

**SCHEDULE**  
**of the 2nd INTERNATIONAL SPECIALIZED SYMPOSIUM**  
**«SPACE AND GLOBAL SECURITY OF HUMANITY»**  
05.07-09.07.2010

**MONDAY, 5 July 2010**

09:00 – 10:30	Registration of participants
10:30 – 11:00	Opening Session
11:00 – 12:40	Plenary session
12:40 – 13:00	Press-Conference
13:00 – 14:00	Lunch
14:00 – 16:00	Technical Sessions
	Session of Public Committee on the IGMASS project realization
16:00 – 16:30	Coffee break
16:30 – 18:00	Technical Sessions
	Session of IAA Working Group «Disaster Management / Natural Hazards»
19:00 – 21:00	Welcome Reception

**TUESDAY, 6 July 2010**

09:00 – 10:30	Technical Sessions
	Seminar “Globalisation of Transport Needs and New Transport Training Environment”
10:30 – 11:00	Coffee break
11:00 – 12:30	Technical Sessions
	Session of Public Committee on the IGMASS project realization
12:30 – 13:30	Lunch
13:30 – 15:00	Technical Sessions
	Session of IAA Working Group «Disaster Management / Natural Hazards»
15:30 – 19:30	Sightseeing tour of Riga

**WEDNESDAY, 7 July 2010**

10:30 – 12:30	Technical Sessions
12:30 – 13:30	Final Plenary Session
13.30 – 15.00	Final Reception
15:10 – 15.20	Transfer to Riga Sea Passenger Port (for participants of workshop at the ferry "Festival")
17.30	Departure to Stockholm (for participants of workshop at the ferry "Festival")
16.00 – 19.00	Sightseeing tours (in accordance with individual orders)
18.00 – 20.00	“Potential of micro and nanotechnology for using of joint international space projects”. Workshop at the ferry "Festival".

**THURSDAY, 8 July 2010**

09:30	Arrival to Stockholm
10:30 – 12:00	“Innovative solutions in the joint Russian-Swedish programmes and projects” Workshop in the Russian Chamber of Commerce
12.00-17.00	Sightseeing tours
17:30	Departure to Riga

**FRIDAY, 9 July 2010**

09:30	Arrival to Riga
11:00 – 14:00	Summary of the Symposium and Workshops

**PROGRAMME**  
**of the 2nd INTERNATIONAL SPECIALIZED SYMPOSIUM**  
**«SPACE AND GLOBAL SECURITY OF HUMANITY»**  
05.07-09.07.2010

**MONDAY, 5 July 2010**

<b>10.30–11.00</b>	<b>Hall №1 (aud. 130)</b>
<b>Opening Session</b> <i>(Moderator: Prof. E.M. Malitikov)</i>	
Speakers: <ul style="list-style-type: none"><li>▪ Dr. Jean Michel Contant, Secretary General, International Academy of Astronautics, France</li><li>▪ Nil Ushakov, Mayor of Riga, Latvia</li><li>▪ Prof. Juris Ekmanis, President, Latvian Academy of Science, Latvia</li><li>▪ Prof. Igor Kabashkin, President, Institute of Transport and Telecommunication, Latvia</li><li>▪ Prof. Yuriy S. Alekseyev, Director General, National Space Agency of Ukraine, Ukraine</li></ul>	
<b>11.00–12.40</b>	<b>Hall №1 (aud. 130)</b>
<b>Plenary Session</b> <i>(Moderator: Prof. E.M. Malitikov)</i>	
Speakers: <ul style="list-style-type: none"><li>▪ Anatoliy E. Shilov, Deputy Head, Russian Federal Space Agency, Russia</li><li>▪ Dr. Milind Pimprikar, Founder &amp; Chairman, CANEUS International, and Centre for Large Space Structures &amp; Systems, Canada</li><li>▪ Prof. Anatoly S. Koroteev, President, Russian Academy of Cosmonautics named after K.E.Tsiolkovskiy, Russia</li><li>▪ Dr. Dumitru-Dorin Prunariu, Pilot-Cosmonaut, Chairman of the UN Committee on the Peaceful Uses of Outer Space (COPUOS), Romania</li><li>▪ Prof. Valery A. Menshikov, Vice President, Russian Academy of Cosmonautics named after K. E. Tsiolkovsky, Head of the IGMASS Project from IAA, Russia</li><li>▪ Chris de Cooker, Head of the International Relations Department, European Space Agency, Netherlands</li><li>▪ Prof. Talgat A. Musabaev, Pilot-Cosmonaut, Chairman of the National Space Agency of the Republic of Kazakhstan, Kazakhstan</li><li>▪ Announcement of Workshop “Globalisation of Transport Needs and New Transport Training Environment”. Hans-Jörg Lotter, President, Infowerk Multimedia, Austria</li></ul>	
<b>12.40–14.00</b>	<b>Hall №1 (aud. 130) Press-Conference</b>
<b>12.40–14.00</b>	<b>Lunch</b>

