



Overview of ICAO Meteorology Panel

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US Member of ICAO Meteorology Panel



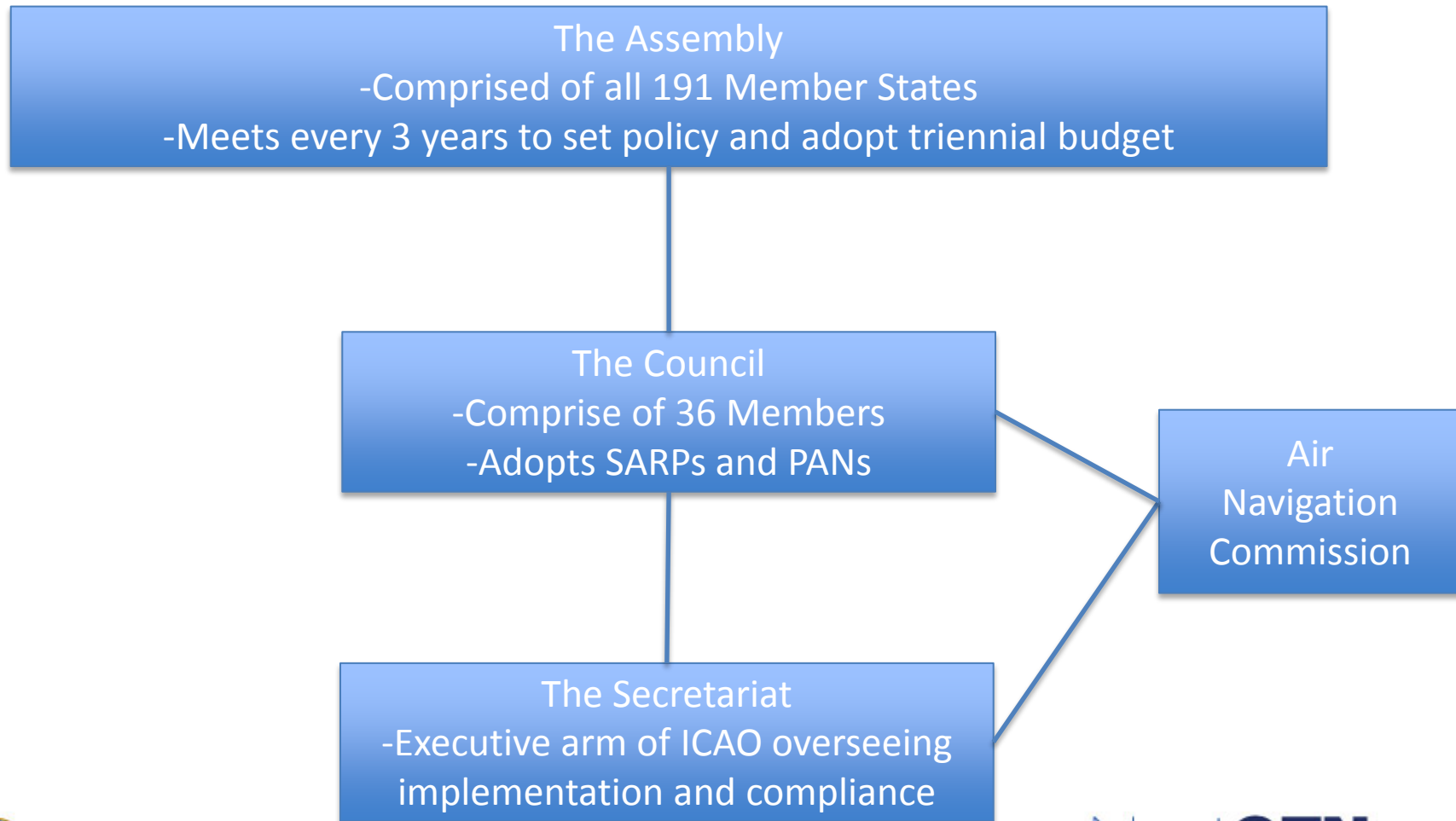
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Overview of ICAO

- A UN specialized agency established in 1944 by the “Chicago Convention” that oversees international cooperation on regulations, standards, and procedures governing civil aviation
- 191 member States
- Headquarters: Montreal
- Regional Offices: Bangkok, Cairo, Dakar, Lima, Mexico City, Nairobi, Paris
- Composed of three main bodies
 - ✦ Assembly
 - ✦ Council
 - ✦ Secretariat



