



AeSM NEWSLETTER

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CONTENTS

- ✈ Changes at the level of the Council
- ✈ This year's highlights
- ✈ An AeSM Proposal to consolidate the Air Travel and Tourism Sector.
- ✈ So, What's AeSM's Submission?
- ✈ The State of AeSM's Membership
- ✈ Amendments to the Constitution

AeSM Council 2019-2020

Jagadish Soobarah
President

Sarupanand Kinnoo
Vice-President

Jacques Gentil
Secretary

Dr. Amrita Kundomal
Asst. Secretary

Abdeen Madarbakus
Treasurer

Nadeem H. Kaudeer
Asst. Treasurer

Capt. Richard Twomey
Public Relation Officer

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Message from Incoming President

Jagadish SOOBARAH,
CEng, FRAeS, FAeSM, FIEM

Dear Colleagues,

With Captain Richard (Dick) Twomey, AeSM President stepping down as President after the Council elections at the AGM of 28th March 2019, the undersigned was elected President. Dick had received the full support of the membership of AeSM, and I shall be relying heavily on this support continuing in my favour if I am to maintain AeSM on the course and flight level set by my predecessors, and even attempt to a climb higher. The power we need for such a move should hopefully come from the additional 4 members who will be co-opted by Council as soon as the Registrar of Associations gives his approval to the changes approved at the Society's Special General Meeting held end of March this year. In response to our invitation to show interest to serve the Council as co-opted members, five members (Mic Gujadhur, Shyam Fulena, Keshav Nundloll, Roodra Raghoobar and Prahlad Ramdhany) had responded positively.

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Changes at the level of the Council

While Nadeem Kaudeer, Abedeen Madarbakus and Dr Amrita Kundomal continue with their previous functions as Assistant Treasurer, Treasurer and Assistant Secretary respectively, Anand Kinnoo is the new Vice President and Jacques Gentil takes over from Kinnoo as the Secretary. As regards Dick, given his extensive involvement with the various activities initiated by him as President of the Society, it has been agreed that Dick continues holding responsibility for those activities. Considering Dick's vast experience and the networking he has established in favour of the Society, Dick will be the Society's PRO, and manage AeSM's external relations. Please access our website [\[Click Here\]](#) for other details.

This year's highlights

One important event of the year—the visit of the RAeS President Simon Henley (22 to 24 April—in the context of the joint AeSM/RAeS MoU— is behind us; the Model Glider Competition is in its final phase with the selection of participants who will compete on the D-Day for the event which is on 10th June at the Maryse Justin stadium at Reduit. Prizes for the event are sponsored by the University of Southampton. Following on the heels of the Model Glider Competition, we shall have an opportunity, on the 12th June at the MRIC offices, to attend to a presentation on Human Factors in Aviation by our member Shyam Fulena.

The next event—a momentous one—is the commemoration, on 20th July, of the 50 years of the Apollo Moon landing Mission, jointly with the Rajiv Gandhi Science Centre and supported by Air Mauritius and the Mauritius Astronomical Society. Dick will shortly circulate the detailed programme for this event but you can take it from me that that he has lined up a few Speakers who are specialists in space travel and in low/or zero- gravity flights, and also who know what is up there high above our heads. You would want to make a note of the date and place: Saturday 20th July at Rajiv Gandhi Science Centre.



Left to Right: Capt. Richard(Dick) Twomey, Jagadish Soobarah, Simon Henley and Keith Allan

An AeSM proposal to consolidate the Air Travel and Tourism Sector

In the wake of the budgetary consultations by the Hon PM and Minister of Finance, AeSM Council took up a suggestion by Mic Gujadhur to the effect that AeSM should make its views heard by the policy makers—on aviation of course, by submitting a proposal on how that sector could be strengthened and transformed into the major pillar of the economy.



However before getting into this issue may I bring out some local aerospace/aeronautics/aviationrelated news that have been doing the rounds for some time. AeSM since its inception in 2013 has been advocating the need for establishing an Aviation Pilot Training Organisation. Then there was news about the Chinese Govt (PRC) setting up a Civil Aviation institute in Mauritius, which apparently faded out to make place for a Civil Aviation Academy to be launched by Air Mauritius—that is work in progress; a team at the MRIC won a competition to design and build a nano satellite; then we had a presentation from Dr Carlo Viberti of SpaceLand who spoke of his endeavours to set up a Sub-gravity Flight Training Centre with potential to attract the more affluent tourism to our island; then also, sometime back, during the launch of the celebration of the 50 years of Air Mauritius the Prime Minister spoke of the project of Air Mauritius to renew its fleet and increase its seat capacity, and of the work in progress on the planning by AML of a new Passenger Terminal Building. More recently, there was news about the authorities having received and studying a Report on the transformation of the Department of Civil Aviation into a Civil Aviation Authority.