**MONDAY, 5 July 2010**  
**14.00–16.00. Technical Sessions**

Hall №1 (aud.130)	Hall №2 (aud.230)	Hall №3 (aud.221)
<p><b>Session 1.</b>  <b>Contemporary Space Exploration Strategy and Security</b></p> <p>Co-chairmen:  <i>E.M. Malitikov (CIS);</i>  <i>I.V. Kabashkin (Latvia)</i></p>	<p><b>Session 2.</b>  <b>IGMASS Conception</b></p> <p>Co-chairmen:  <i>Rainer Sandau (Germany);</i>  <i>S.V. Pushkarsky (Russia);</i>  <i>Milind Pimprikar (Canada);</i>  <i>E.A. Kopytov (Latvia)</i></p>	<p><b>Session 3.</b>  <b>Space Debris. Outlook for Development of Information Space of Security</b></p> <p>Co-chairmen:  <i>Yu.N. Makarov (Russia);</i>  <i>I.V. Yatskiv (Latvia);</i>  <i>A.G. Milovanov (Russia)</i></p>
<p><b>IAA-RACT C1 S1-01</b>  International Global Monitoring Aerospace System IGMASS – New Approach to the Disaster Management Issue.  <b>prof. A.N. Perminov</b> – ROSCOSMOS,  <b>prof. V.A. Menshikov</b> – Maksimov Space Systems Research Institute, Russia</p>	<p><b>IAA-RACT C1 S2-01</b>  Results and Future Perspectives of the Space Monitoring Systems of the Earthquake Precursors in Earth Ionosphere.  <b>prof. A.A. Romanov, prof. U.M. Urlichich, A.A. Romanov</b> – JSC “Russian Space Systems”, Russia</p>	<p><b>IAA-RACT C1 S3-01</b>  “IKAR” Project – Earth Global Protection System from Casual Space Factors of Near Action Radius.  <b>V.A. Menshikov</b> – Maksimov Space Systems Research Institute, <b>A.R. Kuzmin, V.D. Denisov, A.S. Egorov</b> – M.V.Khrunichev SRPSC, Russia</p>
<p><b>IAA-RACT C1 S1-02</b>  Power Supply and Life Support – a Key Problem of Planet Missions.  <b>prof. A.S. Koroteev</b> – Federal State Unitary Enterprise “Keldysh Research Center”, Russia</p>	<p><b>IAA-RACT C1 S2-02</b>  Researching a Possibility of the Earthquake Preparation Process Monitoring with the Help of Space Means by Ionospheric Dimensions.  <b>V.G. Degtyar, V.D. Kuznetsov</b> – OAO “Academician V.P. Makeyev State Rocket Center”, Russia</p>	<p><b>IAA-RACT C1 S3-02</b>  Problems on Near-Earth Space Nuclear Pollution.  <b>K.A. Boyarchuk, S.V. Kuzin, M.A. Anikeeva</b> – VNIEM, <b>S.E. Ulin</b> – MIFI, <b>N.S. Bahtigaraev</b> – INASAN, Russia</p>
<p><b>IAA-RACT C1 S1-03</b>  The System Approach to Integration between Earth Remote Sensing Systems and Control Systems for the Benefit of the Country, Society, Business and Power.  <b>K.A. Boyarchuk, M.V. Tumanov, E.I. Panfilova</b> – VNIEM, Russia</p>	<p><b>IAA-RACT C1 S2-03</b>  Global Multi-Purpose Satellite System “ДАHKO” as a Component of the International Space System Global Monitoring (MAKCM).  <b>A.V. Nesterov</b> – Moscow Radio Communication Research Institute, Russia</p>	<p><b>IAA-RACT C1 S3-03</b>  Conceptual, Technological and Legal Bases of Creation of the International Planetary Defense System.  <b>V.V. Adushkin, A.V. Vityazev</b> – Institute of Geosphere Dynamics of RAS, Russia</p>
<p><b>IAA-RACT C1 S1-04</b>  Managing Trans – Boundary Disasters Related to Volcanic Eruption and Weather/Climate Extremes in the Sub Sahara: Africa in Question.  <b>Tomukum Chia, Konsey Delphine Yei, Nkono Victor Sayo</b> – Global Centre for Compliance, Hazards and Disaster Management, Cameroon</p>	<p><b>IAA-RACT C1 S2-04</b>  Risk-Analysis Conceptual Principles of the IGMASS Creation.  <b>I.V. Minaev</b> – NPP VNIEM, Russia</p>	<p><b>IAA-RACT C1 S3-04</b>  Russian Federation Activity on Space Debris Mitigation.  <b>Y. Makarov, G. Raykunov, S. Kolchin, S. Loginov, M. Mikhailov, M. Yakovlev</b> – Federal Space Agency, Central Research Institute of Machine Building, Russia</p>
<p><b>IAA-RACT C1 S1-05</b>  Space Technology for Early Warning of Natural Disasters in India.  <b>A.S. Rajawat, C.M. Kishtawal, A.S. Arya, P.K. Champati Ray, K.M. Sreejith, J.V. Thomas</b> – Space Applications Centre, India</p>	<p><b>IAA-RACT C1 S2-05</b>  Automated Monitoring System by Space Means on High-Risk Objects.  <b>E.P. Minakov, A.S. Kondratyev, E.F. Chichkova</b> – Central R&amp;D Institute for Robotics and Technical Cybernetics, Russia</p>	<p><b>IAA-RACT C1 S3-05</b>  The Automated System on Near-Earth Space Hazard Created by the Man-Made Space Objects. The Status. Future Development.  <b>V.A. Davydov, Yu.N. Makarov, G.G. Raykunov, N.M. Ivanov, S.A. Suhanov, E.L. Akim</b> – Federal Space Agency, Central Research Institute of Machine Building, Russia</p>
<p><b>14.00–16.00</b> <b>Hall №4, aud.100</b></p>		
<p><b>Session of Public Committee on the IGMASS Project realization</b></p> <p>Moderators:  <b>Dr. Jean Michel Contant</b>, Secretary General, IAA, France  <b>Prof. Valery A. Menshikov</b>, Head of the IGMASS Project from IAA, Russia</p>		
<p><b>16.00–16.30</b> <b>Coffee Break</b></p>		

