Summary of Discussions
Forty-seventh Meeting of the
Informal Pacific Air Traffic Control Coordinating Group
(IPACG/47)

February 3-4, 2022 (UTC)
Virtual

1.0 Background

1.1 The Forty-seventh Meeting of the Informal Pacific Air Traffic Control Coordinating Group (IPACG/47) was held virtually on Wednesday, February 2, and Thursday, February 3, 2022 UTC. The IPACG was established to provide a forum for air traffic service providers and airspace users to informally meet and explore solutions to near term air traffic control (ATC) problems that limit capacity or efficiency within the Anchorage, Oakland, and Fukuoka Flight Information Regions (FIR).

2.0 Welcome and Opening Remarks

2.1 The meeting was co-chaired by Mr. Ahmad Usmani, Manager, Asia Pacific Group, Air Traffic International Office, Federal Aviation Administration (FAA) and Mr. Atsushi Sano, Special Assistant to the Director, Japan Civil Aviation Bureau (JCAB). Mr. Usmani welcomed the meeting participants as well as introduced Mr. Sano. Mr. Sano thanked Mr. Usmani and noted that JCAB looked forward to a productive discussion.

3.0 Submitted Papers

3.1 The working and information papers presented to IPACG/47 were made available on the IPACG website for the meeting participants:

https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/mission_support/ato_intl/ipacg/

4.0 AGENDA ITEM 1: Review and Approve Agenda

4.1 Mr. Usmani drew the meeting's attention to the agenda and timetable for the IPACG/47 meeting. The following agenda was proposed and adopted by the meeting:

AGENDA ITEM 1	Review and Approve Plenary Agenda
AGENDA ITEM 2	Report on the Outcome of the Providers Meeting (PM/27)
AGENDA ITEM 3	Report on the Outcome of the FANS Interoperability Team Meeting (FIT/34)
AGENDA ITEM 4	Air Traffic Oceanic Facility Updates
AGENDA ITEM 5	Air Traffic Management (ATM) Issues
AGENDA ITEM 6	Communications/Navigation/Surveillance (CNS) Issues
AGENDA ITEM 7	Reports on Relevant Outcomes from Other Meetings
AGENDA ITEM 8	Other Business

5.0 AGENDA ITEM 2: Report on Outcomes from IPACG Providers Meeting 27

On behalf of JCAB and FAA, Mr. Usmani shared that the IPACG Providers Meeting 27 occurred on February 1, 2022. He then provided the following summary of discussions from the meeting:

- The FAA and JCAB successfully completed the first night of the 27th IPACG Providers Meeting yesterday. Due to time constraints in this virtual meeting space, we were not able to complete the entire agenda, but look forward to concluding the final presentations on Friday.
- We reviewed the Working Paper on North Pacific (NOPAC) Route System Redesign, which we will cover during the Plenary, and came to agreement on the tentative plan to move from Phase 1A to Phase 1B and the approach to PBCS and RNP4 approvals moving forward.
- We discussed and agreed on an approach to manage RCP240 and RSP180 Data Link Network Outages and agreed to develop a Letter of Agreement that would establish Near Term Procedures for managing these outages.
- We also covered the collaborative approach to the Pacific Organized Track System (PACOTS) System and the further relaxation of User Preferred Routes (UPR) restrictions, and a path forward has been agreed upon by JCAB's Air Traffic Management Center (ATMC) and FAA's Oakland and Anchorage Centers.
- JCAB and the FAA will cover the remainder of the agenda on Thursday including updates to the Seamless Airspace Chart and Action Item Review. We also plan to discuss the tentative plans for the next Plenary Meeting.

