



सह वीर्यं करवावहे

IETE

NEWSLETTER

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FROM PRESIDENT'S DESK

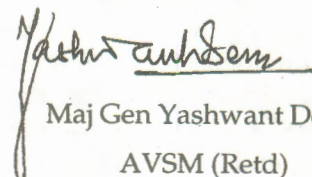
I receive a bagful of postal mail and byteful of e-mail everyday. I open it with misgivings not because of fear of catching "Anthrax" or "I Love You" but apprehending loaded calumny and slander. That is precisely my lot and more so of the Secretary General. He carries the brunt and that too in megabits. Cynics and doomsayers never tire of working overtime in reproaching, pinpricking and finding fault. Our bete noire abound.

There is often a pleasant change mostly from remote places. The ones that buck up our morale are: a grateful daughter expressing approbation of NORAD for deliverance from oppression and social ostracize in this evil world; an eighty-five-plus reminiscing days gone by and showering blessings for making him still relevant; and a jawan posted at Sopore appreciating our response to his queries for acquiring a diploma in information technology.

A cynic asked me what were the achievements of the IETE in the last two years and I said, "Go and see blossoms in the eyes of the NORAD girls and the disabled (nay! I should say "challenged" as I have been correcting others), who gathered at the recently concluded seminar in Chandigarh." Three more centres for NORAD training have been added, Imphal, Kanpur and Noida; each a locale and an opportunity for meaningful social work. Our next bid is Mhow the birthplace of Babasaheb Ambedkar; it beckons and inspires me as no other place does.

A surprise came from the Army Chief. His winsome response to Vijayee Bhav was a pleasing DO and a morale booster, so are the words of encouragement and eulogy that we have received from a wide spectrum of luminaries and who's who on the occasion of the MTS. What plumes a matter of pride is the standard of papers; excellent is the word.

The Engineering Council of India is a reality. We are in the process of creating a TATA and an IRSI seat of research. Warangal soon will be our 42nd baby. If this is not progress what else is? Skeptics, doubters and agnostic notwithstanding, we march forward. Everyday the step becomes firmer and firmer.


Maj Gen Yashwant Deva,
AVSM (Retd)

NEWS FROM HEADQUARTERS

IETE Apex Forum

A meeting of the IETE Apex Forum was held at IETE, Kolkata centre on February 16, 2002 on "Technologies for Combating Terrorism". The meeting was chaired by Shri K Santhanam, Director IDSA. It was a well-attended meeting with participants from the Services, Cabinet Secretariat, MHA, IB, CBI, DRDO, IETE fraternity and intelligentsia. The background paper, prepared by the President IETE brought out facets and nuances of all types of terrorism including cyberterrorism. The paper extensively covered the technologies adopted by the terrorist and their counter. The technologies that are vibrant and becoming easy to access by the terrorists are: remote control technology in all its forms employed surreptitiously, virtual reality, synchronization steganography and IT. The areas of stress were identified as electronic eyes and ears, airport security, biometrics, cockpit security, tunnel hunting, ferreting improvised explosive devices, immigration and border crossing and WMD. The paper also discussed prototypes and products on the anvil. It laid stress on Cyberint, psy and techtronic terrorism and databank management. The following thrust areas were identified: surveillance, biometrics, genetics, virtual environment and intelligence analyses, steganalysis, cryptanalysis, artificial intelligence, knowbots and MEMS. In his conclusion the President IETE said that if the international community regards terrorism immoral, there would be little room for terrorists to act. According to him terrorism is a war between technology and anti-technology. Technology has to be shared, there is no room for denial regimes and sanctions. He assured IETE's lead role in taking technology to the trench and to the other side of the divide. Other papers that were distributed included "Biometrics for Identification" by Dr J H Agarwal, "The Looming Threat of Bioterrorism" by Maj Gen Yashwant Deva, AVSM (Retd), "Tools of Terror: The Art and Science of Steganography" by Maj Gen Yashwant Deva, AVSM (Retd), "Wake-up Call: India's Cyberspace is under attack" by Maj Gen Yashwant Deva, AVSM (Retd), "Technologies for Combating Terrorism" by Shri Dilip Sahay, "Security through Biometric Systems and Related Issues" by Prof A K Mandal, and "Terror Hunt: Warehousing and Mining Data" by Maj Gen Yashwant Deva, AVSM (Retd).