ICAO Organizational Structure



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Previous Management of MET

- MET Section within the Air Navigation Bureau (ANB) managed the development of standards by study groups, operations groups, and a project team
 - ✦ Aerodrome Meteorological Observation and Forecast Study Group (AMOFSG)
 - ✦ Meteorological Warnings Study Group (METWSG)
 - ✦ International Airways Volcano Watch Operations Group
 - ✦ Satellite Distribution System for Information Relating to Air Navigation (SADIS) Operations Group
 - ✦ World Area Forecast System (WAFS) Operations Group
 - ✦ Meteorological Aeronautical Requirements and Information Exchange Project Team (MARIE-PT)
- ANB Secretary reported the results from each SG and OPSG to the Air Navigation Commission



Reorganization of ICAO

- In 2014, ICAO completed a significant reorganization of the Secretariat and the panel structure
- Two primary reasons for the reorganization:
 - ✦ The adoption of the Global Air Navigation Plan (GANP) and the Aviation System Block Upgrades (ASBUs) by the 12th Air Navigation Conference
 - The GANP and the ASBUs reoriented the focus on the provision of services to meet operational needs
 - ✦ Increased ANC oversight and panel accountability
 - Panels report to the ANC which improves accountability
 - Panels are composed of experts, not representatives of States
 - There are 17 ICAO panels, the MET Panel is one of approximately 11 new or “rebranded” panels

Reorganization of ICAO, Cont.

- Impact on provision of Meteorological Services
 - ✦ The SGs are disbanded
 - ✦ The OPSGs are now collocated in a MET Panel working group
 - ✦ Less chance of individual States pursuing parochial interests
 - ✦ More rigorous user need identification and requirements development process leading to SARPs
- Principal Panels with which the MET Panel will collaborate
 - ✦ Air Traffic Management Requirements Performance Panel
 - ✦ Information Management Panel
 - ✦ Communications Panel (for testing AMHS with IWXXM)

MET Panel Membership

State/Org.	Member
Australia	Sue O'Rourke
Canada	Bill Maynard
Chile	Rodrigo Rossel
China	Zhongfeng Zhang
France	Christiane Givone
Germany	Dirk Engelbart
Japan	Koichiro Kakihara
New Zealand	Peter Lechner
Russian Federation	Yukia Naryshkina

State/Org.	Member
South Africa	Maluta Tshifaro
United Kingdom	Colin Hord
United States	Rick Heuwinkel
ASECNA	Moise Betole-Ada
EUROCONTROL	Dennis Hart
IATA	Atholl Buchan
IFALPA	Capt. Klaus Sievers
WMO	Dimitar Ivanov

- Several additional States/Organizations have applied to nominate experts to the MET Panel, including Argentina, Cuba, and IFATCA.



