CNS OFFICERS' GUILD (Regd.)

Regd. Under Society Act: Registration No. S-54400

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Dated: September 28, 2010



No. CNSOG/CHQ./CNS INDIA 2010/

To, Mr. Praful Patel, Hon'ble Minister of Civil Aviation, Rajiv Gandhi Bhawan, Safdarjung Airport, New Delhi – 110003

Subject: Report – International Seminar CNS INDIA 2010 on Next Generation Air Traffic Engineering Systems - *NGATES*.

Hon'ble Sir,

I am pleased to submit a brief report on the International Seminar CNS INDIA 2010 on *Next Generation Air Traffic Engineering Systems* which was organized by CNS Officers' Guild of Airports Authority of India and attended by over 200 participants from the aviation industry in India and overseas. Approximately 50 CNS Professionals from 20 airports across the country also attended the seminar. Few pictures showing the glimpses of the seminar, souvenir, copy of the presentations and video is being enclosed for your information.

This seminar had an overwhelming response and has been appreciated by one and all including senior officers from the Ministry.

CNS Officers' Guild is having professional expertise in the field of Air Traffic Engineering System (Communication, Navigation, Surveillance and ATM Automation) and would like to volunteer their services to meet the challenges in the Indian Aviation Industry with booming growth in air traffic over Indian airspace. CNS Officers' Guild is affiliated to the *International Federation of Air Traffic Safety Electronics Associations (IFATSEA)* with its Headquarter at Montreal, Canada. IFATSEA is a non-political international body working for global harmonization and sharing of information amongst the members. This affiliation has given us a global platform for exchange of information and ideas with our counterparts across the globe. Our mission through our constant endeavor in the technical domain in Air Navigation Service is to provide a Safe Sky over Indian airspace.

Thanking you.

Yours sincerely,

Subit Kobiraj General Secretary

Contd..Pg/2

President: Shamsher Singh+91-9971766868 General Secretary: Subit Kobiraj+91-9899901156

Copy with above enclosures to:

- 1) Shri M. M. Nambiar, IAS, Secretary, M. of C.A., New Delhi
- 2) Shri V. P. Agrawal, Chairman, AAI, New Delhi
- 3) Shri Y. Bhave, IAS, Chairman, AERA, New Delhi
- 4) Dr S. N. A. Zaidi, IAS, Director General of Civil Aviation, New Delhi
- 5) Shri E. K. Bharat Bhusan, IAS, AS & FA, M of C.A., New Delhi
- 6) Shri Alok Sinha, IAS, Jt. Secretary, M of C.A., New Delhi
- 7) Shri Somosundarm, Executive Director (ANS), AAI, New Delhi

Subit Kobiraj General Secretary CNS Officers' Guild

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REPORT

International Seminar CNS INDIA 2010 on Next Generation Air Traffic Engineering Systems- NGATES 10th September 2010

 A one day International Seminar on Next Generation Air Traffic Engineering Systems-NGATES was organized on 10th September 2010 at India Habitat Center, Lodhi Road, New Delhi.

2. Inaugural function:

The Inaugural function started with the Welcome note from Mr U. N. Singh, Regional Executive Director, Northern Region. In his welcome note he shared his experience as an Instructor at Civil Aviation Training College, Allahabad, he discussed the changes in electronics engineering from the valve system to the solid state transistors, to integrated chips, to the modern state-of-art CNS systems and now to the next generation equipments.

Mr Yashwant Bhave, IAS, Chairman Airports Economic Regulatory Authority of India and the Chief Guest inaugurated the seminar by lighting of Lamp with other dignitaries on the dais. In his inaugural speech he said that technology is the heart of CNS & ATM systems operation. He also said that, change in technology is continuum. He explained the role of technology of special type in nature in CNS/ATM systems. He further said in the frame work of tariff determination for CNS facilities, the decision was based on equipment life time, criticality i.e certain limitations and redundancy, zero tolerance and forecast. The august house was inspired with his references to different quotes and books in his address.

Mr. E. K. Bharat Bhushan, IAS, Additional Secretary and Financial Advisor, Ministry of Civil Aviation and Guest of Honour released the souvenir. In his Key Note Address Mr Bharat Bhusan praised CNS Officers Guild's in coming up with initiative in organizing the international seminar of this nature. He also praised the efforts of AAI in modernization of infrastructure of airports. The phenomenal growth in air traffic transport system with present 120 million passengers and expected growth to 560 million passengers this has brought massive strain on resources. By reengineering the systems and upgrading we need to meet the challenges. He expressed his happiness that trade and professional body of engineers and executives of AAI has come forward to address the issue though this seminar. He said as the responsible person in the allocation of funds, government will help for both best personal training needs and best equipment and technology.

