



# PLANET AEROSPACE

(Registration No.DRB/SOR/43116 – 17)

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## **Minutes of the 6<sup>th</sup> Annual General Body meeting held on 10<sup>th</sup> August 2022**

### **Members present : As given in the attendance sheet**

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Since the required quorum was not present, President postponed the meeting by 30 minutes and after that time meeting was started.

As per the Agenda, conduct of Election to the next Executive Committee was taken up and the Returning Officer, Mr.D.L Shirolikar (Life Membership No.LM-032) was requested to start the proceedings.

Returning Officer announced that he has received a copy of the latest Byelaws, list of eligible members to contest and list of all members as on date from the Executive Committee. Accordingly, he has circulated the sequence of events to conduct the Election . He received eleven Nominations before the due date given and found that all nominations are in order after scrutiny. Since the election is for only 11 posts of the Executive Committee, he declared that all the eleven members 'Elected as Executive Committee Members for the term 2022 – 2025'. A copy of the Official announcement of Election result is attached as Annexure-1. He expressed his gratitude to the current EC for appointing him as Returning Officer.

Members of the new EC elected were introduced to the General Body.

### **AGBM proceedings**

The Election process was followed by the AGB meeting.

1. Secretary welcomed the members for this 6<sup>th</sup> AGBM and expressed that this is a pleasant occasion as members are physically meeting each other after a gap of 3 years (due to pandemic).
2. Secretary requested members to keep 1 minute silence to pay homage to Mr.VN Purohit, Life Member, who passed away in October 2021.
3. After the invocation, Secretary requested President to give his opening address

4. Mr.Rajangam welcomed the members and thanked them all for the continued co-operation they extended to the activities of PA. Following are highlights of his address

- He mentioned that more persons are showing interest to join the Association, but unless there is an opportunity for them to contribute, it is difficult to make them Members
- Members may also kindly note that the name of Planet Aerospace is becoming popular among the industry and academic sectors and PA has not advertised anywhere so far.
- A Special GBM was arranged in November 2021 to specifically address the amendment of Byelaws in order to clearly make the framework for conduct of elections to the EC. Later, same was ratified by the Registrar of Co-op Societies.
- The proposal of forming a Private Limited company (which was discussed in the last GBM) was analysed in detail addressing the pros and cons in the EC meetings. It was decided to defer this decision for the time being and may be addressed in future.
- He expressed his happiness to announce that the turn-over of the Association this year was Rs.48 Lakhs and most of this money was disbursed to Members who contributed to various projects / tasks, as Honorarium. He suggested that the turn over for next year should be aimed at Rs.1 Crore and all efforts to be put in that direction
- President briefed about the status of various projects / tasks completed / in progress taken up by PA
  - A small company named GiveMe5 (Dynami Technologies) developing training material for students, requested us to provide PPT and Documents on satellite sub-systems and same was successfully executed
  - Another start-up called Delta Robotics in Singapore wanted our support in developing Spacecraft simulator. This was taken up but did not progress further due to their poor response.
  - A comprehensive training with 35 presentations was given on Satellite Technologies to Janyu Tech, Mumbai who showed interest in launching a constellation of satellites. Due to some funding problems, they kept this project on hold
  - Dhruva Space, a promising Company in Hyderabad, is developing and qualifying Solar panels for Defence requirements. A team of experts from PA is supporting this since last > 1 year.
  - Larsen & Toubro, a major industrial house is entering space business in a big way. PA provided training / support to their Teams at Coimbatore unit in (i) training programme on satellite tech (ii) RFP proposal on establishment of Launch vehicle

services (iii) Technical Readiness Level (TRL) assessment of start-up companies to whom L&T plans to fund. Further discussions are in progress regarding PA support in their design and development efforts of Attitude and Navigation systems

