## AGENDA v 1.0 - Aircraft Certification in Icing Condition New Requirements of the Means of Compliance (MoC) 12-13 Nov. 2018

## Centro Italiano Ricerche Aerospaziali (CIRA), Via Maiorise, snc, 81043 Capua, Italy

10:00 - 10:20   20   Welcome   CIRA   P. Pirrelli	Mon.	Δt		Affiliation	Discussion Lead(s)
10:20 - 10:30   10   Flight near deep convective systems: TAT anomaly and jet engine damage due   Airline Pliot   S. Mussa	12-Nov-18	(min)	Opening and Key Notes		
10:20 - 10:30   10   Flight near deep convective systems: TAT anomaly and jet engine damage due to ingestion of ice particles	10.00	00		OID A	D D: III
to ingestion of ice particles  CIRA R&TD program (PRORA) and Workshop objectives  CIRA & M. Amato  Manufacturers view on new needs and current gaps  Chair. Richard Lewis  Compliance Requirements  Team  Airbus Perspective on priority versus gaps to cover - potential areas of  Collaborations  Collaborations	10:00 - 10:20	20	Welcome	CIRA	P. Pirrelli
10.35 - 10.50   15   Flagship Program ICE	10:20 - 10:30	10	, , , , , , , , , , , , , , , , , , , ,	Airline Pilot	S. Mussa
Chair: Richard Lewis   Manufacturers view on new needs and current gaps   Chair: Richard Lewis   Manufacturers   Manufacturers   Manufacturers   Team   Te	10:30 - 10:35	5	CIRA R&TD program (PRORA) and Workshop objectives	CIRA	M. Amato
Chair: Richard Lewis   Manufacturers' View on Required Improvements in SLD and Ice Crystal Means of Compliance Requirements   Chair: Richard Lewis   Collaborations   Collaborations   Chair: Richard Lewis   Collaborations   Chair: Richard Lewis   Collaborations   Chair: Richard Lewis   C	10:35 - 10:50	15	Flagship Program ICE	CIRA	B. Esposito
Team			, ·		
collaborations  11:45 - 11:55	10:50 - 11:35	45	·		R. Lewis
collaborations  11:55 - 12:05	11:35 - 11:45	10		Airbus	J. Cliquet / G. Duprat
collaborations  Stojanowski  12:05 - 12:15	11:45 - 11:55	10		Boeing	E. Langhofer / C. Bosetti
12:15 - 13:25   70   Lunch	11:55 - 12:05	10		Dassault	
13:25 - 13:35   10   EMBRAER's perspective on priority versus gaps to cover - potential areas of collaborations   13:35 - 13:45   10   BOMBARDIER's perspective on priority versus gaps to cover - potential areas   Bombardier   A. Pueyo of collaborations   13:45 - 14:05   20   Engine events and ice crystals /Rolls-Royce's approach to future MoC / EIWG   Rolls-Royce   G. Jones (by WebEx)   14:05 - 14:25   20   UTAS Perspective on Test Facility Limitations for Air Data Probes and Ice   UTAS   G. Botura   14:25 - 15:10   45   Section Round-Table   All     Regulatory requirements for Airplane, Helicopter, and Engine   Chair: Vincenzo Brandi   Chair: Vincenzo Brandi   Tis:30 - 15:50   20   FAA rulemaking activities and perspective to demonstrate rules compliance in   FAA   T. Bond   T. Bond	12:05 - 12:15	10	Flight in icing under new regulations – Leonardo perspective	Leonardo	E. Bellussi / M. Di Muzio
collaborations  13:35 - 13:45 10 BOMBARDIER's perspective on priority versus gaps to cover - potential areas of collaborations  13:45 - 14:05 20 Engine events and ice crystals /Rolls-Royce's approach to future MoC / EIWG Rolls-Royce G. Jones task on ice crystal means of compliance  14:05 - 14:25 20 UTAS Perspective on Test Facility Limitations for Air Data Probes and Ice UTAS G. Botura  14:25 - 15:10 45 Section Round-Table  Regulatory requirements for Airplane, Helicopter, and Engine Chair: Vincenzo Brandi  15:10 - 15:30 20 Highlights on the EASA new icing regulation and related means of compliance EASA V. Brandi  15:50 - 16:10 20 Understanding of new icing regulations and related compliance in China CAE-CAPE Hu Tao  16:10 - 16:30 20 FAA-EASA harmonization efforts  FAA T. Bond  16:30 - 16:50 20 Section Round-Table  All	12:15 - 13:25	70	Lunch		
of collaborations (by WebEx)  13:45 - 14:05	13:25 - 13:35	10	, , , , , , , , , , , , , , , , , , , ,	Embraer	W. Affonso
task on ice crystal means of compliance (by WebEx)  14:05 - 14:25	13:35 - 13:45	10	, , , , , , , , , , , , , , , , , , , ,	Bombardier	_
Detectors  14:25 - 15:10	13:45 - 14:05	20	,	Rolls-Royce	
Regulatory requirements for Airplane, Helicopter, and Engine Chair: Vincenzo Brandi  15:10 - 15:30	14:05 - 14:25	20	·	UTAS	G. Botura
Chair: Vincenzo Brandi  15:10 - 15:30	14:25 - 15:10	45	Section Round-Table	All	
15:30 - 15:50   20   FAA rulemaking activities and perspective to demonstrate rules compliance in USA   T. Bond   15:50 - 16:10   20   Understanding of new icing regulations and related compliance in China   CAE-CAPE   Hu Tao   16:10 - 16:30   20   FAA-EASA harmonization efforts   FAA   T. Bond   16:30 - 16:50   20   Section Round-Table   All					
USA  15:50 - 16:10 20 Understanding of new icing regulations and related compliance in China CAE-CAPE Hu Tao  16:10 - 16:30 20 FAA-EASA harmonization efforts FAA T. Bond  16:30 - 16:50 20 Section Round-Table All	15:10 - 15:30	20	Highlights on the EASA new icing regulation and related means of compliance	EASA	V. Brandi
16:10 - 16:30       20       FAA-EASA harmonization efforts       FAA       T. Bond         16:30 - 16:50       20       Section Round-Table       All	15:30 - 15:50	20		FAA	T. Bond
16:30 - 16:50 20 <b>Section Round-Table</b> All	15:50 - 16:10	20	Understanding of new icing regulations and related compliance in China	CAE-CAPE	Hu Tao
	16:10 - 16:30	20	FAA-EASA harmonization efforts	FAA	T. Bond
16:50 17:05 15 Carimany to commomorate Ludavice Veschions	16:30 - 16:50	20	Section Round-Table	All	
10.50 - 17.05   15   Gerimony to Commomerate Eudovico Veccinone	16:50 - 17:05	15	Cerimony to commomerate Ludovico Vecchione		
17:05 - 18:05 60 Visit to CIRA ground-based facilities CIRA B. Esposito	17:05 - 18:05	60	Visit to CIRA ground-based facilities	CIRA	B. Esposito
18:05 end of day's meeting	18:05		end of day's meeting		