The issues debated in the meeting were- should India adopt defensive or offensive policies to counter terrorism, what should be the organizational structure to meet the threat of terrorism, should there be a single intelligence agency, what should be the modus operandi to make terrorism expensive for the enemy, the technologies that India should develop or acquire for encountering different types of terrorism. It was suggested that security of infrastructures like banking & finance, electric power, water supply, airport, fire & rescue, law enforcement, IT, telecom, oil & gas and transport services are the targets of terror attack. The meeting also discussed NBC threat and our response, technology thrust areas of cybersecurity, biometrics, genetics, steganography, steganalysis, MEMS etc. The training of manpower to counter terrorism, psy and techtronic terrorism, physiological tools for winning minds of alienated people, weapons of mass destruction were also discussed.



Maj Gen Yashwant Deva (Retd), AVSM, President, IETE presenting the memento to Shri K Santhanam, Director IDSA during IETE Apex Forum

Formation of the Engineering Council of India

The Engineering Council of India (ECI) has been formed to co-ordinate the activities and responsibilities of different professional societies in developing a uniform code for regulating the conduct of Indian professional engineers both inside the country and abroad. The aims and objectives of ECI are:

1. To promote the science and practice of engineering for national development, collectively along with constituent members.

2. To encourage engineers to serve the needs of the society.
3. To promote advancement of education of engineering in the country.
4. To promote the practice of continuing education and training to upgrade the quality of engineering professionals.
5. To identify and undertake activities of common interest to the engineering profession.
6. To encourage inventions, investigations and research; and promote their applications for development of the national economy.
7. To identify and undertake activities directed to enhance prestige of engineers in the country, and to secure for them their rightful place at various levels of planning, administration etc.
8. To promote steps to attract bright persons of the younger generation to the engineering profession.
9. To assist Associations / Professional societies in normalizing criteria for membership so as to make these nationally equitable and internationally acceptable.
10. To establish a common "Code of Ethics" for professional and consulting engineers adoption by Associations / Professional Societies and evolve the strategy for its enforcement.
11. To interact with the Government at State & Central levels and help adoption of policies for betterment of the engineering professions.
12. To represent engineers and engineering professionals of all disciplines, at national and international levels.
13. To maintain a National Register of "Professional Engineers" and a National Register of "Consulting Engineers".
14. To act as a Nodal Body, representing India for bilateral / multi-lateral recognition of "Professional Engineers" and "Consulting Engineers" on mutual and reciprocal basis.
15. To identify and encourage the implementation of best practices for the development and assessment of engineering intending to practice as professionals in domestic as well as foreign markets.
16. To standardize criteria to be adopted for according status of "Professional Engineer" and "Consulting Engineer" and to accord licence/ accreditation to practice engineering in India.
17. To identify major engineering disciplines in which substantial cross border mobility is expected and to cater to those disciplines in Engineering Council of India's policies, practices and their registers/ sub-registers.
18. To identify barriers to professional engineers' mobility and to develop and promote strategies, to advise and, if required, assist Central and State Govt. Departments, in managing those barriers in an effective and non-discriminatory manner.
19. To develop mutually acceptable standards and criteria for facilitating cross-border mobility of experienced Professional Engineers and Consulting Engineers among WTO signatories.
20. To establish such committees, as may be necessary, for reciprocal joint activities with similar professional bodies in other countries who are signatories of WTO and other related agreements.
21. To network and cooperate with other such international bodies who are engaged in similar activities.
22. To perform any or all other acts, deeds and things, which may become necessary to be performed at any stage to achieve the main objectives of improving the image of the engineering profession and of the professional engineer, and to serve the needs of the society.