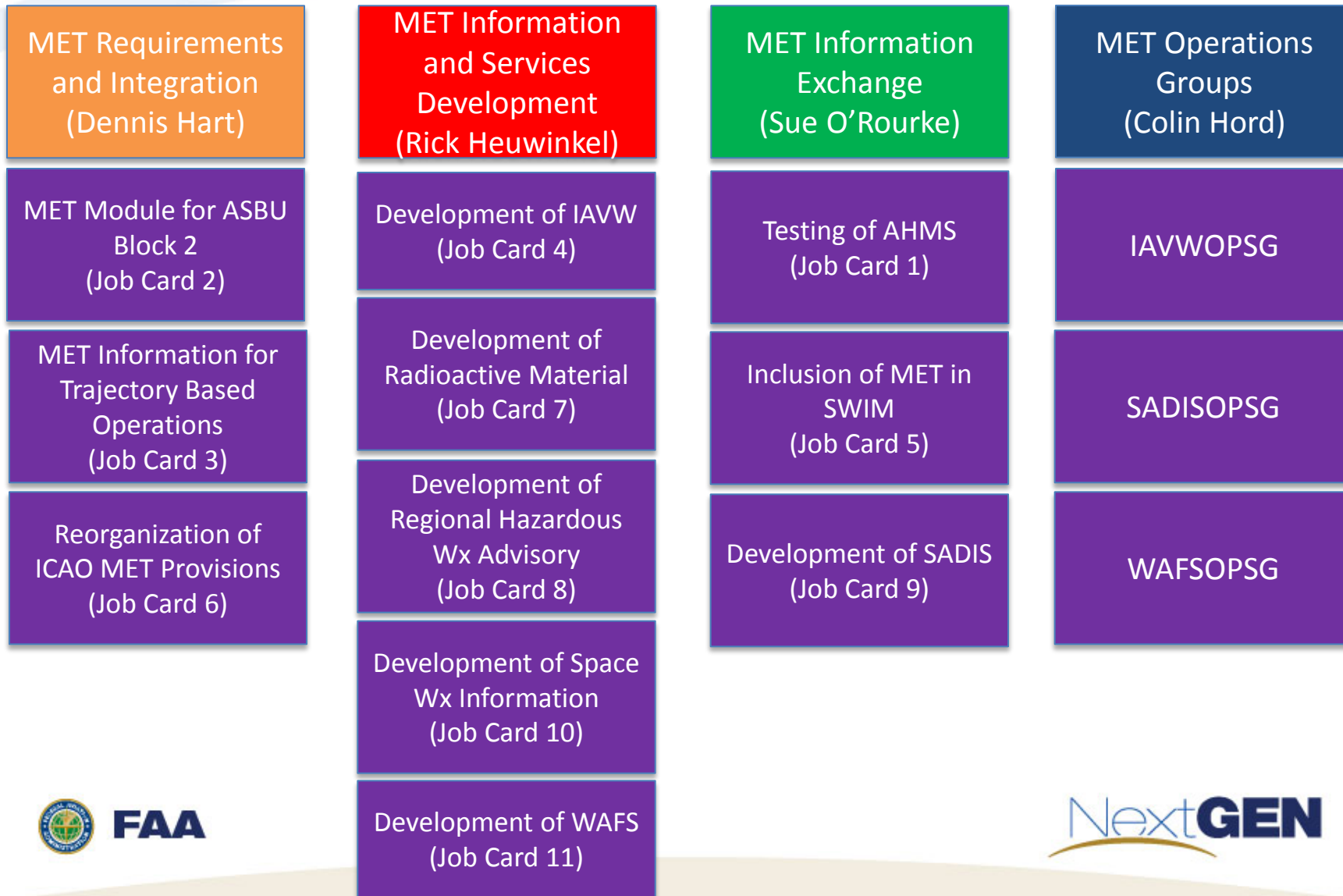
MET Panel Leadership

- Chair: Peter Lechner (New Zealand)
- Vice Chair: Bill Maynard (Canada)
- Secretary: Neil Halsey/Raul Romero (ICAO)
- Working Group Rapporteurs/Deputy Rapporteurs
 - ✦ Group 1 - Requirements and Integration: Dennis Hart (ECTL)/ Jun Ryuzaki (JPN)
 - ✦ Group 2 - Information and Services Development: Rick Heuwinkel (USA)/ CM Shun (HKG)
 - ✦ Group 3 - Information Exchange: Sue O'Rourke (AUS)/ Bill Maynard (CAN)
 - ✦ Group 4 - Operations Groups: Colin Hord (GBR)

MET Panel Organization

- MET Panel organized its work program around 11 job cards provided by the Secretary
 - ✦ Job cards are based on recommendations from the 2014 ICAO Meteorology Divisional Meeting
 - ✦ A twelfth job card to address cost recovery is being drafted
 - ✦ ANC will approve final versions of all job cards
- MET Panel established four working groups to complete work program
- Each working group has a Rapporteur reporting to the Chair
- Two working groups are further split into work-streams each with a coordinator

METP Structure and Work Program



US Advisors to METP WGs

	WG-MRI (Group 1 – Dennis Hart)	WG-MISD (Group 2 – Rick Heuwinkel)					WG-MIE (Group 3 – Sue O'Rourke)	WG-MOG (Group 4 – Colin Hord)		
		Radiation	RHWAC	Space Wx	Volcanic Ash	WAFS		SADIS	Volcanic Ash	WAFS
Coordinator	N/A	Engelbart (GER)	Shun (HKG)	Albersheim (USA)	Lisk (GBR)	Murphy (USA)	N/A	Gait/Tyson (GBR)	Lisk (GBR)	TBD
US Expert	Heuwinkel									
US Advisor 1	Johnston	Albersheim	Murphy	Rutledge	Albersheim	Albersheim	Murphy	Albersheim	Albersheim	Strahan
US Adviser 2	Albersheim	Strahan	Albersheim	Albersheim	Rutledge (ASB Chief)	Strahan	Kaplun	Alfred	Don Moore	Albersheim
US Advisor 3	Murphy	Rutledge (ASB Chief)	Strahan		Don Moore		Simmons		Jamie Kibler	Murphy
Contractor 1	Burch	Helms	Burch	Helms	Burch	Burch	Dash	Dash	Burch	Burch
Contractor 2	Helms						Braekel			

