (Left to Right):** Capt(IN) MM Mudaliar, Gp Capt Virender Singh, Capt(IN) Rahul Inamdar, Capt(IN) Harish Kumar Sharma, Capt(IN) HS Mutalik, Capt(IN) Sumit Joshi (HoF Navy), Col (Dr) Rajesh Kapoor (HoF Army), Gp Capt G Mahesh Kumar (DS Coord), AVM Vivek Blouria (Commandant), Cmde Rajesh Chatterjee (Deputy Commandant & Chief Instructor), Gp Capt Alok Shrivastava (HoF Air Force), Col Pankaj Kumar (Col Adm), Col RP Singh (HoD Dept of IT & Studies), Gp Capt AS Viridi, Gp Capt Ranjan Samaddar, Col Rohit Sharma, Lt Col Rajnish Mehta



# Commandant and Deputy Commandant with Editorial Team

## MILITARY INSTITUTE OF TECHNOLOGY



**Sitting (Left to Right):** Capt (IN) Rahul Inamdar, Col RP Singh, AVM Vivek Blouria (Commandant), Cmde Rajesh Chatterjee (Deputy Commandant & Chief Instructor), Wg Cdr SP Padmarajan, Cdr S Sridhar Rao









*The pursuit for creating techno warriors continue...*





# MILIT

## Military Institute of Technology

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