Honorable Deputy Chairman of Planning Commission of India is the patron of Engineering Council of India. It would have a five member advisory committee appointed by the Board of Governors from amongst its members. The Chairman is to be appointed by the patron on the recommendations of the advisory committee. Prof Ashok Chandra, Special Secretary, Ministry of HRD has taken over as the first Chairman of Engineering Council of India. Following are the board members of the Engineering Council of India:

- The Institution of Engineers (India) (IEI)
- The Institution of Electronics and Telecommunication Engineers (IETE)
- Consulting Engineers Association of India (CEAI)

- Construction Industry Development Council (CIDC)
- Indian National Academy of Engineering (INAE)
- Planning Commission
- Ministry of Human Resource Development
- Ministry of Commerce
- Ministry of Urban Development
- Council of Scientific & Industrial Research (CSIR)
- All India Council of Technical Education (AICTE)
- National Board of Accreditation (NBA)

NORAD

The IETE has extended socially relevant NORAD Scheme that imparts training to urban women from weaker section of the society to three more centres viz. Imphal, Kanpur and Noida besides, other 17 IETE centres. Under this scheme more than 1500 trainees will be trained during the year.

NEWS FROM LOCAL CENTRES

Ahmedabad

A zonal seminar on "Role of Telecommunications & IT in Disaster Management" was arranged on the 18th January 2002 at IETE Ahmedabad centre. Shri P K Chanda, Chief General Manager, Telecommunication, BSNL, Gujarat Circle was the Chief Guest and Shri B S



A view of the dias during the zonal seminar held at Ahmedabad

Bhatia, Director DECU, ISRO, the Guest of Honour on the occasion. The session on Cyclones was chaired by Prof B H Jajoo of IIM, Ahmedabad. Shri A Mukhopadhyay, Chief Technical Officer of Fascel Ltd, chaired the session on Flood/ Drought. The third session on Earthquake was chaired by Shri A R Dasgupta, Dy Director, SAC, Ahmedabad.

Some of the senior members of IETE were felicitated by Dr A K S Gopalan, Director SAC, Ahmedabad.

Bangalore

The IETE Bangalore centre organised the following technical events:

- A lecture by Shri Uday Kumar, GM, Lucent Technologies Ltd, New Delhi on "What makes GSM a killer technology: GSM today and the way forward" on January 4, 2002.
- A lecture on "Telecom Scenario in 21st Century" by Shri G B Meemamsi on January 10, 2002.
- A lecture by Dr Wolfgang Mueller on "Virtual Home Environment (VHE) Middleware: Vision Challenges and Directions—A European Perspective", on January 25, 2002.
- IETE Student Forum at NTT IT centre Bangalore was inaugurated on the February 16, 2002 by Shri PNAP Rao, FIETE, Distinguished Scientist, ADA and a lecture cum demo was arranged. Shri K Venugopal Director training NTTF presided. AMIETE (IT) cell was also inaugurated at NTT IT centre.
- National Science Day lecture was delivered by Prof S V Subramanyam, IISc, Bangalore on "Superconductors, Discovery, Properties and Applications" on February 28, 2002.

Cochin

A lecture on "Payment Gateway" by Dr K Poullose Jacob Director, School of Computer Science Studies CUSAT was arranged on January 19, 2002 at Calicut by the centre. An activity centre has also been opened at Calicut with Shri B S Ramanjaneyulu, Senior Design Engineer of CEDTI, as its Chairman.

Dehradun

Dr Banmali S Rawat, Prof., Department of Electrical Engineering, University of Nevada, USA delivered a talk

on "Dense Wavelength Division Multiplexing (DWDM) Technology for Optical Communication" on January 7, 2002.