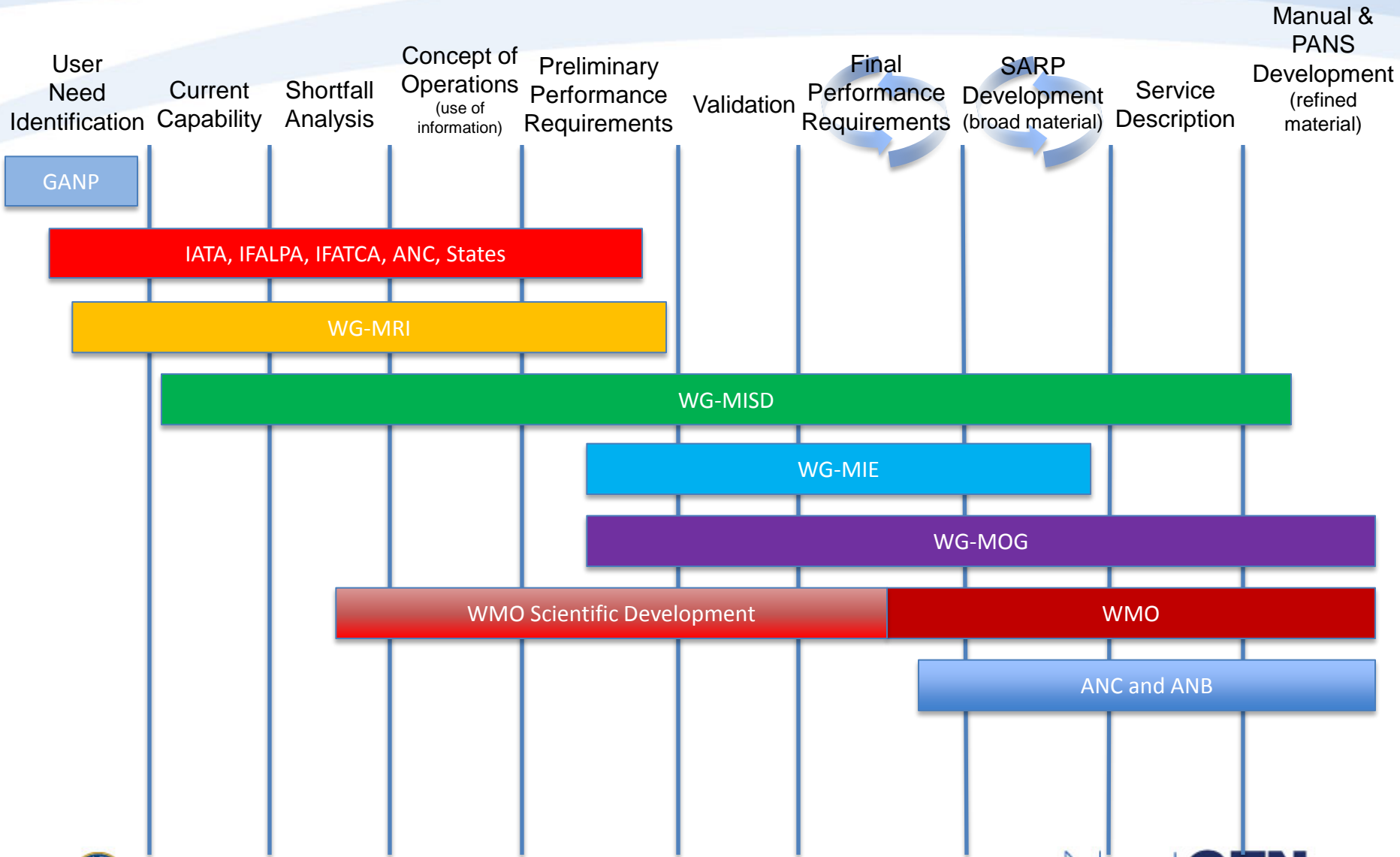
FAA ATO: Kevin Johnston (AJR), Alfred Moosakhanian (AJM), Mark Kaplun (AJM), Aaron Braekel (NCAR/AJM), Ernie Dash (AvMet/AJM)

FAA ANG: Steve Albersheim, Rick Heuwinkel, Pat Murphy, Larry Burch (AvMet), Tom Helms (AvMet)

NOAA: Jamie Kibler (WAS VAAC), Don Moore (ANC VAAC), Bob Rutledge (ASWSB), Ryan Simmons (OSTI), Matt Strahan (AWC)



MET Panel Requirements Development Process



Bottom Line for Global Met Standards?