6.0 AGENDA ITEM 3: Report on the Outcome of the FANS Interoperability Team Meeting (FIT)

Mr. John Roman of the FAA reported on the outcomes of the FIT/34 meeting held January 26-27, 2022. He noted that participants from FAA, JCAB and satellite service providers (SSPs) presented papers on problem reports (PR), Performance-based Communication and Surveillance (PBCS) monitoring, and Future Air Navigation System (FANS)/Datalink issues. Presentations provided by the FAA and JCAB regarding PBCS performance showed that general results were very good with all metrics met, but with a few challenges. In addition, Central Reporting Agency (CRA) reports covered new reports by aircrews and facilities over the last 18 months. He shared that Boeing provided information on upcoming software fixes for tracked issues as well. Lastly, he shared that the FAA provided a brief update on U.S. Domestic En Route Data Link Services (Controller Pilot Data Link Communications (CPDLC)) which has been on hold for two years. Work is now underway to move the schedule ahead for implementation at Oakland Center and other facilities.

The meeting materials for all topics for FIT/34 were made available on the FAA IPACG website at:

https://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/mission_support/ato_intl/ipacg/

7.0 AGENDA ITEM 4: Air Traffic Oceanic Facility Updates

7.1 Updates from Air Traffic Management Center [PPT03/FAA]

Mr. Hitoshi Sasaki of JCAB provided an update from the Air Traffic Management Center (ATMC) in Fukuoka, Japan. He shared the annual and daily traffic volume in the Fukuoka oceanic airspace including traffic related to North America; Hawaii; Guam; Oceania; Southeast Asia; and Alaska. He also noted the proportion of aircraft types and Required Navigation Performance (RNP) RNP4/RNP10 and PBCS/CPDLC filed rates. He then provided the Future Air Navigation Systems (FANS) equipped/PBCS approved rate by operating area and the rate of CPDLC clearance issued to the requested altitude. He noted the percentage of the traffic volume on each NOPAC route from January to November 2021 as well as the PBCS/RNP approved level and traffic volume at each altitude on R220 and on A590.

Mr. Sasaki stated that JCAB began UPR relaxation on February 24, 2021, by NOTAM. JCAB currently extends the NOTAMs every 3 months, and there are still some restrictions. JCAB mitigated the gates from North America to Southeast Asia for Tracks H, I and K within the Fukuoka FIR on August 24. This mitigation shortened the flight distance and contributed to a small but significant reduction in fuel consumption. Depending on the PACOTS, up to a dozen or more aircraft are flying in this UPR. He noted that JCAB is working with the FAA to ascertain whether there are other restrictions that may also be relaxed.

Mr. Sasaki added that JCAB is considering Pacific Organised Track System (PACOTS) tracks for removal or optional generation. Tracks M and 8 were formally removed after a 90-day trial starting April 18, 2021, and JCAB encountered no issues. They are considering other PACOTS Tracks that they may remove as well.

Lastly, Mr. Sasaki shared information regarding JCAB's ADS-C CDP Trial, which started on September 9, 2021, with no particular issues.

Mr. Gen Schnee of United Airlines (UA) thanked JCAB for considering expanding the UPRs and the possible reduction of PACOTS, and said that UA is interested in the progress moving forward.

Mr. Blair Cowles of the International Air Transport Association (IATA) thanked JCAB for the comprehensive updates, adding that the slide showing the breakdown of PBCS traffic on NOPAC Routes was particularly useful. He then asked if JCAB experienced issues with service delivery in their airspace resulting from the recent COVID variant. Mr. Sasaki responded that JCAB did not experience a significant impact at ATMC because of the Omicron variant. The ATMC currently maintains safe operations at safe traffic levels even with reduced headcount.

Mr. Mark Hebert of Air Canada inquired about JCAB's plans for a domestic CPDLC trial in the Fukuoka FIR. He followed by asking if there is an end date planned in the domestic regional trial. Mr. Aoto of JCAB responded that JCAB planned the trial to last for one year, and they will examine in one year to determine whether they transition to formal operations or continue the trial. He added that they will conduct the domestic trial operation at FL335 and above in all airspace other than oceanic airspace in the Fukuoka FIR.