Then there was a spate of conferences/seminars on aviation, including the Airbus-Air Mauritius Conference to mark the International Civil Aviation Day at Sugar Beach Hotel in September last year, followed this year by the Airlines Business Seminar hosted by Embraer at the same hotel at the start of May, and more recently,

from 12th to 14th May, the AFRAA (African Airlines Association) Stakeholders' Convention held at the Ravenala Attitude Hotel.

Of course the airlines, particularly the African airlines, talked about the problems they were facing and identified the rising cost of fuel as well as the aviation and airport charges as the critical ones weighing down on their bottom lines. Aircraft manufacturers spoke about how innovative technologies contribute to design of aircraft with lower costs of operation. However, much was also said about the opportunities for increased cooperation in the face of the anticipated growth in aerospace and air transport that could lead to economic growth and employment in all sectors of aerospace and aviation, particularly in the African continent. Of particular interest to AeSM were the data various studies and researches seemed to indicate, viz. a doubling of passenger traffic every 15 years, possibly doubling of the aerospace market and trebling of air transport market by 2050.

So, what is AeSM's Submission?

This brings me to AeSM's proposals. It seems to AeSM that a lot is happening with key players working separately to attain their individual organisations' business objectives. This, in AeSM's view may not properly represent a set of long-term national objectives and may not be conducive to optimal economic growth and development. A Think Tank of the AeSM has therefore proposed that in



order to derive the greatest benefit in terms of economic growth, job creation and employment opportunities from the anticipated massive development in aerospace/aeronautics and aviation (which the pundits in these sectors have forecast and foreseen) Government should ensure that the various sectors operate in an integrated manner under one “Aviation/Aeronautics/Astronautics Hub”. This is the essence of AeSM’s proposals: that such a Hub be established to serve both Mauritius and the African continent. AeSM will wait to hear from the authorities of their reaction to its proposals before releasing the details.

The State of AeSM’s Membership

In our first edition of this Newsletter, President Dick Twomey expressed his disappointment that our membership was static in spite of the huge potential for growth. Considering that it is sufficient for someone to have an interest in aerospace and aviation and to have a genuine desire to contribute to the society’s advancement to be admitted as an Affiliate, then all the aviation, airport, airlines personnel, including those in the hospitality sector are potential members. Those who hold special qualifications and the prescribed nature and quantum of experience could be eligible for admission to the grade of Associate Member, Member and even Fellow, though the latter is by invitation. Students in aeronautical engineering programmes or studying to obtain their ATPL can also be eligible for admission—to the Student grade. The Affiliate grade is also available.

However, as a start we would appeal to friends of AeSM who are on our mailing list, but are not yet members, to download (or request) an Application form and just fill it, supplying all the information requested in the form. We will do the rest.

We also have another category of members: our Corporate Partners. These are companies and business enterprises. We would like to consider them as our own “Pillars”. We depend on them for support to achieve certain objectives which could be outside our purview or our means. These would range from sponsoring an event, a prize, taking an ad on our website, or even meeting cost incurred in bringing over a resource person for a special occasion or event organised by the Society, or providing facilities to the Society to hold meetings or some other events free of cost or at discounted rates.

We can never thank them enough.

AeSM Corporate Partners:



Amendments to the Constitution

In the previous NEWSLETTER mention was made of our proposals to amend the AeSM Constitution, or Rules of Association as they are referred to officially. We can mention that C'est chose faite, and we would now await the Registrar's approval. The Society's website [Click Here](#) carries a summary of the proposals. We can mention here that the amendments include: adoption of a Vision Statement; defining our Mission Statement; adoption of an objective on "Diversity", viz avoidance of all forms of discrimination; authority to elected Council to co-opt up to 4 "co-opted" members; limiting President's tenure to not more than two mandates, but with provision to extend beyond two mandates in exceptional circumstances; quorum for Special General Meeting and required majority for passing a resolution at an SGM.

<End of President Message>

First Men on the Moon 50th Anniversary: 20 JULY 2019

On Saturday 20 July the Aeronautical Society of Mauritius (AeSM) will host two meetings at the Rajiv Gandhi Science Centre to celebrate the 50 years since American astronauts Neil Armstrong and "Buzz" Aldrin first stepped onto the surface of the moon in July 1969.