**MONDAY, 5 July 2010**  
**16.30–18.00. Technical Sessions**

Hall №1 (aud.130)	Hall №2 (aud.230)	Hall №3 (aud.221)
<p><b>Session 1.</b>  <b>Contemporary Space Exploration Strategy and Security</b></p> <p>Co-chairmen:  <i>E.M. Malitikov (CIS);</i>  <i>I.V. Kabashkin (Latvia)</i></p>	<p><b>Session 2.</b>  <b>IGMASS Conception</b></p> <p>Co-chairmen:  <i>Rainer Sandau (Germany);</i>  <i>S.V. Pushkarsky (Russia);</i>  <i>Milind Pimprikar (Canada);</i>  <i>E.A. Kopytov (Latvia)</i></p>	<p><b>Session 3.</b>  <b>Space Debris. Outlook for Development of Information Space of Security</b></p> <p>Co-chairmen:  <i>Yu.N. Makarov (Russia);</i>  <i>I.V. Yatskiy (Latvia);</i>  <i>A.G. Milovanov (Russia)</i></p>
<p><b>IAA-RACT C1 S1-06</b>  Prospects of Use of Nanotechnologies Developed in the Union State Programme "Nanotechnologiya-SG" in Project to Create International Global Monitoring Aerospace System.  <b>V.Menshikov, S.Pushkarsky, S.Lysyy, A.Dubovoy, V.Kulakov</b> – Maksimov Space Systems Research Institute, Russia</p>	<p><b>IAA-RACT C1 S2-06</b>  Prospects of Utilization of the Small Size Satellites for the Benefit of the International Global Monitoring Aerospace System.  <b>V.Menshikov, S.Lysyy, S.Pushkarsky, N.Vasiliev</b> – Maksimov Space Systems Research Institute, Russia</p>	<p><b>IAA-RACT C1 S3-06</b>  The Cooperation in the Field of Space Security between Russia and Northern European Countries.  <b>D.A. Usikov</b> – The Institute of Europe of the Russian Academy of Sciences, Russia</p>
<p><b>IAA-RACT C1 S1-07</b>  Organization and Results of International Space Station Mission Safety Provision.  <b>V.N. Zhukov, Ye.K. Melnikov</b> – TsNIIMASh, Russia</p>	<p><b>IAA-RACT C1 S2-07</b>  Programs and Projects of International Space Systems for Natural Disasters Monitoring.  <b>S.V. Pushkarsky, A.V. Radkov, S.V. Cherkas</b> – Maksimov Space Systems Research Institute, Russia</p>	<p><b>IAA-RACT C1 S3-07</b>  Place and Role of Automated Hazard Alarm System of the Near-Earth Space Environment in the Operation of Manned and Automated Space Vehicles.  <b>V.M. Ivanov, V.N. Raspopov, N.L. Sokolov, V.F. Bendyakov</b> – Central Scientific Research Institute of Machine-building (TsNIIMash), Russia</p>
<p><b>IAA-RACT C1 S1-08</b>  Virtual Educational Network for International Aerospace and Transport Systems.  <b>I.Kabashkin</b> – Transport and Telecommunication Institute, Latvia,  <b>W.Kallus</b> – University of Graz, Austria  <b>H.-J. Lotter</b> – Infowerk Multimedia, Austria</p>	<p><b>IAA-RACT C1 S2-08</b>  New Intellectual Monitoring Technology for Complex Objects and Processes with Use of Space Information.  <b>B.V. Sokolov, M.Yu. Okhtilev, V.A. Zelentsov</b> – St.Petersburg Institute for Informatics and Automation of the Russian Academy of Sciences (SPIIRAS), Russia</p>	<p><b>IAA-RACT C1 S3-08</b>  Urgent Issues of the Creation and Organization of the International System for Distance Learning of the Specialists in the Field of the Monitoring and Forecast of the Natural and Man-Caused Disasters.  <b>V.A. Menshikov, S.R. Lysyy</b> – Maksimov Space Systems Research Institute, Russia;  <b>E.M. Malitikov</b> – International Association "Znanie", CIS</p>
<p><b>IAA-RACT C1 S1-09</b>  The Potential Role of Small Satellite Technology in Addressing the Impact of Climate Change on the Chronic Vulnerability of Pastoralists in the Horn of Africa: Case of Ethiopia.  <b>Tomukum Chia, Konsey Delphine Yei</b> – Global Centre for Compliance, Hazards and Disaster Management, Cameroon</p>	<p><b>IAA-RACT C1 S2-09</b>  Integration Ways of Monitoring System of Aerospace Ionizing Radiation Impact on Spacecraft Astrionics Via International Aerospace Monitoring System  <b>V.S. Anashin</b> – JSC Research Institute of Space Device Engineering, Russia</p>	<p><b>IAA-RACT C1 S3-09</b>  Space-Born Near-Earth Space Survey for Geostationary Orbit.  <b>A.V. Bagrov</b> – INASAN, <b>B.A. Emelyanov, V.V. Maslov, U.K. Merkushev</b> – FSUE «TSNIMASH»,  <b>M.I. Kislitsky, A.P. Kovalev, M.K. Sapego</b> – FSUE «Arsenal», Russia</p>
<p><b>16.30–18.00</b> <b>Hall №4, aud.100</b></p>		
<p><b>Session of the IAA Working Group on Disaster Management/Natural Hazards</b></p> <p>Moderators:  <b>Dr. Ranganath R. Navalgund</b>, Chair of the IAA Working Group on Disaster Management/Natural Hazards, Director of the Space Applications Centre (ISRO), India  <b>Prof. Valery A. Menshikov</b>, Head of the IGMMASS Project from IAA, Russia  <b>Dr. Jozef Akinaide</b>, Secretary of the U.N.O. African Regional Centre for Space Research and Applications, Nigeria</p>		