7.2 Updates from Oakland Air Route Traffic Control Center (ZOA ARTCC) [PPT02/FAA]

Ms. Holly King of the FAA provided the ZOA ARTCC update for the FAA. She reviewed the current ZOA operational status, staffing, crew rotation, and training. She then shared FIR Traffic Data including volume, aircraft distribution types, CDP usage in KZAK, ITP usage and related traffic flow information. In addition, she shared commercial space launch activity including ZOA's current LOAs. She then covered Advanced Technologies & Oceanic Procedures (ATOP) program updates, including the 23NM Lateral Separation implementation planned for Spring 2022. She noted that due to a COVID training stoppage, the facility delayed the implementation and related training. Technical upgrades and the ability to train will determine when ZOA may move forward with the ATOP T29 software build, which contains 23NM lateral separation software. She added that Oakland Domestic DataComm (CPDLC) is delayed until further notice.

Ms. King then provided updated information related to AIDC. She stated that ZOA implemented AIDC with Port Moresby on December 6, 2021. They delayed the

RNP4 cross boundary separation until Port Moresby is ready and completes the associated training. ZOA also completed AIDC testing with Ujung Pandang, and the LOA is under revision. ZOA completed the first round of AIDC testing with Manila in September 2021, but additional testing is now on hold. The LOA revisions are in progress as well. Lastly, Ms. King shared operational updates. She noted the increase in UPR flexibility that is currently in place via NOTAM and extended every 3 months. ZOA is also considering other Tracks for removal or optional generation. The proposals from the last IPACG identified Tracks H, I and K as possibilities. The PACOTS MOU Revision was completed for removing Tracks 8 and M as well.

Mr. Schnee of UA asked for clarification regarding Categorical Exclusion Determination (CED) and the significant level for U.S. to Hawaii traffic, noting the certain flow and routing management during holidays. Ms. King responded that the Honolulu Control Facility had made a request to use traffic management initiatives on this flow.

Mr. Max Matsumoto of the International Federation of Air Line Pilots' Associations (IFALPA) and the Air Line Pilots' Association (ALPA) of Japan, asked why the briefing did not cover unannounced speed changes this year. Ms. King responded that after the implementation of the welcome message at the FIR boundary, ZOA saw a decrease in unannounced speed changes. She noted that some recent data showed errors, and ZOA decided to brief this information in other venues.

Mr. Craig McFarlane of NAVBLUE asked if the UPR NOTAM on Slide 18 would be extended beyond February 24. Ms. King confirmed and stated that ZOA needed to complete the coordination with ATMC, and that she anticipated the issuance of that replacement NOTAM effective immediately after expiration. She added that ZOA would notify carriers 72 hours in advance.

7.3 Updates from Anchorage Air Route Traffic Control Center (ZAN ARTCC) [PPT03/FAA]

Mr. Stephen Thornton of the FAA provided the ZAN facility update. He reviewed the operational staffing; readiness; traffic volume; NOPAC Redesign including Phase 1A and Phase 1B; and other proposed projects. Mr. Thornton noted that Level 3 Cleaning minimizes ATC-0, ATC-Limited, and ATC-Alert, and that the recent COVID-19 Omicron variant has not significantly impeded services. He shared that the NOPAC traffic volume since the pandemic began has not been significantly reduced. ZAN began the relaxation of UPR restrictions in earnest in 2021 when they changed the UPR filing requirement for entry in and out of ZAN operational airspace. He added that its initial success allowed trials in other areas with very few operational concerns and great benefits for airspace users. Due to the success of these efforts, ZAN intends to make these trials permanent. He then reviewed the initial results from NOPAC Redesign Phase 1A and added that ZAN and ATMC are currently discussing Phase 1B. They are

working with industry partners to discuss implementation and use of reduced separation routes. Initial Results of Phase 1A implementation are expected by December 2, 2022, and they are evaluating the safety case and impact of Phase 1B.