President: Shamsher Singh+91-9971766868 General Secretary: Subit Kobiraj+91-9899901156 Mr S. C. Chhatwal, Member (Finance) Airports Authority of India welcomed all the dignitaries on the dais, government officials, participants and friends from overseas on behalf of Airports Authority of India. He said that AAI has been doing a lot in up-gradation of airports in the past. In the last two years focus has shifted to augmentation and modernization of ATC and CNS systems. He said the next target of AAI will be to be in line with international in technology and equipment.

Mr B Pradhan, IAS, Chief Vigilance Officer, Airports Authority of India gave a small presentation in his address on the understanding of Next Generation Air Traffic Engineering Systems. In the starting he said that CNS Officers with this seminar will take a long way in providing CNS systems for safe and efficient Air Traffic Management. His presentation was focused on the need of next generation ATS system, what are next generation ATS systems and the benefits from the next generation systems. He also talked about the three trigger points of the new system – seamless sky, safe & efficiency and Technology.

Mr. Pradhan also said in his address that the CNS directorate may revisit its procurement process to get quality product at competitive price. CNS directorate may prepare procurement Manual as a reference guide for Capital and maintenance purchase at CHQ and field stations. And he also said that E-tendering to be put in place for all procurements for better transparency, fair practices and optimization of prices.

Mr Yvan Oullette, President, International Federation of Air Traffic Safety Electronics Associations. In his address welcomed CNS Officers' Guild to IFATSEA membership. He said more should be done for development of training, competency and licensing of Air Traffic Safety Electronics Personnel (ATSEPs). He spoke about the efforts in bringing global uniformity in ATSEPs training, competency and licensing and said that this seminar is a good example. He also apprised that ICAO has launched a task force work for studying and finding strategy for Next Generation Aviation Professionals (NGAP) which includes ATSEPs and IFATSEA is a part of the task force. He said that aviation is global; solution is better addressed globally working together which ensure benefits for safe and secure Air Navigation Service, once again he said that this seminar is a good example for the same.

3. Technical sessions:

The Seminar had three Technical sessions. The Session Moderators, Topics and speakers are as detailed below –

- i. **Technical Session I** *Moderator:* Mr. S. R. R. Rao Executive Director (Planning)
 - a) Single European Sky ATM Research (SESAR)

Speakers: Mr D Alan Gardiner, Director Marketing Asia, Indra Air Traffic Management and Mr Sylvian Cherel, THALES ATM

b) GPS Aided Geo-stationary Augmented Navigation (GAGAN)

Speakers: Mr A S Ganeshan, Director Space Navigation Group & Project Director GAGAN and Mr Rajneesh Gupta, Dy Dir. Project GAGAN

c) FAA Next Generation Air Transportation System (NextGen)

Speaker: Mr Aaron E Wilkins III, FAA Sr Representative (South Asia)

d) Next Generation of Air Traffic Safety Electronic Personnel and Air Traffic Engineering Systems

Speaker: Mr Yvan Oullette, President, IFATSEA

ii. **Technical Session – II** *Moderator:* Mr. Ravi Prakash, General Manager and Chief Instructor CNS, Civil Aviation Training College

a) Performance Based Navigation (PBN)

Speakers: Capt Michel Menestrot, AIRBUS, Capt Hemant Samant, Head of Flight Operations Inspection, DGCA and Capt Ajay Singh, Flight Operation Inspector, DGCA

b) Design of wide area multilateration systems

Speaker: Dr Werner Langhans, ERA Industries

c) Advanced Integrated ATM Systems

Speaker: Mr D Alan Gardiner, Director Marketing Asia, Indra Air Traffic Management

d) Licensing of CNS personnel (ATSEP)

Speaker: Mr Vishwa Nath, General Manager (CNS), Presently Chief Inspector (CNS) in DGCA

iii. **Technical Session – III** *Moderator:* Mr. P. K. Bandhopadhyay, General Manager (CNS), I. G. I. Airport, New Delhi

a) Next Generation CNS/ATM System

Speaker: Mr N V Atale, Jt. General Manager (ATM), AAI

b) Arrival Manager - Tool For Air Traffic Flow Management (AMAN)