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Tue.	Δt	Aircraft Certification in Icing Condition - New Requirements of	Affiliation	Discussion Lead(s)
13-Nov-18	(min)	the Means of Compliance (part. 2)		
9:00 - 9:10	10	Opening of the day	CIRA	P. Annunziato
9:10 - 9:25	15	European Aviation Safety Research and Innovation: the EC perspective	EC	A. Gentili
9:10 - 9:10	0	Ground-based facilities: an overview of current performance, calibration methods, and limitations Chair: Biagio Esposito		
9:25 - 9:45	20	SLD Cloud Characterization at CIRA	CIRA	B. Esposito
9:45 - 10:05	20	IC and SLD Cloud Characterization at NASA Glenn	NASA	J. Van Zante
10:05 - 10:25	20	IC and SLD Cloud Characterization at NRC	NRC	D. Orchard
10:25 - 10:45	20	SLD Capabilities in the RTA Icing Wind Tunnel	RTA	H. Ferschitz
10:45 - 11:00	15	Tea/coffee break		
11:00 - 11:20	20	IC and SLD Capabilities in the GKN Icing Wind Tunnel (air-data probes)	GKN	I. Stott
11:20 - 11:30	10	Cox Tunnel SLD and Ice Crystal simulation	Cox-LeClerc	K. Al-Khalil
11:30 - 11:50	20	Section Round-Table	All	
11:50 - 13:00	70	Lunch		
#RIF! - #RIF!	0	Physical Modelling and numerical tools: current capabilities and foreseen R&TD programs by Research Establishments. Chair: Giuseppe Mingione		
13:00 - 13:20	20	CIRA IC and SLD capabilities and modeling research update	CIRA	G. Mingione
13:20 - 13:40	20	NASA IC and SLD capabilities and modeling research update	NASA	T. Ratvasky
13:40 - 14:00	20	ONERA IC and SLD capabilities and modeling research update	ONERA	O. Rouzaud
14:00 - 14:20	20	TsAGI IC and SLD capabilities and modeling research update	TsAGI	Miller Alexey
14:20 - 14:40	20	ANSYS IC and SLD capabilities and modeling research update	ANSYS	J. Stokes (by WebEx)
14:40 - 15:00	20	Section Round-Table	All	
#RIF! - #RIF!	0	Updates from funded Research programs and Icing WGs		
15:00 - 15:10	10	Cleansky2: Overview of Advanced Research Activities on Icing and Perspectives	CS2 JU	A. Marino
15:10 - 15:20	10	SLD Instrumentation Test Group (Description of the effort, goals, expected publications)	NASA	J. Van Zante, B. Esposito, D. Orchard
15:20 - 15:30	10	ICE-GENESIS project	Airbus	J. Cliquet
15:30 - 15:40	10	MUSIC-HAIC project: objectives and MoC gaps to fix in the time schedule	TU-BS/ONERA	S. Bansmer / O. Rouzaud
15:40 - 15:50	10	Tea/coffee break		
15:50 - 16:50	60	General discussion on way forward, recommendations on future cooperation works		All
16:50		end of workshop		