PROGRAMME: There will be two separate sessions, the first at 10 O'clock in the morning for AeSM members, friends and VIP guests; the second at 2p.m. for secondary school students

who are either members of our "Junior Aviators" section or other young people already known to be enthusiastic about aviation – even including the exploration of Space.

These two events have been made possible thanks to the close partnership of AeSM with the Director and staff of the **Rajiv Gandhi Science Centre**, supported by the following organizations, to whom we express our thanks:

- **The United States Embassy in Mauritius**
- The Ministry of Education and Human Resources, Tertiary Education and Scientific Research
- The Royal Aeronautical Society (RAeS)
- SpaceLand Italia
- Mauritius Research and Innovation Council (MRIC)
- The Astronomy Society (Mauritius)
- The British Council

The Main Speaker, **Mr Howard Nye**, Chairman of the Space Specialist Committee of the RAeS, will start with short video showing President Kennedy's announcement of the lunar programme, the moon journey and the first humans on the moon. Then he will continue with a snapshot of the times, the space race, the Apollo programme; the exploitation of space and how it has already brought benefits, finishing with a view of the future and NASA's plans to return to the moon by 2024.

A second space expert **Dr Carlo Viberti**, President of SpaceLand Italia and himself an astronaut, will show videos of actual zero-gravity flights involving normal people of all ages.



Finally (1) we shall hear a brief description, from **Dr. VICKRAM BISSONAUTH**, of the cube satellite of the MRIC, which will be launched into LEO (Low Earth Orbit) before the end of the year; and (2) we shall be introduced to the activities of the Astronomy Society (Mauritius).

The afternoon session will be a repeat of the morning programme, but more interactive, and tailored to the needs of the younger audience.

About Mr. Howard Nye



Mr. Howard Nye
FRAeS, MInstP, BSc.Hons
Former ESA Senior Executive
RAeS President-Elect 2019-20
Chair, RAeS Space Group
Vice-President RAeS Paris Branch

Howard was educated at Alleyn's School and read physics at Bristol University. His space career began in 1973 at British Aircraft Corporation, Filton. Following work on the Hubble Space Telescope Solar Array, he became head of the BAe-Bristol solar array group in 1978. In 1980 he joined Vega-Ltd. to prepare ESA Spacelab I operations at ESA-ESOC in Germany, and astronaut training at NASA-MSFC in Huntsville, Alabama, later moving to NASA-Johnson in Houston for the Spacelab 1 mission carried aloft by Space Shuttle Columbia.

He joined ESA in 1983 assigned to the ESA-Giotto mission, playing a lead role in cruise phase operations and the successful encounter with comet Halley in March 1986. He was then concurrently responsible for Hipparcos preparations

and post-launch recovery, ISO preparations and as flight director, the unforeseen Giotto Extended Mission to encounter a second comet, successfully completed in 1992.

From 1993, he was responsible for delivery of both the mission operations centre at ESOC and the science operations centre in Spain for the XMM-Newton mission and all related activities until end of the in-orbit commissioning in 2000. In 2002, he led an ESA cooperation involving eight ESA member states, negotiating an agreement in 2004 assigning responsibilities for flight operation of the EU Galileo satellites, valid until 2016.

From 2004, all five ESA establishments across Europe were placed under his responsibility and from 2006, he was additionally responsible for ESA-wide corporate informatics. He transferred to Paris in 2009 to elaborate political and financial solutions for evolution of ESA-HQ, liaising with the Mayor of Paris and French Ministry of Foreign Affairs. Responsible from 2012 until end 2014 for ESA-wide organisational change and cost efficiency.

Since 2015, he offers aerospace consulting. He is a Fellow of the Society and Member of the Institute of Physics, fluent in French and German.

About Dr. Carlo Viberti

Graduated with Honours at 24 years of age as Doctor in Aeronautical Engineering at the prestigious Engineering University Politecnico Torino (Italy), in 2010 has been proposed by the President of the Italian Space Agency as



first sub-orbital astronaut-engineer for the first upcoming series of sub-orbital research flights.



Dr. Carlo Viberti
Director of the SpaceLand group

In 2005 became the first non-U.S. citizen authorized to fly from the NASA Space Shuttle L.F. at the Kennedy Space Center (Cape Canaveral-Florida) for the first NASA Microgravity Pathfinder Flights.

So far he has worked in weightlessness for almost three times longer periods than Yuri Gagarin's spaceflight; during such test-flight programs, for the Italian engineering company "SpaceLand", founded by him with Swiss investors in the last decade, he has trained and brought on board special flight vehicles representatives of the general population. Such crews have included the world's oldest (93 years of age), the first disabled woman and the youngest-ever (11 yr-old) life-sciences and technology experimental test subjects in zero-gravity flight conditions; inter alia, such experiments involved Nobel Prize-winning scientists and generated spin-off biomed and technological applications most valuable to ameliorate not only the well-being and work output of astronauts, but also the quality of life for kids, disabled and the elderly.