Mr. Brett Jones of Atlas Air asked about the implementation date of Phase 1B and the availability of Phase 1A airways. Mr. Thornton responded that the airways were published, and the delivery schedule for Phase 2 has been delayed. However, the airways will come into play in Phase 2. The FAA will provide a timeline in the future, but not in 2022.

Mr. Schnee of UA expressed thanks for the news on UPR, and recognized the effort for NIPPI and OMOTO, irrespective of flight levels.

Mr. Cowles of IATA expressed thanks to the FAA for the technical information meetings (TIMs), highlighting tangible improvements and benefits for airlines as a result. He added that he looked forward to further discussion on the NOPAC redesign as well.

8.0 AGENDA ITEM 5: ATM Issues

8.1 AKARA-FUKUE Corridor Improvement [PPT03/FAA]

Mr. Yasuhiro Marutsuka of JCAB provided an information paper on the phased improvements on the route structure and ATC operations of the AKARA-FUKUE corridor airspace, which has major routes between China, Japan and the Republic of Korea. The briefing provided beneficial information to air carriers and their operations.

Mr. Makoto Fujino of Japan Airlines (JAL) noted that the route is important to JAL operations, and he thanked JCAB for their continued discussions with China and Korea. He added that JAL looks forward to Phase 2 implementation.

Mr. Cowles of IATA thanked Mr. Marutsuka for the informative update, and noted that safety and efficiency improvements within the AKARA corridor have been important to IATA for many years. He added that IATA is extremely appreciative of the Phase 1 implementation, and that the Phase 2 implementation remains a priority for IATA.

Mr. James Morimoto of the U.S. Pacific Air Force (PACAF) command responded that the U.S Air Force is interested in the AKARA corridor due to the confluence of aircraft in the east/west and north/south. He noted that they would follow closely as the implementation plans evolve. He then added that PACAF has concerns regarding civil/military airspace access and is interested in the delegation of airspace to the West in this corridor, as the service provider identified it as sovereign airspace. PACAF appreciates the cooperation to ensure all users have access to the airspace.

Ms. Cheryl Chen of the International Federation of Air Traffic Controllers' Associations (IFATCA) Asia Pacific shared that IFATCA learned about the removal of the flight level allocation scheme (FLAS) through the ICAO Regional Airspace Safety Monitoring Advisory Group (RASMAG)/26 Meeting. After the meeting, IFATCA consulted Korean controllers (no consultation with Japan) regarding the removal of FLAS. The controllers understand that the removal of FLAS is the ultimate goal for all the users in AKARA Corridor, and they are under pressure to operate the new procedures. Ms. Chen added that safety must be first in order to remove the FLAS.

Mr. Justin Lonie of FedEx thanked JCAB and their partners for the Phase 1 improvements. With increased APAC flying due to COVID-19, FedEx noted immediate improvements. He added that FedEx supports Phase 2 and removal of FLAS. Mr. Marutsuka responded that JCAB understands that passenger flights decreased during COVID-19, but cargo remained robust. He noted that FedEx flies from Shanghai to North America and is a major user of this corridor. He thanked Mr. Lonie for the support.

8.2 FOTO35 [PPT04/FAA]

Mr. Randy Mauer of the FAA delivered a presentation of the FAA's Future of the Ocean 2035 (FOTO35), a strategic program to effectively enhance the way oceanic air traffic management is conducted, benefit airspace users, and promote further global harmonization among neighboring Air Navigation Service Providers (ANSPs). The program promotes seamless end to end operations, improved operational safety and efficiency for users, and the integration of new entrants, all enabled by new and improved automation capabilities.

Mr. Nobumichi Akagi of JAL thanked Mr. Mauer for the presentation and for including the shareholders in the discussion.

Mr. Hajime Aoto of JCAB added that JCAB currently participates in multi-regional trajectory based operations (TBO) activity and looks forward to such collaborative efforts with the FAA.