**TUESDAY, 6 July 2010**  
**09.00–10.30. Technical Sessions**

Hall №1 (aud.130)	Hall №2 (aud.230)	Hall №3 (aud.221)
<p><b>Session 1.</b>  <b>Contemporary Space Exploration Strategy and Security</b></p> <p>Co-chairmen:  <i>E.M. Malitkov (CIS);</i>  <i>E.A. Kopytov (Latvia)</i>  <i>Carlo Ulivieri (Italy)</i></p>	<p><b>Session 2.</b>  <b>IGMASS Conception</b></p> <p>Co-chairmen:  <i>Rainer Sandau (Germany);</i>  <i>S.R.Lysyy (Russia);</i>  <i>Milind Pimprikar (Canada);</i>  <i>A.V. Grakovski (Latvia)</i></p>	<p><b>Session 3.</b>  <b>Space Debris. Outlook for Development of Information Space of Security</b></p> <p>Co-chairmen:  <i>Yu.N. Makarov (Russia);</i>  <i>B.F. Mishnev (Latvia);</i>  <i>A.G. Milovanov (Russia)</i></p>
<p><b>IAA-RACT C1 S1-10</b>  Natural Disasters in 2008 Sichuan Earthquake and their Cause  <b>Quentin Z. Q. Yue</b> – <i>The University of Hong Kong</i></p>	<p><b>IAA-RACT C1 S2-10</b>  Low-Altitude Microsatellites System for On-Line Monitoring of Geophysical Fields.  <b>I.V. Belokonov, A.N. Kirilin</b> – <i>Samara Space Centre, Russia</i></p>	<p><b>IAA-RACT C1 S3-10</b>  Definition of Probability of Collisions of Space Crafts with the Space Debris.  <b>A.I. Kozoriz, V.P. Pavlov</b> – <i>Central Scientific Research Institute of Machine-building (TSNIImash), Russia</i></p>
<p><b>IAA-RACT C1 S1-11</b>  Possibilities for the Remote Sensing and Monitoring of the Balkan Region.  <b>Petar Getzov</b> – <i>Space Research Institute, Bulgaria</i></p>	<p><b>IAA-RACT C1 S2-11</b>  Monitoring of Volcanic Activity by the MSG Satellite.  <b>Emiliano Ortore, Munzer Jahjah, Carlo Ulivieri</b> – <i>Sapienza University of Rome, Italy</i></p>	<p><b>IAA-RACT C1 S3-11</b>  The Integrated Mission for Intelligence of Threatening Asteroid Apophis.  <b>M. Martynov, V. Pol, A. Simonov, I. Lomakin</b> – <i>Lavochkin Association, Russia</i></p>
<p><b>IAA-RACT C1 S1-12</b>  Asteroid–Comet and Volcano–Seismic Hazards for the Earth.  <b>A.V. Vityazev, D.O. Glazachev, G.V. Pechernikova</b>– <i>Institute for Dynamics of Geospheres RAS, Russia</i></p>	<p><b>IAA-RACT C1 S2-12</b>  Key Principles Development for Implementation of International Global Aerospace Monitoring System (IGMASS) Creation Project in Geopolitical Space.  <b>S.V. Pushkarsky, A.V. Radkov</b> – <i>Maksimov Space Systems Research Institute, Russia</i></p>	<p><b>IAA-RACT C1 S3-12</b>  Evolution Necessity of Scientific Knowledge Inspiration in the Light of Space Thinkers` Ideas.  <b>M.N. Chiryatyev</b> – <i>International Centre of the Roerichs, Russia</i></p>
<p><b>IAA-RACT C1 S1-13</b>  Applying Results of Space Activity in the Social-Economical Development of the Krasnoyarsk Region.  <b>G.P. Beliakov, Y.A. Veysov, Yu.Yu. Loginov</b> – <i>Siberian State Aerospace University named after academician M.F. Reshetnev, Russia</i></p>	<p><b>IAA-RACT C1 S2-13</b>  Adopting the Principle of Free and Unrestricted Sharing to Ensure the Proper Functioning of IGMAS.  <b>Catherine Doldirina</b> – <i>McGill Institute of Air and Space Law, Canada, Lesley Jane Smith – <i>Leuphana University, Germany</i></i></p>	<p><b>IAA-RACT C1 S3-13</b>  IGMAS as a Tool for Evolving the Planetary Security Information Field.  <b>V.A. Menshikov, S.V. Cherkas</b> – <i>Maksimov Space Systems Research Institute, Russia</i></p>
<p><b>IAA-RACT C1 S1-14</b>  Applying Minor Spacecraft (MSC) for Remote Sensing of Siberian Woodlands.  <b>E.A. Okhotkina, A.I. Sukhinin</b> – <i>Siberian State Aerospace University named after academician M. F. Reshetnev, Russia</i></p>	<p><b>IAA-RACT C1 S2-14</b>  Concept of the Model of Interaction between Terrestrial and Space Segment of Intelligent Transport System of Satellite Monitoring.  <b>A. Medvedev, I. Kabashkin, A. Grakovski, I. Yatskiv</b> – <i>Transport and Telecommunication Institute, Latvia</i></p>	<p><b>IAA-RACT C1 S3-14</b>  Monitoring of High Orbit Areas of Near-Earth Space Environment in Favour of Space Activity Security Support in Terms of Technological Debris.  <b>E.L. Akim, V.M. Agapov, E.I. Molotov, V.A. Stepanyants</b> – <i>Keldysh Institute of Applied Mathematics RAS, Russia</i></p>
<p><b>09.00–10.30</b> <span style="float: right;"><b>Hall №4, aud.100</b></span></p>		
<p><b>Workshop “Globalisation of Transport Needs and New Transport Training Environment”</b></p> <p>Moderators:  <b>Prof. Igor Kabashkin</b>, Transport and Telecommunication Institute, Latvia  <b>Prof. Wolfgang Kallus</b>, University of Graz, Austria  <b>Hans-Jörg Lotter</b>, Infowerk Multimedia, Austria</p>		
<p><b>10.30–11.00</b> <span style="float: right;"><b>Coffee Break</b></span></p>		