During his work as Lead Engineer of the European Space Agency's Astronaut Activities Office, was in charge of microgravity test campaigns both underwater and on-board zero-gravity

flights for the design and development of the space laboratory Columbus of the International Space Station; after designing and testing the underwater operational model of the Columbus laboratory, which is now utilized at the European Astronaut Center, he became Chairman of the European Technology Working Group and responsible of the European technology facilities for the NASA ISS Phase 1 program on board the Russian Space Station MIR.

As Director of the SpaceLand group, he has conceived and leads the SpaceLand program in Africa for the development of the first Center of Excellence for Microgravity Research, Education and Training in the form of world's largest artificial Mars analog, surrounded by high-tech, near-zero-energy-building (NZEB) office towers of the first SpaceLand City: this program has been presented by him through invitational speeches at United Nations High-Level Space Forum events in the UAE in 2017, together with the Head of State of Mauritius

LATE NEWS:

Development Proposals in the Aeronautical Environment mentioned in the National Budget Speech 2019/2020 by Hon Pravin K Jugnauth PM and Minister of Finance on 10th June 2019.

Members of AeSM would certainly have noticed references to the following proposals concerning the aeronautical sector:

1. to further improve World Bank ranking of Mauritius on the Ease of Doing



Business a new Business Facilitation Bill will be introduced to, among other purposes, expedite clearances at the port and airport;

2. towards improving air connectivity with the rest of the region and the world.

(i) a Master Plan has been completed by Airports of Mauritius with the aim of developing a new growth pole with the airport as the linchpin.

(ii) the construction of a new terminal building of about 50,000 square metres to cater for a total of 8 million passengers, since the existing airport terminal, will reach full capacity by 2022 with some 4.5 million passengers. Editor's Note: On 30 August 2013, the existing "new" Terminal Building of 50,000 sq.m which was designed for handling 4 million passengers by 2020, was commissioned on 30 August 2013; it was more than 3 times the size of the existing (1987) Terminal Building.

(iii) the aircraft parking capabilities will be increased to accommodate 22 wide-bodied aircrafts simultaneously. Editor's note: the website of ATOL states that there are currently 15 parking stands.

(iv) a new road will connect directly the airport to Mahebourg to facilitate the development of Mahebourg as a tourist village.

(v) an Airport City will be developed to comprise a new infrastructure to enable training for pilots and Licensed Aircraft Maintenance Engineers; extension of the Cargo and Freeport area at the airport towards Rose-Belle Industrial park to accommodate light industries; a new fully fledged cargo terminal; and a solar farm in the vicinity of the airport with a view to

being more environmental friendly and fully autonomous and run by green energy.

(vi) In line with the Bilateral Air Services Agreement, airlines will be exempted from payment of VAT and customs duty on printed materials which bear their insignia, publicity materials and uniforms.

(vii) to enhance Visibility, Attractiveness, Accessibility and Sustainability additional funding is allocated to the MTPA to redynamise the Shanghai and Kenya routes and

reinforce the visibility of the Mauritius destination in traditional markets as well as in China, Saudi Arabia, Kenya, Scandinavian countries, Ireland and Eastern Europe.

List of winners for the Model Glider Competition 2019

Winners of Category 1 (Grade 10)				
SN	Code	School	Team Members	Supervising Teacher
1	G10/064	Sookdeo Bissoondoyal State College	Adnaan Binyamin Jaunoo Fahim Hosenbocus Hemesh Harsh Meetan Manish Gopee	Mr. Nabeel Mungly
2	G10/046	Phoenix SSS	Shreedhara Chinniah Haider Sobratee Rehaan Khodabocus Laghirajen Miniadee	Mr. Rajvansh Ramjuttun
Winners of Category 2 (Grade 12)				
SN	Code	School	Team Members	Supervising Teacher
1	G12/054	Sookdeo Bissoondoyal State College	Raghav Ramkissoon Rahul Dewangsing Beemola Muhammad Ismail Twaha Chattaroo Muhammad Irfaan Hossen Rujeedawa	Mr. Nabeel Mungly
2	G12/052	Sookdeo Bissoondoyal State College	Jeshraj Sookun Snehann Ramchurn Boovesh Balisson Nunnoo Raihan	Mr. Aveenash Gajadur

Your attention is drawn to information and other news contained in this NEWSLETTER and on our website to better appreciate the scale and scope of our enterprise.

