

**International Symposium
“Aviation Technologies of XXI Century”**

November 26–30, 2018

Programme

November 26th, Monday		
IFAR Summit		
14:30–15:00	Summit Registration	<i>Bryusov hall, Metropol hotel</i>
15:00–16:30	Leadership Team Meeting	
16:45–18:30	Steering Committee Meeting #1	
19:00–21:30	Welcome Cocktail Reception	<i>Savva Morozov hall, Metropol hotel</i>
Meetings		
11:00–12:00	Meetings with NASA Delegation	<i>Tolstoy hall, Metropol hotel</i>
14:30–19:00	Double-sided meetings with IFAR Summit participants	
November 27th, Tuesday		
IFAR Summit		
08:30–09:00	Summit Registration (Late Arrivals)	<i>Bryusov hall, Metropol hotel</i>
09:00–09:25	Opening of the Summit. Welcome by the host and significant updates by members	
09:25–11:00	<p>Session 1. IFAR’s Sustainability and 4 Core activities</p> <p>(1) Technical issues to enable bilateral/multilateral international collaboration:</p> <p>Reports of IFAR WG’s: Noise (ONERA), Infrastructure Inventory (NRC), Supersonic & ATM (NASA), Vertical lift (TU Vienna), Climate change — New Challenge for Aircraft development (DLR)</p> <p>Report of activities of members (Head of agencies meetings)</p>	
11:30–13:00	<p>Session 1. IFAR’s Sustainability and 4 Core activities (cont.)</p> <p>(2) Information exchange and networking among principals.</p> <p>(3) External IFAR partnership: ICAS, including ICAS–IFAR Award 2020.</p> <p>(4) Human resources development (empowering early career employees):</p> <p>Report on current activities: IFAR Young Researchers Conference 2018</p> <ul style="list-style-type: none"> – ECN activities – Definition of HR development <p>Discussion</p> <p>Update IFAR’s Best practice Document</p>	

TsAGI–ONERA Seminar		
08:15-08:45	<i>Registration and Coffee</i>	<i>Chatsky hall, Metropol</i>
08:45-09:00	Opening & Welcome	
09:00-11:00	Session 1. Aeroacoustics and Noise Control Chairs: <i>Viktor Kopiev (TsAGI), Denis Gély (ONERA)</i>	
11:30–13:00	Session 2. Cooperation Projects Chairs: <i>Sergey Lyapunov (TsAGI), Anne-Laure Delot (ONERA)</i>	
TsAGI–CARDC Conference		
09:00–09:15	Opening & Welcome by TsAGI and CARDC leaders	<i>Boyarsky hall, Metropol hotel</i>
09:15–11:00	Session 1. Aircraft Aerodynamics Chairs: <i>Liu Sen (CARD C), Andrey Wolkov (TsAGI)</i>	
11:30–13:00	Session 2. Laminar-Turbulent Transition Chairs: <i>Maksim Ustinov (TsAGI), Zhang Laiping (CARD C)</i>	
13:00–14:00	<i>Lunch</i>	
IFAR Summit		
14:30–15:30	Session 2. Urban Air Mobility Introduction by DLR Keynote speech, including Q&A. <i>Gregor Grandl, Porsche Consulting</i>	<i>Boyarsky hall, Metropol hotel</i>
16:00–18:00	IFAR Café discussions on UAM Introduction to IFAR Café, 5 topics to be discussed	<i>Savva Morozov hall, Metropol hotel</i>
19:00–22:00	<i>IFAR Leadership Team Dinner</i>	<i>Bolshoi Restaurant, Moscow</i>
TsAGI–ONERA Seminar		
14:30–18:00	Session 3. Icing Chairs: <i>Aleksey Miller (TsAGI), Pierre Millan (ONERA)</i>	<i>Chatsky hall, Metropol hotel</i>
TsAGI–CARDC Conference		
14:30–15:00	Session 3. High Speed Flows Chairs: <i>Zhang Laiping (CARD C), Aleksandr Chevagin (TsAGI)</i>	<i>Boyarsky hall, Metropol hotel</i>
TsAGI–JAXA Workshop		
11:00–16:00	<i>Culture Programme for JAXA Delegation</i>	
18:00–20:30	<i>Welcome Reception</i>	
Meetings		
		<i>Tolstoy hall, Metropol hotel</i>
November 28th, Wednesday		
IFAR Summit		
09:00–11:00	Session 2 (Cont.) Presentation of IFAR Café UAM session results and way forward	<i>Bryusov hall, Metropol hotel</i>