- Greater focus on operational support
 - ANC directed work and priorities toward implementing GANP
 - Directed coordination with operationally focused Panels (ATMRPP, IMP)
 - Increased focus on users groups (IATA, IFALPA, ?IFACTA?)
- Greater Accountability
 - All work goes through 17 members, the chairman, to the ANC
- Disciplined requirements and standards setting
- **Challenge**: how to get more effective input from users



THANK YOU



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ADDITIONAL SLIDES



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ICAO Organizational Structure

- The Assembly
 - ✦ Comprised of all 191 member States
 - ✦ Meets every 3 years to review the work of ICAO, set policy for the next 3 years, and adopt the triennial budget
- The Council
 - ✦ Governing body of 36 States elected to a 3-year term by the Assembly
 - ✦ Provides overall direction on the work of ICAO
 - ✦ Adopts Standards and Recommended Practices (SARPs) that are incorporated into ICAO Annexes and Procedures for Air Navigation (PANS)
 - ✦ Assisted by technical experts on the Air Navigation Commission
- The Secretariat
 - ✦ Led by the Secretary General
 - ✦ 5 main divisions: Air Navigation Bureau, Air Transport Bureau, Technical Cooperation Bureau, Legal Bureau, and Bureau of Administration
 - ✦ Executive arm of ICAO overseeing implementation and compliance by member States



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ICAO Panel Formation

- Panels are technical groups composed of qualified experts
- Panels are established by the ANC to address specific problems or develop standards for the planned evolution of air navigation within specified timeframes
- Panels are governed by ICAO Doc 7984 and the Terms of Reference approved by the ANC
- Generally, panels are comprised of 15-20 members
 - ✦ ANC invites approximately 15 States and international organizations to nominate members
 - ✦ Other States/organizations may request to nominate a member
- Panel members participate in their personal, expert capacity, not as representatives of their nominating States/organizations
- By nominating a panel member, States/organizations are committing the resources (e.g., time, travel costs) for the member contribute freely and effectively



ICAO Panel Operation

- Panel participation is limited to:
 - ✦ Panel Members nominated by States/organizations
 - ✦ Advisors who provide technical expertise to members
 - ✦ Observers designated by States/organizations
 - Cannot vote, move or second motions or amendments
 - ✦ Secretariat provided by ICAO
- Each Panel includes the following roles:
 - ✦ Chairperson – Elected by Panel members
 - ✦ Secretary – Technical expert designated by the ANB
 - ✦ Rapporteur – Facilitates a working group established under a Panel

Current ICAO Leadership

- President of the Council
 - ✦ Dr. Olumuyiwa Benard Aliu (Nigeria)
- Secretary General
 - ✦ Raymond Benjamin (France)
- Air Navigation Commission (ANC)
 - ✦ President: Farid Zizi (France)
 - ✦ US Member: Bill Voss
- Air Navigation Bureau
 - ✦ Director: Steve Creamer (United States)

Role of the MET Panel

- Develop the requirements for meteorological information to support global air navigation
 - ✦ Address the recommendations from the 2014 ICAO/WMO MET Divisional Meeting
 - ✦ Gather user needs within the context of the ICAO panel structure
 - ✦ Ensure the requirements for MET information support the capabilities described in the Global Air Navigation Plan and Aviation System Block Upgrades

Roles and Responsibilities

- US Expert
 - ✦ Technical expert – does not represent US interests
 - ✦ Responsible for all input provided by US Advisors
 - ✦ Seeks advise from US advisors to ensure recommendations are in harmony with US policies
- US Advisors
 - ✦ Coordinate with US Expert to ensure METP WGs are working toward global harmonization of MET information standards
 - ✦ Attend meetings and telcons
 - ✦ Volunteer for/accept tasks from Rapporteurs
 - ✦ Draft, review, and edit documents (e.g., ConOps, requirements, SARPs, guidance material) necessary to meet working group deliverables



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METP and WG Meetings

- Full MET Panel tentatively scheduled to meet October 2016 in Montreal
- Working Groups expected to rely heavily on virtual meetings scheduled by Rapporteurs
- Expect limited face-to-face meetings
 - ✦ WG-MRI: November 2015
 - ✦ WG-MISD: November 2015
 - ✦ WG-MOG: September 2015
- Not all US Advisors expected to travel to face-to-face meetings and/or stay for entire duration

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