Delhi

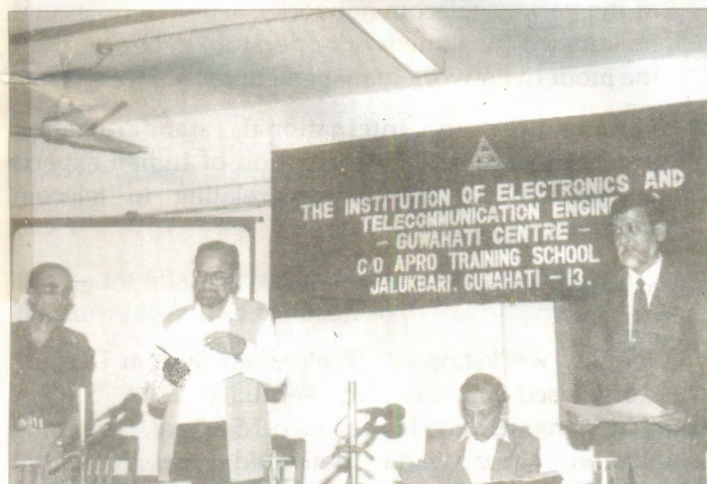
Dr Stephen Ryrie, Associate Dean, Faculty of Computing Engineering & Mathematical Sciences, University of the West of England (UWE), Bristol UK delivered a lecture on "Professional Bodies in Higher Education: A Help or Hindrance?" on January 11, 2002.

Mr Bernard Wise, President, Energy-ONIX, USA delivered a lecture on "FM Broadcasting in USA" on February 1, 2002.

Shri Ashok Kumar, Deputy Director General (R) of Telecommunication Engineering Centre delivered a lecture on "Management of Telecommunications during Disaster and Natural Calamities" on February 8, 2002.

Guwahati

An entrepreneurship development programme, a 5-day course for NORAD Trainees of IETE Guwahati Centre was organized by the Indian Institute of Entrepreneurship from 18 to 22 Feb 2002. The valedictory function was held on Feb 22, 2002. Participants were given certificates by Col T B B Lahkar (Retd), Chairman IETE Guwahati Centre and Dr P C Mahanta, Director, Technical Education, Govt of Assam.



Certificates being given to NORAD trainees at IETE Guwahati Centre

Hyderabad

The following activities were conducted by the centre

- Short-term course on 'Oracle 8i/9i DBA Forms 6I' was inaugurated by Shri M Madan Mohan, Distinguished Fellow, IETE on January 17, 2002.
- A lecture was delivered by Dr K M M Rao, Group Head, Imaging & Image Processing, NRSA, Hyderabad on "Image Processing & its Application" on January 28, 2002.
- 4th Prof K K Nair Memorial Lecture on "The Future of Bio-Medical Engineering in India" was delivered by Prof Alladi Prabhakar.

Jaipur

The IETE Jaipur centre conducted the following activities-

- A lecture on "Speech Compression" by Shri K K Sharma, Hony Treasurer & Senior Lecturer at MREC on December 13, 2001.
- A technical quiz was organized on December 18, 2001 for the benefit of the IETE students and students of the nearby technical institutions at MREC, Jaipur.
- A lecture on "Switching Network" by Dr R P Yadav Secretary IETE & Reader at MREC on January 15, 2002.
- A national level student competition "Mirage" was organized by Electronics & Communication Engineering Society students along with IETE & IEEE at MREC Jaipur from 25-27 January 2002.
- A lecture on New Trends in Mobile Communication by Col B S Jaggi, Chairman IETE Jaipur Centre.

Kanpur

A student's meeting was arranged on January 6, 2002.

Lucknow

Coaching classes and lab practical exams for the DIPIETE and AMIETE students were conducted for the first time at the centre.

Nagpur

A seminar on "From Old Telephony & Wireless

Communication to Communication in 21st Century" was organized jointly by IETE Nagpur centre, Sri Sant Gajanan Maharaj College of Engineering, Shegaon on February 9, 2002. Shri S S Patil, President SSGM Shikshan Sansthan, presided over the inaugural function. Shri Pankaj Gupta, Telecom, District Manager, Khamgaon was the Chief Guest. Shri Milind Ektare, Engineer from Hughes Telecom was the Theme speaker.

