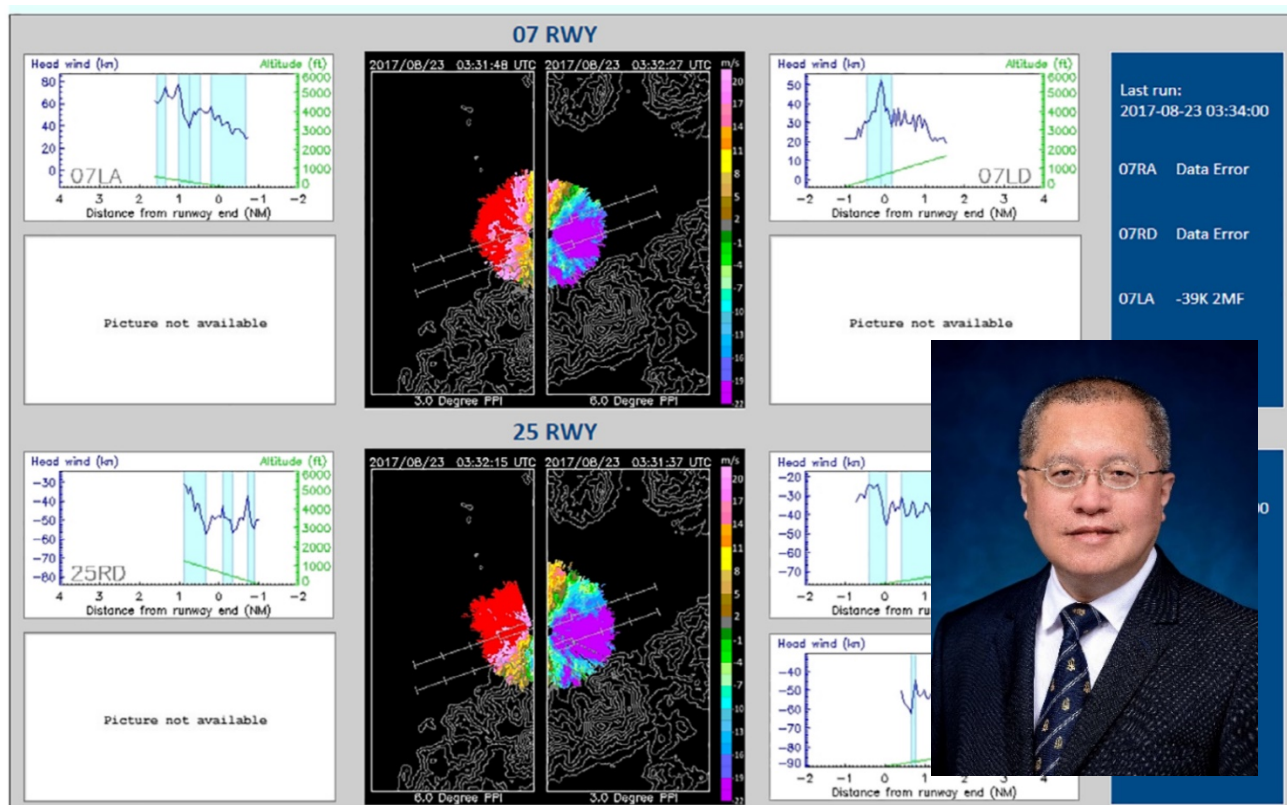


Aircraft Division AGM Lecture Dinner 2024

Monitoring and Prediction of low level windshear and turbulence at the Hong Kong International Airport



By **Dr CHAN Pak Wai** JP FRMetS FHKMetS
Director of the Hong Kong Observatory

Date: 10 May 2024 (Friday)

Time: 6:00 pm (for registration); 7:00 pm – 10:00 pm

Venue: The Regal Airport Hotel, Hong Kong International Airport.

Low level windshear and turbulence could be hazardous to the departing and arriving aircraft at the airport. This lecture focuses on the effort of the Hong Kong Observatory (“HKO”) in the monitoring and prediction of low level windshear and turbulence. It will cover the world’s first Light Detection And Ranging (“LIDAR”) system introduced by the HKO in 2002 for operational alerting purpose. The LIDAR reveals many interesting features of wind changes at the Hong Kong International Airport, including mountain wake flow, mountain wave, tiny vortices, etc. The predictability of such features is also studied by running Weather Research and Forecasting (“WRF”) model at large eddy simulation model with a spatial resolution down to 40 m. Some recent results of the modelling of windshear features and turbulence intensity will also be shared.