**TUESDAY, 6 July 2010**  
**11.00–12.30. Technical Sessions**

Hall №1 (aud.130)	Hall №2 (aud.230)	Hall №3 (aud.221)
<p><b>Session 1.</b>  <b>Contemporary Space Exploration Strategy and Security</b></p> <p>Co-chairmen:  <i>E.M. Malitkov (CIS);</i>  <i>E.A. Kopytov (Latvia);</i>  <i>Carlo Ulivieri (Italy)</i></p>	<p><b>Session 2.</b>  <b>IGMASS Conception</b></p> <p>Co-chairmen:  <i>Rainer Sandau (Germany);</i>  <i>S.R.Lysyy (Russia);</i>  <i>Milind Pimprikar (Canada);</i>  <i>A.V. Grakovski (Latvia)</i></p>	<p><b>Session 3.</b>  <b>Space Debris. Outlook for Development of Information Space of Security</b></p> <p>Co-chairmen:  <i>Yu.N. Makarov (Russia);</i>  <i>B.F. Mishnev (Latvia);</i>  <i>A.G. Milovanov (Russia)</i></p>
<p><b>IAA-RACT C1 S1-15</b>  Space Tourism and Microbial Safety.  <b>V.K. Ilyin</b> – Russian Federation State Scientific Center – Institute for Biomedical Problems, Russia</p>	<p><b>IAA-RACT C1 S2-15</b>  An indirect adaptive fault-tolerant control system design.  <b>Pefouho Valentine Delor</b> – National Polytechnic Institute, Cameroon</p>	<p><b>IAA-RACT C1 S3-15</b>  Optical Surveillance Facilities Role in Geostationary Orbit Debris Controlling.  <b>E.L. Akim, V.M. Agapov, E.I. Molotov, V.A. Stepanyants</b> – Keldysh Institute of Applied Mathematics RAS, Russia</p>
<p><b>IAA-RACT C1 S1-16</b>  Multipurpose Integrated Aerospace Monitoring System for Innovation Social and Economic Development of Russia.  <b>V.V. Khartov, M.B. Martynov, V.V. Efanov, K.A. Zanin</b> – Federal Enterprise "Lavochkin Association", Russia</p>	<p><b>IAA-RACT C1 S2-16</b>  Computer Simulation and Optimization of Parameters of Device, which Creates a Large Diameter Vertical Air Jet by Means of Symmetric System of Fans.  <b>V. Ushakov, N. Sidenko, G. Filipsons</b> – Riga Technical University, Latvia</p>	<p><b>IAA-RACT C1 S3-16</b>  Asteroid-Comet Hazard and problem of asteroid 99942 Apophis.  <b>Y.N. Makarov, G.G. Raykunov, S.V. Kolchin, V.S. Sazonov</b> – Federal Space Agency, Central Research Institute of Machine Building, Russia</p>
<p><b>IAA-RACT C1 S1-17</b>  Harnessing the Sun: Embarking on Humanity's Next Giant Leap.  <b>Massado Carole Diane</b> – Natinal Polytechnic Institute, Cameroon</p>	<p><b>IAA-RACT C1 S2-17</b>  Developing a New RO Data Processing System for the Formosat-3 Follow-on Mission.  <b>Yuei-An Liou</b> – Center for Space and Remote Sensing Research, Taiwan</p>	<p><b>IAA-RACT C1 S3-17</b>  The International Re-Entry Test Campaigns for Risk Objects and the Russia Contribution to Them.  <b>Yu.N. Makarov, G.G. Raykunov, N.M. Ivanov, Yu.F. Kolyuka</b> – Federal Space Agency, Central Research Institute of Machine Building, Russia</p>
<p><b>IAA-RACT C1 S1-18</b>  Small Satellites for Emerging Countries in Support of a Global Security and Sustainable Development Agenda: Challenges and Opportunities.  <b>Tomukum Chia, Ngo Eog Augustine Dorine, Bambun Feumba Miler Cornelle, Adi Ajame Richard, Delphine Konsey Yei, Nkono Sayo Victor</b> – Global Centre for Compliance, Hazards and Disaster Management, Cameroon</p>	<p><b>IAA-RACT C1 S2-18</b>  Using Computer Methods for Automatic Classification of Galaxy Images.  <b>S. Bratarchuk, A. Sazonov</b> – Riga Classical gymnasium, Latvia</p>	<p><b>IAA-RACT C1 S3-18</b>  The Risk Objects' Re-Entry Prediction Task Solution in the Russian Mission Control Center.  <b>N.M. Ivanov, Yu.F. Kolyuka, T.I. Afanaseva, T.A. Gridchina</b> – Central Research Institute of Machine Building, Russia</p>
<p><b>11.00–12.30</b> <b>Hall №4, aud.100</b></p>		
<p><b>Session of Public Committee on the IGMASS Project realization</b></p> <p>Moderators:  <b>Dr. Jean Michel Contant</b>, Secretary General, IAA, France  <b>Prof. Valery A. Menshikov</b>, Head of the IGMASS Project from IAA, Russia</p>		
<p><b>12.30–13.30</b> <b>Lunch</b></p>		