11:30–13:00	Session 3. IFAR 2019 Summit 2019 presentation by NLR Discussion on theme(s) of Summit 2019 Take the opportunity to have your bi- and multilateral exchanges with other members	
TsAGI–ONERA Seminar		
09:00–11:00	Session 4. Novel Aircraft Configurations Chairs: <i>Aleksandr Chevagin</i> (TsAGI), <i>Laurent Jacquin</i> (ONERA)	<i>Chatsky hall, Metropol hotel</i>
11:30–13:00	Session 5. Flow Control Including Plasma Control Chairs: <i>Aleksandr Chevagin</i> (TsAGI), <i>Laurent Jacquin</i> (ONERA)	
TsAGI–CARDC Conference		
09:00–09:30	Arrival of the CARDC Delegation. Welcome Coffee	<i>TsAGI House of Scientists, Zhukovsky</i>
09:30–10:45	Session 4. Experimental Aerodynamics Chairs: <i>Petr Savin</i> (TsAGI), <i>Liu Sen</i> (CARDC)	
10:45–13:00	Facility tour	<i>TsAGI, Zhukovsky</i>
TsAGI–JAXA Workshop		
09:00–11:30	Arrival of the JAXA Delegation to TsAGI, Registration, Welcome coffee Opening & Welcome. Introduction of the participants Session I. Wind Tunnel Test Technologies Chair: <i>Anton Gorbushin</i> (TsAGI)	<i>TsAGI, Zhukovsky</i>
12:00–13:00	TsAGI Facility Tour (T-101, T-128, Static Tests Hall, Research Flight Simulators, Icing wind tunnel)	
TsAGI–ICARe Seminar		
08:30–08:50	Welcome coffee and Registration. Self-introduction	<i>Savva Morozov hall, Metropol hotel</i>
09:00–09:20	Messages from EC and Minpromtorg of RF, NCP (TsAGI)	
09:20–09:45	Latest Progress on Russia – ICARe Activities (Discussion)	
09:45–11:00	Presentation on Russia – Europe Future Collaboration Activities (each topic max 5 min) + short Discussion Sub-group 1: <i>Aircraft Reliability + Airframes</i> Sub-group 2: <i>Flow Control + Safety + Rotorcraft + High-Speed + MDO</i>	
11:15–13:00	Sub-group 2: <i>Flow Control + Safety + Rotorcraft + High-Speed + MDO</i> (continuation) Sub-group 3: <i>Noise Reduction</i>	
13:00–14:00	<i>Lunch</i>	
IFAR Summit		
16:00–18:00	TsAGI Historical Technical Tour NIMK (Scientific & Research Moscow Complex) TsAGI: T-1-2 Subsonic Wind Tunnel, Towing Tankl	<i>Moscow Complex TsAGI</i>
19:00–21:30	<i>IFAR Dinner</i>	<i>Moscovsky hall, National hotel</i>