8.3 North Pacific Route Structure Redesign [WP02/PPT03/FAA/JCAB]

Mr. Dennis Addison of the FAA provided a working paper on the planned revision of the North Pacific (NOPAC) Route System. The redesign will take advantage of the 23 Nautical Mile (NM) lateral separation minima to optimize the movement of aircraft through the NOPAC Route System. The NOPAC routes will be compressed into a smaller volume of airspace, providing more efficient NOPAC route flight planning and increased opportunity for optimized routes south of the NOPAC Routes. The NOPAC Redesign Phases will require aircraft to have Required Navigation Performance (RNP) RNP4, Required Surveillance Performance (RSP) RSP180, and Required Communication Performance (RCP) RCP240 approvals when operating from FL340 through FL400 on specified NOPAC routes.

Mr. Addison reviewed the main points of the paper including the three redesign phases and associated PBCS monitoring data and RNP4 approval status of various operators in the region.

Ms. Chen of IFATCA thanked the stakeholders and asked that they take into consideration the workload of ATC. IFATCA hopes that JCAB and FAA will provide ATC ample time for training for the newly implemented procedures.
She then asked if the FAA and JCAB plan to ensure that enough operators will comply the with PBCS requirements and if there is a clear number for Phase 1B to begin, such as 90 percent.

Mr. Thornton of the FAA responded that the FAA agrees that controller training and familiarization with the changes are paramount. He added that the FAA and JCAB continue to discuss the compliance rate and that 90 percent or higher is certainly attainable. He stated that they have prioritized efforts to communicate with the operators in order to retain the highest level of compliance possible.

Ms. Hiromi Kaneko of JCAB agreed with Mr. Thornton, and shared that the ATMC is also spending sufficient time to allow operators and controllers to familiarize themselves with procedures as they move to the next phase. The FAA and JCAB will continue close coordination plan to share the PBCS approval rate with the operators as they move to the following phases.

Mr. Cowles of IATA thanked the FAA and JCAB for the informative paper and stated that the NOPAC Redesign has been on the collective agenda for many years. He shared that IATA's Asia Pacific Regional Coordination Group and Safety Flight and Ground Advisory Council, the regional and global governance bodies, have endorsed the concept of "most capable, best served" as it relates to the NOPAC. This is in recognition that 80 percent of traffic now has PBCS certification and will benefit from the restructure. The majority of airlines not certified have plans to certify their fleets. He noted that a small group of the Boeing 744 will be significantly impacted by the NOPAC changes; however, IATA will continue to work with the FAA and JCAB to communicate to these operators to mitigate the impacts of the NOPAC changes. He noted that the phased approach is pragmatic and open and thanked the FAA and JCAB for driving it forward and including the operators in the process.

Mr. Sano of JCAB responded that the operators' support and cooperation is indispensable and asked for continued support.

Mr. Chiaki Yokota of Nippon Cargo Airlines shared that they successfully acquired RNP4 approval in January 2022, and asked how far ahead the FAA and JCAB will announce the Phase 1B schedule. Mr. Thornton and Mr. Aoto responded that the FAA and JCAB will communicate 3-4 months in advance.

Mr. Fujino of Japan Airlines (JAL) expressed his thanks for the NOPAC coordination and asked if there is a contingency procedure with RNP4 for inflight issues.

Mr. Aoto responded that it depends on traffic, contingency events will be handled on a case-by-case basis. Mr. Fujino then specifically asked about climb and descend procedures. Mr. Thornton responded that the FAA will conduct a safety analysis and have procedures in place as indicated by ATMC. Mr. Marutsuka of JCAB shared that JCAB plans to conduct a safety assessment of the NOPAC Redesign, particularly in Phase 2 with 23NM lateral separation and may include Japanese operators in the assessment. As mentioned by IFATCA, JCAB will also include an evaluation of the oceanic ATC system and controller support function in the safety assessment as part of controller training.

