



International Civil Aviation Organization

**The Twentieth Meeting of the APANPIRG ATM/AIS/SAR Sub-Group
(ATM/AIS/SAR/SG/20)**

Singapore, 05 – 09 July 2010

Agenda Item 8: Review developments relating to CNS/ATM implementation

**UPDATE ON ACTIVITIES OF THE ASIA AND PACIFIC INITIATIVE TO REDUCE
EMISSIONS (ASPIRE)**

(Presented by the United States of America)

SUMMARY

The ASPIRE Partnership was initiated in February 2008 and has achieved many milestones and successes since its inception. The ASPIRE Strategic Plan has been developed and is a living document that is driving ASPIRE Partners towards actual accomplishments and operational benefits. The ASPIRE Annual Report was also published in 2009. And in the past twelve months, the ASPIRE Partnership has welcomed two new members: the Civil Aviation Bureau of Japan (JCAB) on 11 October 2009 and the Civil Aviation Authority of Singapore (CAAS) on 31 January 2010.

1. INTRODUCTION

1.1 The ASia and Pacific Initiative to Reduce Emissions (ASPIRE) is a partnership of air navigation service providers focused on environmental stewardship in the region. The ASPIRE partnership was initiated by the signing of the ASPIRE Joint Statement of Purpose by Airservices Australia, Airways New Zealand, and the Federal Aviation Administration at the Singapore Air Show on 18 February 2008. Unlike regional collaborations focused primarily on technology demonstration, the ASPIRE partnership is a comprehensive approach to environmental stewardship for the Pacific Rim. Under ASPIRE, current and future partners pledge to adopt and promote best practices that have demonstrated and proven success in the reduction of greenhouse gasses, as well as to the development of work programs to promote future gains for the environment.

2. CURRENT STATUS

2.1 The ASPIRE Partnership has recently expanded to focus on additional sub-regions within the Asia Pacific. The Civil Aviation Bureau of Japan (JCAB) officially joined the ASPIRE Partnership on 11 October 2009. One day before on 10 October 2009, JCAB conducted a flight demonstration (labelled ASPIRE 4) from Honolulu, HI to Kansai International Airport using a Japan Airlines Boeing 747 aircraft. The demonstration was presented at the IPACG/31 meeting in Tokyo, Japan and was very successful as it fully executed several ASPIRE operational procedures, including Dynamic Airborne Reroute Procedures (DARP). The JCAB and Japan Airlines also focused on achieving fuel efficiency by addressing the overall weight of the aircraft. Some of the steps taken to reduce aircraft weight were using fibreglass cargo containers and reduced cabin attendants' luggage.

2.2 The Civil Aviation Authority of Singapore (CAAS) officially joined the ASPIRE Partnership on 31 January 2010 in a signing ceremony conducted at the Singapore Air Show 2010. CAAS and Singapore Airlines conducted a flight demonstration (labelled ASPIRE 5) on 2 February 2010 from Los Angeles, CA to Singapore via Tokyo Narita International Airport using a Singapore Airlines Boeing 747-400 aircraft. This was essentially the first multi-leg ASPIRE flight executed to date. In addition to completing planned airborne optimizations such as User Preferred Routing (UPR) and DARPs, Singapore focused on airline procedures, advanced engine and airframe washing, and other efforts to make the overall flight as efficient and green as possible.

2.3 In total the five (5) ASPIRE demonstration flights have been an overwhelming success, given that these savings are for only one aircraft and one single flight. The cumulative fuel savings of the ASPIRE flights is 32,386 Kg leading to an overall carbon dioxide (CO₂) reduction of 101,986 Kg. Extrapolating these benefits over multiple flights per day, everyday for a year, that annual savings would be astounding.

2.4 With the addition of Japan and Singapore to the ASPIRE Partnership, the focus of the strategic plan initiatives can not be expanded to the North Pacific and South East Asian corridors. As members ASPIRE, JCAB and CAAC will be developing regional ASPIRE work programs that will focus attention of the region and airlines on the ASPIRE initiatives, and seek to gain benefits and savings through additional regional work led by these new entities.

2.4 The ASPIRE members met on June 8-10 for the 2010 ASPIRE Annual Meeting in Maroochydore, Australia. The meeting focused on the ASPIRE Work Program for 2010 and 2011, including updates from the each ASPIRE member on progress and future planning. The members conducted a workshop session to review progress on the development of shared metrics for fuel and emissions to be published in the ASPIRE Annual Report. In addition to the ASPIRE partners, the meeting was attended by AeroThai as a service provider guest, as well as several participating airlines. At the meeting, it was agreed that the term of chairmanship of ASPIRE would be extended from one year to two years, with Airservices Australia beginning a second term as ASPIRE Chair beginning in September 2010. It was also agreed that Civil Aviation Authority of Singapore would host the 2011 ASPIRE Annual Meeting.

2.5 The 2010 ASPIRE Annual Report is under development and scheduled for a September publication. The report will include updates from the ASPIRE Partners on work program activities, as well as recent ASPIRE demonstration flights and plans for future enhancements.

3. CONCLUSION

3.1 Progress, performance and program updates by the ASPIRE Partnership are published on an annual basis in the ASPIRE Annual Report. The first ASPIRE Annual Report was published by the ASPIRE coordinators in August 2009. The report is available on the ASPIRE website at <http://www.aspire-green.com/>

3.2 The meeting is requested to note the information presented in this information paper. Any questions on ASPIRE can be routed to Mr. Kevin Chamness, FAA ASPIRE Coordinator at kevin.chamness@faa.gov.