**TUESDAY, 6 July 2010**  
**13.30–15.00. Technical Sessions**

Hall №1 (aud.130)	Hall №2 (aud.230)	Hall №3 (aud.221)
<p><b>Session 1.</b>  <b>Contemporary Space Exploration Strategy and Security</b></p> <p>Co-chairmen:  <i>E.M. Malitkov (CIS);</i>  <i>E.A. Kopytov (Latvia);</i>  <i>Carlo Ulivieri (Italy)</i></p>	<p><b>Session 2.</b>  <b>IGMASS Conception</b></p> <p>Co-chairmen:  <i>Rainer Sandau (Germany);</i>  <i>S.R.Lysyy (Russia);</i>  <i>Milind Pimprikar (Canada);</i>  <i>A.V. Grakovski (Latvia)</i></p>	<p><b>Session 3.</b>  <b>Space Debris. Outlook for Development of Information Space of Security</b></p> <p>Co-chairmen:  <i>Yu.N. Makarov (Russia);</i>  <i>B.F. Mishnev (Latvia);</i>  <i>A.G. Milovanov (Russia)</i></p>
<p><b>IAA-RACT C1 S1-19</b>  Conservancy Activity Infotainment Principles Using the Earth Remoter Probing Data from Space.  <b>V.M. Yegorov, V.S. Kukosh</b> – <i>Institute of Moscow Development, Ministry of Nature of Russia</i></p>	<p><b>IAA-RACT C1 S2-19</b>  Problems of the IP Routing in Satellite-Based Communications for Providing Global Services.  <b>J.Revzina</b> – <i>Transport and Telecommunication Institute, Latvia</i></p>	<p><b>IAA-RACT C1 S3-19</b>  Large Space Debris Transfer from Near-Earth Orbits to Utilization Orbits.  <b>Yu.N. Makarov, Ya.T. Shatrov, V.I. Trushlyakov, V.Yu. Kudentsov</b> – <i>Federal Space Agency, Russia</i></p>
<p><b>IAA-RACT C1 S1-20</b>  A New Approach to Hypersonic Flight.  <b>Djudje J. Caroline, Paul Jumberla</b> – <i>Geotech Information Centre, Cameroon</i></p>	<p><b>IAA-RACT C1 S2-20</b>  Growth of Satellite Tracking and Monitoring Systems Information Safety.  <b>S.Kamenchenko</b> – <i>Transport and Telecommunication Institute, Latvia</i></p>	<p><b>IAA-RACT C1 S3-20</b>  Invariant-Regulized Processing of Navigation Measurements for IGMASS Common Information Space Optimisation.  <b>A.P. Manin, I.G. Semenov</b> – <i>Science &amp; Production Testing Center «Armint», Russia</i></p>
<p><b>IAA-RACT C1 S1-21</b>  Global Exhaustion of an Ozone Layer as a Source of Destruction Mechanisms of Stabilizations of a Climate and Strengthening of Earthquakes.  <b>V.V. Ponomar'</b> – <i>Moscow State University of Technologies and Management, Russia</i></p>	<p><b>IAA-RACT C1 S2-21</b>  Application of Remote Sensing and GIS Technologies for Sustainable Business Development.  <b>I.Barga</b> – <i>University of Latvia,</i>  <b>E.Kovalchuk</b> – <i>Baltic Satellite Service, Latvia</i></p>	<p><b>IAA-RACT C1 S3-21</b>  Forecast of the Strongest Earthquakes: Search of Problem Solution.  <b>I.L. Gufel'd, A.V. Korol'kov, O.N. Novoselov</b> – <i>Shmidt Joint Institute of Physics of the Earth, Russian Academy of Sciences, State Forest University, Russia</i></p>
<p><b>IAA-RACT C1 S1-22</b>  Spatiotemporal On-Line System.  <b>A.S. Chebotarev, V.G. Grachev, E. I. Nikolaev</b> – <i>Special Research Bureau of Moscow Power Engineering Institute, Russia</i></p>	<p><b>IAA-RACT C1 S2-22</b>  Crustal Faults Detection and Earthquakes Prediction Using Cloud and Thunderstorm Observations in the Crimea and on the Taman Peninsula.  <b>V.A. Alekseev, N.G. Alekseeva, T.N.Bibikova, T.A.Proskuryakova, A.D. Legenka, E.V. Zhurba</b> – <i>Troitsk Institute of Innovative and Thermonuclear Research, Russia</i></p>	<p><b>IAA-RACT C1 S3-22</b>  Uncontrollable Re-Entries of the Risk Space Objects and the Problems Closely Related to Them  <b>Yu.F.Kolyuka, T.I.Afanaseva, T.A.Gridchina</b> – <i>Mission Control Center, Central Research Institute of Machine Building, Russia</i></p>

**13.30–15.00**

**Hall №4, aud.100**

**Session of the IAA Working Group on Disaster Management/Natural Hazards**

Moderators:

**Dr. Ranganath R. Navalgund**, Chair of the IAA Working Group on Disaster Management/Natural Hazards, Director of the Space Applications Centre (ISRO), India