- L&T, Mumbai unit is developing an Electro-optical system for strategic applications and PA team is providing consultancy in this project
- Another start-up in Mumbai, Manastu, is engaged in developing Green propellants and system and wanted PA support. This project is in progress.
- GalaxEye, a start-up company in Chennai have planned an ambitious programme of launching a constellation of satellites with Optical and SAR based EO payloads. PA got a formal PO and discussions are in progress.
- Virginia Tech, a company in Chennai headed by Mr.Padmanabhan of ex-ISAC wants to develop a structured video programme on satellite technology and PA is providing the material through a series of studio recorded presentations by domain experts
- Coming to the projects in pipeline, Avantel, a company in Hyderabad is interested in developing Ground segment for communication satellites and PA is in discussion with them
- Mr.Rajangam informed that about 46 members of PA (~ 50 % of total members) have participated and contributed to above projects and efforts will be made to bring in more members

5. Secretary has taken up the next agenda point – approval of Minutes of 5<sup>th</sup> AGBM.

He mentioned the action items / points raised in the last GBM and gave responses. After discussions, general body approved the MoM of 5<sup>th</sup> AGBM after Mr.MS Srinivasan proposed and Mr.YK Viswanathan seconded

6. Secretary presented the Annual report for the FY 2021-22, and highlighted the activities.

- Govt. of Nepal raised an RFP for establishment of end-to-end system for Communications satellites. Aniara, a Bengaluru based company (H.O in USA) assisted a Dubai based company in preparing the Proposal for this RFP and PA provided Technical inputs to Aniara. Outcome of this RFP is yet to be known
- Deloitte, a US based Financial company wanted to develop a compendium of Space Industries and requested PA for support. However, this has not yet materialised as a Purchase order.

- PA has successfully conducted a 3-days Seminar at Nitte Meenakshi Instt of Technology (NMIT) on Design Development & Testing of Nano satellites in physical presentations mode and it was well received.

7. Mr.BS Shivaswamy proposed and both Mr.SG Raghavan & Mr.CA Prabhakar seconded and GBM approved the Annual Report for FY 2021-22.

8. Treasurer, Mr.BR Ananda Murthy presented the Audit Report for FY 2021-22. GBM approved the Audit report after Mr.DL Shirolkar proposed it seconded by Mr.Ratnakara.

9. General Body approved the proposal by Treasurer to appoint M/s Naik Kotrappa as Auditors for the FY 2022-23 after Mr.Arunachalam propped and Mr.KT Ramprasad seconded it.

#### **10. Any other points for discussion**

- Mr.NS Chandrasekhar mentioned that there is a heavy demand for Drones and whether PA can take up the consultancy services. Mr.YK Viswanathan informed that one Wg.Cdr (Retd) has knowledge on Drones and may support PA.
- Mr.CA Prabhakar mentioned that drones launched from submarines is a trending technology and explained that they are ejected from submarines in a Tubular structure and at the sea surface, drone is released by a deployment mechanism. PA may think of supporting this technology in two areas – deployment mechanisms and power management with Batteries.
- Mr.SG Raghavan informed that HAL got an order for development of On-board Computer for the Sukhoi Aircraft and several Electronic components have become obsolete. He suggested whether PA with its experts in QA and EEE parts can take up 'obsolescence management' of Components for ISRO, HAL etc,. which has a great business potential.
- He also raised the point that Failure analysis of Nano satellites launched by Academic institutions – whether PA can take up this task and provide a feedback report. It was mentioned that sufficient data was not available post launch and this task may not be feasible.
- Mr. Bokil briefed the members on the emerging trends in business models for Space systems and covered following points
  - PA has shifted from Supply driven to Demand driven services during the last 6 years.
  - Present Industry and other agencies are looking for faster turn-around-times for Product development & delivery.

- Rapid evolution of satellite technology is making the technology 'we' evolved in ISRO obsolete, though, the fundamental principles remain the same.
- Defence requirements for Space infrastructure is increasing and Industry has to catch up with this demand.
- He appealed that all Members of PA shall take lead in identifying new projects and Tasks and come out with new ideas how PA can provide support in these areas.
- Members are also requested to promote sale of our Book on Nano satellite through their contacts.

The AGBM meeting ended with a vote of thanks presented by Mr.CS Prasad.

Minutes prepared by

Approved by

(M.Venkata Rao)

(R.K Rajangam)

Secretary

President