About the lecture speaker

Dr CHAN Pak Wai joined the HKO in 1994 and has been working at the Hong Kong International Airport for more than 20 years, with research and operational efforts in airport meteorological instrumentation, low level windshear and turbulence alerting, and high-resolution numerical weather prediction. Dr Chan has spared no effort to improve aviation safety in Hong Kong and he is the developer of the world-first LIDAR windshear alerting system and the Hong Kong's weather buoys for the airport. In collaboration with the Government Flying Service, Dr Chan developed a dropsonde measurement system for the northern part of the South China Sea to improve monitoring capabilities by collecting more meteorological data of the tropical cyclones. Dr Chan also served as a weatherman for many years, reporting the weather to the public.

In 2019, Dr Chan was promoted as the Assistant Director, taking charge of weather forecasting and warning services, climate change research and cooperate communication. Dr Chan was appointed as the Director of the Hong Kong Observatory in March 2023 and he is committed to promote the application of artificial intelligence in meteorological research and weather forecasting, enhancing forecasting capacities of severe weather such as typhoons and heavy rain.

Dr Chan has been involved actively in the work of the World Meteorological Organization ("WMO") and International Civil Aviation Organization ("ICAO") over the years. He is currently the vice-chair of Standing Committee on Measurement, Instrumentation and Traceability of WMO to promote the standardization of meteorological and related observations. He is also the chair of the meteorology subgroup of ICAO in the Asia Pacific Region to facilitate the implementation of aeronautical meteorological services in the Asia Pacific and to ensure the continuous and coherent development of meteorology in the region.

Dr Chan obtained a PhD degree from the City University of Hong Kong in 2023 on wind engineering. He is also a visiting professor of a number of universities in mainland China and serves as editorial board member of many renowned scientific journals. He has published around 400 SCI journal papers, mostly on meteorological instruments and measurements.

Fee

Western Buffet Dinner: **HK\$150** per head for Aircraft Division / Aircraft Discipline / Student Members of the HKIE; **HK\$800** per head for non-members; or **HKD7,500** per 10-person table.

Registration

Prior registration is required. Please click [HERE](#) to register. Successful applicants will be notified on or before 30 April 2024 by e-mail.

Payment

- 1) For members or guests of the organisations listed in Table 1 of page 4, please contact your company representatives for registration and payment; or
- 2) For other members or guests, Cash Deposit / Transfer to the HKIE Aircraft Division bank account (HSBC 801-220153-001) and e-mail the transaction slip to HKIE.AC.2018@gmail.com annotating: "AGM Dinner – Your Full Name & Organisation".

Dress Code

Business

CPD

Attendance certificate will be available on request.

Lecture Dinner Souvenir

Momax Q.PLUG BOX 100W 6-Port GaN with Wireless Charging (UM28AUKW)



Enquiries

Ir CHIM Wing Nin Warren

WhatsApp: +852 9105 6657

e-mail: HKIE.AC.2018@gmail.com

Table 1: Company Representatives

Organisations	Company Rep	e-mail
AHK	Ir Albert CHAN	albert.chan@airhongkong.com.hk
AAIA	Mr Andeon SIU	andeonsiu@tlb.gov.hk
CAD	Ir Bill LAU	bwclau@cad.gov.hk
CASL	Ir Warren CHIM	warren.chim@casl.com.hk
CityU	Mr Vector WONG	YCWONG54@cityu.edu.hk
CX	Ir Gary SUNG	gary_sung@cathaypacific.com
GBA	Ir Kent WONG	kent_wong@yahoo.com
GFS	Ir Joe CUA	kkcua@gfs.gov.hk
HAECO & AEDS	Ir WK CHAN	wk2chan@haeco.com
	Ir Thomas TAM	THOMAS.TAM@haeco.com
HAESL	Ir Karina MAK	karina.mak@haesl.com
HKA	Ir Vitoo ZHAN	vitoowx.zhan@hkairlines.com
HKC	Ir Sean WEI	Sean.wei@hkaircargo.com
HKE	Ir Alan TANG	Alan.Tang@hkexpress.com
HKIAA	Ir YP TSANG	yp.tsang@hkiaacademy.com
HKU SPACE	Ir William LEUNG	317daifei@gmail.com
HKUST	Dr Larry LI	larryli@ust.hk
Metrojet	Ir Lokki HO	Lokki.Ho@metrojet.com
PAPAS	Ir Steve MOK	stevemok@papas.com.hk
PolyU	Dr NG Kam Hung	kam.kh.ng@polyu.edu.hk
VTC / IVE	Ir LAI Chi Fai	cfl27471003@gmail.com