Speaker: Mr Tom Richards, Principal Engineer, Raytheon

c) ACP Benefits to Indian Aviation Industry

Speaker: Dr Arjun Singh, Program Director - ACP

- 4. Copies of the presentations are annexed to the report.
- 5. The seminar was well attended by 200 delegates and participants from Ministry of Civil Aviation, o/o the Director General of Civil Aviation, Airports Authority of India, Aeronautical Society of India, Foundation for Aviation & Sustainable Tourism, International Transport Workers' Federation, Federal Aviation Administration, Members of SESRAR JU, CNS Professionals across the country, ATM Professionals from CHQ, leading manufacturers and suppliers in the aviation sector.
- 6. This seminar has been of immense gain to the delegates and participants as information and knowledge on the future technology to meet the growing air traffic service globally was shared.
- 7. The Technical sessions not only covered the next generation Technology and Systems, it also covered the next generation CNS professionals/ ATSEPs.
 - As per ICAO recognized terminology and ILO International Standard Classification of Occupations, CNS Professionals are known as **Air Traffic Safety Electronics Personnel** (ATSEPs) in the aviation industry across the globe.
- 8. With the change in technology and complex systems used in the present day Air Traffic control/ management the role of ATSEPs in the global scenario was presented by Mr Yvan Oullette, President IFATSEA. Training, competency level and licensing requirements for ATSEPs was focused in his presentation.
 - Mr Yvan said that the constant evolution of the CNS/ATM technology brings new challenges to air navigation. Air navigation systems are now implemented and operated globally. Aviation is going beyond geographical boundaries and personnel involved in the maintenance and installation of CNS/ATM systems should be trained to uniform requirements on a worldwide basis. ICAO therefore decided to develop of a new Part of the ICAO Training Manual that would address the training requirements for this technical group or personnel that are recognized as the *Air Traffic Safety Electronics Personnel (ATSEP)*.

Mr. Yvan also said that the *ICAO DOC 7192 Part E-2 Training Manual for Air Traffic Safety Electronics Personnel* (ATSEPs) has been developed and subsequently updated in 2009 that gives detailed information on the training and expertise required for personnel involved in the maintenance and installation of CNS/ATM systems.

9. We from the CNS Officers' Guild believe and propose that establishment of a suitable Collaborative Management System in India, involving different stake holders including CNS and ATM experts from AAI, much like the European SESAR Joint Undertaking, US FAA NextGen or Japan Civil Aviation Bureau CARATS, will be an effective tool for implementing NEXT GEN systems, and will be a step in the right direction for providing holistic and global solutions to problems of ever-increasing air traffic in Indian air-space while also addressing environmental and pollution-related concerns. The bed rock of any efficient Aviation Management System is an effective CNS – ATM System, which is modular in design, suitable for future expansion, integrated and

seamless in nature and backed by effective, trained and highly motivated professionals. We humbly feel the time has come for Aviation in India to make this translation, especially at a time when we are getting world class airports.

We request our Hon'ble Minister of Civil Aviation Mr Praful Patel who has been encouraging and taking the lead in the aviation industry in many ways to kindly give due consideration to our proposal.

10. Our sincere thanks to Mr Yashwant Bhave, IAS, Chairman AERA, Mr. E. K. Bharat Bhushan, IAS, AS & FA, Ministry of Civil Aviation, Mr S. C. Chhatwal, Member (Finance) AAI, Mr B Pradhan, IAS, CVO, AAI and Mr Yvan, President, IFATSEA for sparing their time and being with us for the Inaugural function and making it a grand success.

Our Special thanks to Mr M. M. Nambiar, IAS, Secretary, Ministry of Civil Aviation, Mr V. P. Agrawal, Chairman, Airports Authority of India and Dr S. N. A. Zaidi, IAS, DGCA who could not be present in the seminar, but have been our encouragement in making the preparation of this seminar. We seek their continued guidance.

Our sincere thanks to Mr Parful Patel, Hon'ble Minister of Civil Aviation and Mrs Shiela Dixit, Hon'ble Chief Minister of Delhi and other dignitaries in the aviation sector in India as well as from international bodies ICAO, CASO, EASA, IFATSEA, IFALPA, IFATCA, ITF for the encouraging messages.

Our thanks to all senior officers from the Ministry of Civil Aviation, o/o the DGCA, AAI and other organizations and media for their presence.

Sincere thanks to the authors for preparing excellent papers and making their presentations.

We gratefully acknowledge the support extended to the seminar by the sponsors, advertisers and media personnel.

We wish to thank one and all for making this seminar a grand success.

Sd/-Subit Kobiraj General Secretary CNS Officers' Guild