**Prof. Valery A. Menshikov**, Head of the IGMASS Project from IAA, Russia

**Dr. Jozef Akinaide**, Secretary of the U.N.O. African Regional Centre for Space Research and Applications, Nigeria

**WEDNESDAY, 7 July 2010**  
**10.30–12.30. Technical Sessions**

Hall №1 (aud.130)	Hall №2 (aud.230)	Hall №3 (aud.221)
<p><b>Session 1.</b>  <b>Contemporary Space Exploration Strategy and Security</b></p> <p>Co-chairmen:  <i>E.M. Malitikov (CIS);</i>  <i>I.V. Kabashkin (Latvia)</i></p>	<p><b>Session 2.</b>  <b>IGMASS Conception</b></p> <p>Co-chairmen:  <i>S.R.Lysyy (Russia);</i>  <i>Milind Pimprikar (Canada);</i>  <i>A.V. Grakovski (Latvia)</i></p>	<p><b>Special Session.</b>  <b>Applied Questions of Operation and Development of Aerospace Systems</b></p> <p>Co-chairmen:  <i>E.A.Kopytov (Latvia);</i>  <i>A. Urbach (Latvia)</i></p>
<p><b>IAA-RACT C1 S1-23</b>  Saxony-Anhalt Galileo Test Bed for Innovative Logistics.  <b>M.Schenk, J.Tolujew, A.Müller</b> – <i>Fraunhofer Institute for Factory Operation and Automation, Otto von Guericke University Magdeburg, Germany</i></p>	<p><b>IAA-RACT C1 S2-23</b>  The international integrated system of global monitoring and communication (IIS GMC).  <b>E.F. Kamnev, V.Ju. Bobkov, A.V. Nesterov</b> – <i>Moscow Radio Communication Research Institute”, Russia</i></p>	<p><b>IAA-RACT C1 SS-01</b>  Mathematical Model of a Hydraulic Drive for a Dynamic Test Stand.  <b>B.V.Kuznetsov, I.A. Proshin, V.M. Timakov, E.V. Nazarov, E.A. Sapunov</b> – <i>Penza State Academy of Technology, Russia</i></p>
<p><b>IAA-RACT C1 S1-24</b>  Ground-Space Geodynamic Monitoring of the Caspian Region.  <b>Zh.Sh. Zhantayev, B.K. Kurmanov</b> – <i>National Space Research and Technologies Center of the National Space Agency, Kazakhstan</i></p>	<p><b>IAA-RACT C1 S2-24</b>  Program and Means of the Space Monitoring for Detection and Forecasting Emergencies.  <b>N.Murashko, A.Kruchkou, E.Kozlov</b> – <i>United Institute of Informatics Problems of the National Academy of Sciences of Belarus, Belarus</i></p>	<p><b>IAA-RACT C1 SS-02</b>  Estimation of Mechanical Properties of the Anisotropic Reinforced Plastics with Application of the Method of Acoustic Emission.  <b>A.Urbach, M.Banov, Y.Harbutz, V.Turko, J.Feshchuk, N.Hodos</b> – <i>Riga Technical University, SIA “Aviatest LNK”, SIA “InterSpecMet”, Latvia</i></p>
<p><b>IAA-RACT C1 S1-25</b>  The European Student Moon Orbiter Project in Latvia: Crafting an Imager for the Lunar Spaceship.  <b>M.Ābele, K.Adgere, E.Grabs, L.Osipova, R.Rižikovs, E.Rutkovska, V.Veckalns, J.Vjaters</b> – <i>University of Latvia, Institute of Astronomy, Riga Technical University, Latvia</i></p>	<p><b>IAA-RACT C1 S2-25</b>  About Computer Technology of Intellectual Support of the Ground Objects and Emergencies Automated Discovery and Recognition in for the Purposes of Global Earth Monitoring Using International Aerospace Monitoring System Space Vehicle.  <b>G.G. Vokin</b> – <i>Maksimov Space Systems Research Institute, Russia</i></p>	<p><b>IAA-RACT C1 SS-03</b>  Mathematic Modelling of Control Laws for a Flight Simulator Dynamic Test Stand.  <b>B.V.Kuznetsov, I.A. Proshin, V.M. Timakov, S.A. Nikitashin, A.V. Savelyev</b> – <i>Penza State Academy of Technology, Russia</i></p>
<p><b>IAA-RACT C1 S1-26</b>  Forecasting the Trends of World Astronautics.  <b>D.A. Sumkin</b> – <i>Moscow Institute of Physics and Technology, Russia</i></p>	<p><b>IAA-RACT C1 S2-26</b>  The multiuser global system of monitoring of stationary and mobile objects.  <b>L.N. Wolkov, L.D. Demchenko, D.I. Petrov, A.V. Nesterov</b> – <i>Research and Production Association KROSNA, Moscow Radio Communication Research Institute, Russia</i></p>	<p><b>IAA-RACT C1 SS-04</b>  New Approach of Creation Diagnostic Matrix for Control of Gas Turbine Engine.  <b>E.Kopytov, V.Labendik, S.Yunusov, S.Guseinov</b> – <i>Transport and Telecommunication Institute, Latvia</i></p>
<p><b>IAA-RACT C1 S1-27</b>  Lighting Stroke Passive Location by Atmospheric Analysis in the Hop Model Frames.  <b>Y.A. Krasnitsky</b> – <i>Transport and Telecommunication Institute, Latvia</i></p>	<p><b>IAA-RACT C1 S2-27</b>  Objects Identification Based on the Images Fractal Features for Optical Satellite Observing Systems.  <b>A.Grakovski, G.Jonov, A.Komashko</b> – <i>Transport and Telecommunication Institute, Latvia</i></p>	<p><b>IAA-RACT C1 SS-05</b>  Upgrading the Efficiency of Airspace Flight Simulators for Emergency-Response Training of Space Crewmembers.  <b>B.V. Kuznetsov, M.V. Serebryakov, V.N. Proshkin, A.N. Bormotov</b> – <i>Penza State Academy of Technology, Russia</i></p>