Nashik

IETE Nashik sub-centre jointly with IE (I) Nashik organized a lecture on Development in Nuclear Physics in the Last Century (with special focus on Atom Smashers, Particle Accelerators) by Dr S R Gowardkar, Director, Tolani Institute of Technology & Management, Pune on January 19, 2002.

Noida

The Centre conducted a seminar on Blue Tooth on 18th October 2001. Speakers included Shri Ashis Sanyal, Shri Satyanarayan and Col Remanand.

Pune

To mark the completion of its 30 years, the Pune centre conducted a national seminar on Quality in Telecommunication Services during 23-24 February 2002. The seminar achieved its objective of creation of awareness of quality of services among the various service providers, manufacturers, institutions and users.

Dr Pramod Kale, the noted Scientist and Former Director of ISRO inaugurated the seminar. The keynote address was delivered by Dr D P S Seth, CMD, BSNL. The inaugural function was presided over by Maj Gen Yashwant Deva, AVSM (Retd), President of the IETE, who propounded a philosophical approach to quality. The delegates were managers, service providers, regulators, manufacturers, consultants etc. Technical papers covered the entire spectrum of quality of telecom services concerning conventional as well as new services. A souvenir was brought out during the occasion, containing VIP messages and technical papers.

A lively panel discussion, chaired by Shri Ramani Iyer (Retd), CGM, MTNL, Mumbai was the concluding session of the seminar. Finally, the following

recommendations emerged:

- **Customer orientation of services:** The customer needs an orientation in respect of various services, facilities, their rights and the expected levels of quality of each service. A customer Orientation/Guidance cell should be created in each network unit for this purpose.
- **Uniformity of performance indicators and their measurement:** Certain benchmarks and the methods of measurement and evaluation recommended by a competent authority (ITU/TRAI) must be scrupulously adhered to by all the service providers in order to give uniform quality of service in the multiple-service-providers environment to the customers.
- **Encouragement to customers organization:** Formation of customer organizations should be encouraged for addressing customer grievances, giving feedback information to improve the services and making the procedures customer friendly.
- **Customer perception parameters:** The parameters, through which a customer judges a service, should be defined in consultation with the customer organizations and employed in actual practice to improve the service.
- **Seminars:** Seminars to educate customers of various services such as voice, data, video, cellular mobile etc should be organized from time to time.
- **Network management:** To enhance the performance of the various telecom networks, active steps should be initiated by all network operators to benefit from the modern network management tools.
- **Participation in international standardization process:** Large scale participation of Indian experts in international conferences relating to telecom standards.

Vijayawada

One day workshop on "Embedded System Design" was organised on the 3rd February 2002. Shri P Balagangadhara Rao, ITS, Dy Gen Manager, Switching Installation, Vijayawada delivered the inaugural address. The technical lectures were delivered by Shri D Ramakrishna, FIETE, Chairman, IETE Vijayawada centre. Dr P Venkata Narasaiah, Principal V R

Siddhartha Engineering College, Vijayawada was the Guest of Honour. Ms M Padmaja, Hon'y Treasurer of the centre proposed vote of thanks.

Visakhapatnam

The IETE Visakhapatnam Centre was inaugurated by the Hon'ble Union Minister of State for Defence Shri U V Krishnam Raju on 14th January 2002. Rear Admiral S Mohapatra, VSM Director, NSTL & Chairman IETE presided over the function. Dr K Haribabu, Hon'ble Member of the A P Legislative Assembly was the Guest of Honour. Prof J M Naidu, Registrar, A U released the Souvenir. Mementos were presented to all the guests. Prof GSN Raju Chairman, Building Committee presented vote of thanks. Shri T Sivaram, Vice-President, Ideaspac Financial Technologies, delivered a lecture on "Software Trends in Testing" on the occasion. He described the needs of software testing for E-commerce, Web-Computing and applications that are responsible



Hon'ble Union Minister of State for Defence, Shri U V Krishnam Raju inaugurating the IETE Visakhapatnam Centre at Andhra University Engg College Campus

for secure financial transactions on the net. He discussed the current standards of software testing and stressed on the need for improving software engineering practices to achieve high system reliability.