8.4 Phased Reduction of PACOTS [IP03/UA]

Mr. Schnee of United Airlines reviewed an information paper advocating for the expansion of User Preferred Routes (UPR) across the Pacific. He requested a review and discussion for the future state of the Pacific Organized Track System (PACOTS), noting United asserts that the PACOTS are generally unnecessary and no longer serve the operators from technical and business perspectives. He added that flight planning software capabilities and enhancements provide more efficient routes, including specific aircraft performance data handled through automation.

Mr. Steve Smith of American Airlines and Mr. Mark Hebert of Air Canada thanked Mr. Schnee and noted full support for the presentation.

Ms. King and Mr. Thornton of the FAA thanked Mr. Schnee for the presentation. Ms. King added that the FAA recognizes that it is necessary to reduce the number of PACOTS published, and is evaluationg a further reduction of UPR restrictions. She noted however, that some of the PACOTS may become optional and not generated daily. ZOA specifically needs a route structure with PACOTS at times for military activity, volcanic ash activity, and commercial space activity. She added that the FAA will conduct a UPR study which will consider all the different operator needs and help determine which PACOTS will be necessary to publish daily. She stated that the FAA will coordinate with ZOA, ZAN, and ATMC moving forward.

Ms. Kaneko of JCAB responded that JCAB agrees with the FAA, and they will continue examining these concerns as they relax UPR restrictions via NOTAM in the future.

Mr. Schnee expressed his appreciation, and shared that he looks forward to further discussions moving forward.

Mr. Cowles of IATA offered support for the initiative and noted the broad support and readiness for UPR availability and usage. He then thanked the FAA and JCAB for their willingness to discuss these improvements.

9.0 AGENDA ITEM 6: Communications/Navigation/Surveillance (CNS) Issues

9.1 ADS-C CDP Implementation in Fukuoka FIR [IP02/JCAB]

Mr. Marutsuka of JCAB provided an information paper regarding the implementation process of the Automatic Dependent Surveillance-Contract (ADS-C) Climb Descend Procedure (CDP) in the oceanic airspace of the Fukuoka FIR.

Mr. Cowles of IATA thanked Mr. Marutsuka for the comprehensive briefing on the trial. He added that the results were heartening and was indicative of operational efficiency at no cost to the airlines. He added that IATA supports the comments made in section 2.11. Mr. Marutsuka later provided the associated AIP supplement and it was posted to IPACG website.

9.2 Proposed Space Based ADS-B with HF Communications Minima [IP05/FAA]

Mr. Addison of the FAA provided an update on FAA efforts to create a Space Based Automatic Dependent Surveillance-Broadcast (ADS-B) with High Frequency (HF) Communications (SBAHF) separation minima and confirmed Japan's assistance with creating the minima. He shared that the ICAO Separation and Airspace Safety Panel (SASP) continued work on this effort during the last work group (WG35) meeting. A proposed Job Card has been submitted to the ICAO Air Navigation Commission (ANC) for support of the SBAHF minima. The ANC will discuss the SBA HF Job Card at their ANC220 session, which meets from mid-April into June. One of the things that SASP needs to progress the development of a global SBAHF minima is HF Clearance data from additional ANSPs. The FAA is requesting that other ANSPs share their HF Clearance data with the FAA or SASP. The clearance data should have the time from ATC sending the clearance until the WILCO is received, the data should exclude communication changes and routing clearances, but any data we can get is useful. He added that Space Based ADS-B has been evaluated by some Pacific ANSPs and many have been unable to find a positive business case at this time. Sharing HF clearance data is not a commitment to purchasing SBA data. It will be used to develop another optional controller tool, which ANSPs may elect to use if it provides them a benefit.

Mr. Akagi of JAL asked Mr. Addison what the FAA projects for the satellite, and if the scenario includes an outage with INMARSAT. Mr. Addison confirmed that the outages may involve INMARSAT, SITA, Collins, etc. He added that the minima is not a replacement for PBCS minima, and that the FAA would like to use Data Link capabilities where available. This minima should provide a backup separation when Data Link network failures occur.