TsAGI–ONERA Seminar		
15:00–17:00	Session 6. Composite / Unconventional Aerostructures Chairs: <i>Svetlana Kuzmina</i> (TsAGI), <i>Frédéric Laurin</i> (ONERA)	<i>Chatsky hall, Metropol hotel</i>
17:00–17:20	Presentation of the TsAGI – ONERA Award 2018 Project	
17:20–18:20	Session 7. Non-linear Flight Dynamics and Flight Control Chairs: <i>Maria Sidoryuk</i> (TsAGI), <i>Dominique Farcy</i> (ONERA)	
18:20–18:30	General Discussion / Conclusion of the 17 th TsAGI – ONERA Seminar	
TsAGI–CARDC Conference		
15:00–16:35	Session 5. Applied Aerodynamics Chairs: <i>Liu Sen</i> (CARDC), <i>Andrey Wolkov</i> (TsAGI)	<i>TsAGI House of Scientists, Zhukovsky</i>
17:00–17:45	Visit to TsAGI Museum	<i>TsAGI, Zhukovsky</i>
18:30–20:30	Banquet	<i>Zhukovsky</i>
TsAGI–JAXA Workshop		
15:00–17:00	Session II. Aircraft Structure Chair: <i>Sergey Paryshev</i> (TsAGI)	<i>TsAGI, Zhukovsky</i>
17:00–17:30	Wrap-up and Day Closure	
TsAGI–ICARe Seminar		
14:15–15:30	Sub-group 4: <i>Electric and Hybrid A/C Energy Supply + Propulsion</i> Sub-group 5: <i>Avionics</i> Sub-group 6: <i>Standardization</i> Discussion	<i>Savva Morozov hall, Metropol hotel</i>
15:45–17:00	Discussion and Conclusions of Common Interests, Europe, Russia	
17:00–17:30	<i>AOB, Summary, Action Items</i>	
18:00–20:00	Welcome Reception	<i>Red hall, Metropol hotel</i>
Meetings		
13:30–15:00	NAL	<i>Tolstoy hall, Metropol hotel</i>
November 29th, Tuesday		
IFAR Summit		
09:00–09:30	Session 4. Electric / Hybrid propulsion — Principal only discussion Introduction by NRC and DLR (Plenary) IFAR members’ research on “Electric/Hybrid propulsion”: Overview and Presentation of IFAR members’ capabilities by NRC and DLR (Plenary)	<i>Bryusov hall, Metropol hotel</i>
09:30–12:30	Principal only discussion	<i>Chekhov hall, Metropol hotel</i>
09:30–12:30	Steering Committee Meeting #2	<i>Bryusov hall, Metropol hotel</i>
12:30–13:00	Presentation of the results and AI’s of Session 4 (Plenary)	

TsAGI–ONERA Seminar		
10:00–13:00	Culture Programme	
TsAGI–CARDC Conference		
09:00–11:00	Session 6. Aeroacoustics Chairs: <i>Zhang Laiping</i> (CARDC), <i>Victor Kopiev</i> (TsAGI)	<i>Moscow Complex TsAGI</i>
11:00–13:00	Visit to Facilities of Moscow Research Complex TsAGI: Acoustic Chamber AC-2 and Towing tank	<i>Moscow Complex TsAGI</i>
TsAGI–JAXA Workshop		
09:00–12:00	Session III. Civil Supersonic Aircraft Technologies / Sonic Boom Chair: <i>Maksim Ustinov</i> (TsAGI)	<i>Savva Morozov hall, Metropol hotel</i>
12:00–13:00	Session IV: Helicopters	
TsAGI–ICARe Seminar		
10:00–12:30	Technical Tour , TsAGI Premises	<i>TsAGI, Zhukovsky</i>
13:00–14:00	<i>Lunch</i>	
IFAR Summit		
14:00–15:30	Session 5. Attracting young people to aeronautics research — Principal only discussion	<i>Chekhov hall, Metropol hotel</i>
14:00–15:30	Steering Committee bilateral exchanges	<i>Bryusov hall, Metropol hotel</i>
16:00–16:30	Presentation of the results and AI’s of Session 5 (Plenary)	
16:30–17:00	Summary of decisions of the Summit	
17:00–17:30	Feedback and closing of the Summit	
TsAGI–CARDC Conference		
14:00–15:30	Presentation of TsAGI capabilities and discussion of cooperation in the areas: hydrodynamics, aeroacoustics	<i>Moscow Complex TsAGI</i>
TsAGI–JAXA Workshop		
	Session V. Flight Safety Chair: <i>Sergey Bazhenov</i> (TsAGI)	<i>Savva Morozov hall, Metropol hotel</i>
Meetings		
14:00–15:00	FAI	
17:30–18:00	CARDC	<i>Tolstoy hall, Metropol hotel</i>
18:00–21:30	TsAGI 100th Anniversary Ceremonial Reception	<i>Metropol hall, Metropol</i>