Lecture on Information Technology and Future Wars: A technical lecture on "Information Technology and Future Wars" was delivered by Wg Cdr (Dr) M L Bala (Retd) at IETE Local centres of Kanpur, Lucknow, Nashik and Pune.

IETE STUDENT FORUM ACTIVITY

- The Student Forum of IETE at **SRKR Engineering College, Bhimavaram** organised a seminar on "Personality Development". The seminar was conducted by Prof G Suribabu, Head, Dept of E & IE, Incharge of Training and Placement cell, Sir CRR Engg College, ELURU on 29 December 2001. The Principal, Prof B Janardhan Reddy, inaugurated the seminar. The importance of communication skills and how to do well in the interviews were discussed in the seminar.
- ISF at **MVSR Engineering College** conducted Inter-college Technical Extempore Contest at State level on 22nd December 2001. Students from various colleges of Andhra Pradesh participated. The best competitors were awarded cash prizes. Certificates were given to the participants.

HONOURS & AWARDS

Prof Ashok Jhunjunwala, FIETE has been awarded the 'Padma Shri' for his contribution in establishing the TENET Group at IIT, Chennai. The Group works in conjunction with the industry to develop telecommunications and computer networks. He is credited with the development of corDECT, WiLL, Fibre Access Network, DSL Systems among many others. Prof Jhunjunwala is also in the editorial Board of IETE Journal of Research.

NEW APPOINTMENT



Shri R K Gupta, FIETE has taken over as Engineer-in-Chief in Doordarshan with effect from February 1, 2002. He is presently the President of Broadcast Engineering Society (India).

OBITUARY

With profound grief, we inform the sad demise of the following illustrious members of the Institution.



Prof Satish Dhawan, HF000012, renowned Space scientist and former Chairman of Indian Space Research Organization, passed away in Bangalore on Jan 3, 2002. It was under his dynamic leadership that India launched its first satellite, Aryabhata. He took over as the first Secretary of the Department of Space in 1972 and also became Chairman of the Space Commission in the same year.

Prof Dhawan was the recipient of many awards including Padma Shri, Padma Bhushan, Padma Vibhushan and Indira Gandhi Award for National Integration. During his tenure as Chairman ISRO, the ambitious projects like Satellite Instructional Television Experiment and Satellite Telecommunication Experiments were successfully conducted. Bhaskara I, SLV3, Rohini, RS-DI, Apple Satellite, Bhaskara II, INSAT-IA, RS-D2, INSAT-IB and the Indo-Soviet space mission were successfully launched during his term as Chairman ISRO. Prof Dhawan was known for his deep commitment to human values and use of science and technology for development.

Prof K V Ramanan, F000805, a senior fellow member of IETE passed away.



Shri Shyamnarain Kapur, F000224, a founder member passed away on Sept 27, 2001. He was a Science (Maths) graduate of Bombay University and a Diploma holder of Indian Institute of Science, Bangalore. He joined AIR as a Technical Assistant in 1947 and retired as Engineer-in-Chief (West) in 1980. He was a man of principles and high values. Shri Kapur is survived by his wife and two daughters.

Shri S G Watwe, F038779, a fellow of the institution passed away on August 20, 2001 at Mumbai.



Dr (Smt) Dipti Rustogi, F015096, would be remembered for her valuable contribution to INSAT-I satellite project, satcom applications projects and satcom training under UN Centre for Asia-Pacific Region.

Note: The Institution of Electronics and Telecommunication Engineers assumes no responsibility for the statements and opinions expressed by individual author and speakers.

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