9.3 Feasibility Study of Free Routing Airspace Operation over the North Pacific Airspace [IP02/ENRI]

Ms. Hiroko Hirabayashi of the Electronic Navigation Research Institute (ENRI) provided a briefing on the Feasibility Study of Free Routing Airspace Operation over the North Pacific Airspace. Ms. Hirabayashi stated that IPACG has proposed the phased restructuring of the NOPAC routes to improve air traffic efficiency and to leverage CNS/ATM advances, such as PBCS. She noted that at the ATM Seminar in 2021, ENRI proposed a NOPAC Free Route Airspace (FRA) area to explore airspace and route design options beyond the NOPAC restructuring. She added that the NOPAC FRA eliminates fixed routes in the NOPAC airspace to maximize operator flexibility, but with a possible impact on ATC. ENRI evaluated its effect by fast-time simulation, and shared the preliminary results which are relevant for planning beyond NOPAC Redesign.

Mr. Thornton of the FAA thanked Ms. Hirabayashi and ENRI for preparing the information and the insight that the study provided. He expressed his interest in additional discussions with JCAB and ENRI moving forward.

Ms. Chen of IFATCA thanked ENRI for the insightful presentation and noted the importance for industry to maintain sustainability for the future. With the increase in the burden to ATC, she expressed IFATCA's desire to work with ENRI to increase the capability of the airspace yet reduce burden to ATC.

Mr. Cowles of IATA stated that the aviation industry will be pressured to ensure aviation reduces its environmental footprint moving forward and that empirical research is an important component to ensure such benefits. He added that IATA is available to validate assumptions or provide operator input to ENRI's valuable research. He added his appreciation for the IFATCA perspective and participation due to importance of controller workload in this research as well.

9.4 Introduction of Domestic CPDLC System [IP06/JCAB]

Mr. Takuya Nakahara of JCAB provided a briefing on JCAB's efforts to achieve seamless ATC operations between their domestic and oceanic sectors by utilizing Future Air Navigation Systems (FANS) 1/A, which is currently operating in oceanic sectors. He shared that JCAB will initially operate the system on a trial basis to assess its operational and technological effectiveness for future TBO and eventually make the system compatible with Aeronautical Telecommunications Network (ATN) systems in operation in Europe and the United States. Mr. Nakahara lastly shared that the trial will last for one year.

10.0 AGENDA ITEM 7: Reports on Relevant Outcomes from Other Meetings

10.1 Updates from OPDLWG [PPT05/FAA]

Ms. Theresa Brewer of the FAA provided an overview of the Operational Data Link Working Group (OPDLWG) meeting, which aims to advance the use and performance of datalink and satellite voice technologies. The OPDLWG addresses

all operational aspects of air traffic services that use these technologies for communications, whether between aircraft and the ground, or multiple ground facilities. The briefing included inter-panel coordination updates, new actions, updates on scheduled meetings, and targets for work completion.

10.2 Updates from PARMO/JASMA RASMAG/ [IP07/PPT06/FAA/JCAB]

Ms. Christine Falk of the FAA provided the meeting with a summary of relevant safety monitoring activities conducted for North Pacific Airspace by the two ICAO-endorsed monitoring agencies. The Japan Airspace Safety Monitoring Agency (JASMA) and Pacific Approvals Registry and Monitoring Organization (PARMO)) provide enroute monitoring agency (EMA) and regional monitoring agency (RMA) services for North Pacific Airspace. The purpose of the information paper was to increase awareness of the monitoring agency activities.

11.0 AGENDA ITEM 8: Other Business

Mr. Sano announced that pending the status of the COVID-19 pandemic, IPACG/48 may be held virtually or in-person in 2023, however further details will follow in time. Mr. Sano and Mr. Usmani then thanked the IPACG delegates for a productive meeting. The co-chairs officially closed the meeting.

Mr. Ahmad Usmani
Co-chair for FAA

Mr. Atsushi Sano
Co-chair for JCAB