**WEDNESDAY, 7 July 2010**  
**10.30–12.30. Technical Sessions**

Hall №4 (aud.100)	Hall №5 (aud.220)
<p align="center"><b>Special Session.</b>  <b>Applied Questions of Operation and Development of Aerospace Systems</b></p>	<p align="center"><b>Special Session.</b>  <b>Applied Questions of Operation and Development of Aerospace Systems</b></p>
<p>Co-chairmen:  <i>B.F. Mishnev (Latvia);</i>  <i>S.A. Orlov (Latvia)</i></p>	<p>Co-chairmen:  <i>V.P. Labendik (Latvia);</i>  <i>V.Z. Shestakov (Latvia)</i></p>
<p><b>IAA-RACT C1 SS-06</b>            Operation of Unmanned Aerial Vehicles in Non-Segregated Airspace.  <b>A. Urbach, K. Savkov, V. Petrov</b> – Riga Technical University, Latvia</p>	<p><b>IAA-RACT C1 SS-11</b>            Ornithological Flight Security.  <b>V.Y. Birjukov, V.P. Labendik</b> – Transport and Telecommunication Institute, Latvia</p>
<p><b>IAA-RACT C1 SS-07</b>            Apparatuses for Earth Observation Developed at the Vavilov State Optical Institute.  <b>V. Tupikov</b> – Vavilov State Optical Institute, Russia</p>	<p><b>IAA-RACT C1 SS-12</b>            Development of Protective Coatings for Advanced Aero Engines.  <b>M. Urbaha, K. Savkov, A. Urbach</b> – Riga Technical University, Latvia</p>
<p><b>IAA-RACT C1 SS-08</b>            Efficiency of Onboard Computer Systems for Space Vehicles and Stations.  <b>S. Orlov, B. Tsilker</b> – Transport and Telecommunication Institute, Latvia</p>	<p><b>IAA-RACT C1 SS-13</b>            Ecological Problems in Civil Aviation.  <b>E. Barishev, A. Urbach, A. Leshinskis</b> – Riga Technical University, Latvia</p>
<p><b>IAA-RACT C1 SS-09</b>            Storing and Processing of Astrometric and Photometric Data about Near Earth Asteroids: Present and Future in Russia  <b>S.A. Naroenkov</b> – Institute of Astronomy, Russian Academy of Sciences, Russia</p>	<p><b>IAA-RACT C1 SS-14</b>            About Students' Training in Disciplines of Technogenic and Ecological Safety at High Schools of Latvia.  <b>I. Petukhov, V. Shestakov, V. Zhilinsky</b> – Transport and Telecommunication Institute, Riga Technical University, Latvia</p>
<p><b>IAA-RACT C1 SS-10</b>            Super Position Paradox Understanding of New Information Space to Management Stable Activity.  <b>R. Kopitov</b> – Transport and Telecommunication Institute, Latvia</p>	

13.00–13.30	Hall №1 (aud. 130)
<p align="center"><b>Final Plenary Session</b>            (Moderator: Prof. E.M. Malitikov)</p>	
<p>Speakers:</p> <ul style="list-style-type: none"> <li>• <b>Dr. Jean Michel Contant</b>, Secretary General, IAA, France</li> <li>• <b>Prof. Valery A. Menshikov</b>, Head of the IGMASS Project from IAA, Russia</li> </ul>	

**WEDNESDAY, 7 July 2010**

**18.00-20.00. Conference-Centre of the Ferry "Festival"**

**Workshop "Potential of micro and nanotechnology for using of joint international space projects"**

Co-chairmen:

- **Prof. Valery A. Menshikov**, Head of the IGMASS Project from IAA, Russia
- **Larisa Beach**, Vice-President, Neptec Design Group, Canada

**Presentations:**

1. Prospects of Utilization of the Small Size Satellites for the Benefit of the International Global Monitoring Aerospace System.  
**V.Menshikov, S.Pushkarsky** – *Maksimov Space Systems Research Institute, Russia*
2. The situational awareness of the spacecraft. Sensors and laser scanning  
**Larisa Beach** – *NEPTEC, Canada*
3. Prospects of Use of Nanotechnologies Developed in the Union State Programme "Nanotekhnologiya-SG" in Project to Create International Global Monitoring Aerospace System.  
**V.Menshikov, S.Pushkarsky, S.Lysyy, A.Dubovoy, V.Kulakov** – *Maksimov Space Systems Research Institute, Russia*

**THURSDAY, 8 July 2010**

**Riga.**

**Sightseeing tours (in accordance with individual orders)**

**THURSDAY, 8 July 2010** (for the participants from the ferry "Festival")

**10.30-12.00. Conference-Centre of the Russian Chamber of Commerce**

**Workshop "Innovative solutions in the joint Russian-Swedish programmes and projects"**

Moderator:

- **Prof. Valery A. Menshikov**, Head of the IGMASS Project from IAA, Russia

**Presentations:**

1. Analysis of the Development of International Emergency Monitoring Space Facilities  
**V.E. Nesterov, V.A. Menshikov, S.V. Pushkarsky** – *Maksimov Space Systems Research Institute, Russia*
2. Key Principles Development for Implementation of International Global Aerospace Monitoring System (IGMASS) Creation Project in Geopolitical Space.  
**S.V. Pushkarsky** – *Maksimov Space Systems Research Institute, Russia*

**FRIDAY, 9 July 2010**

**11.00–14.00. Summary of the Symposium and Workshops**