



AVIATION METEOROLOGY

An Airports Perspective

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Manager Airport Performance

Wellington International Airport Limited

- Airport companies are commercial entities.
- Aeronautical revenue component driven by aircraft movements and passengers
- We're also very focused on customer experience. A happy and stress free passenger spends money.
- Operational objective; continuous smooth running, operating to optimum capacity.



Then there's the weather...

MET vs RUNWAY CAPACITY

Predominant Approach Conditions

- Vis - Visual
- IAB – Instrument Above Circling
- IBJ – Instrument Below Jet
- IBC – Instrument Below Circling
- FOG

What does this mean for the airport (WLG)

- Vis – 28
- IAB – 26
- IBJ – 21
- IBC – 17
- FOG – 10 (1 movement at a time anywhere)

Also impacts departures

- WLG terrain environment to the north
- Turbulence increases risk of go around and protection required.



WIND VELOCITY

- High winds affect ground operations; staff and equipment
- Influence on different aircraft types:
 - Turboprop
 - ❖ Stand utilisation
 - ❖ Local anemometers
 - Jet
 - ❖ Opening of aircraft hold – inward or external?
 - ❖ Travelling with bags?
 - ❖ Weather cocking
- Construction/maintenance activity
- Significant Business Disruption alert



WINTER OPERATIONS

- LVO (Low Visibility Operations)
- RVR (Runway Visual Range)
 - ❖ Dissemination of information
- Snow
 - ❖ Resource Planning and Tactical
- Ice
 - ❖ Thermal map
 - ❖ Viasala in pavement sensors

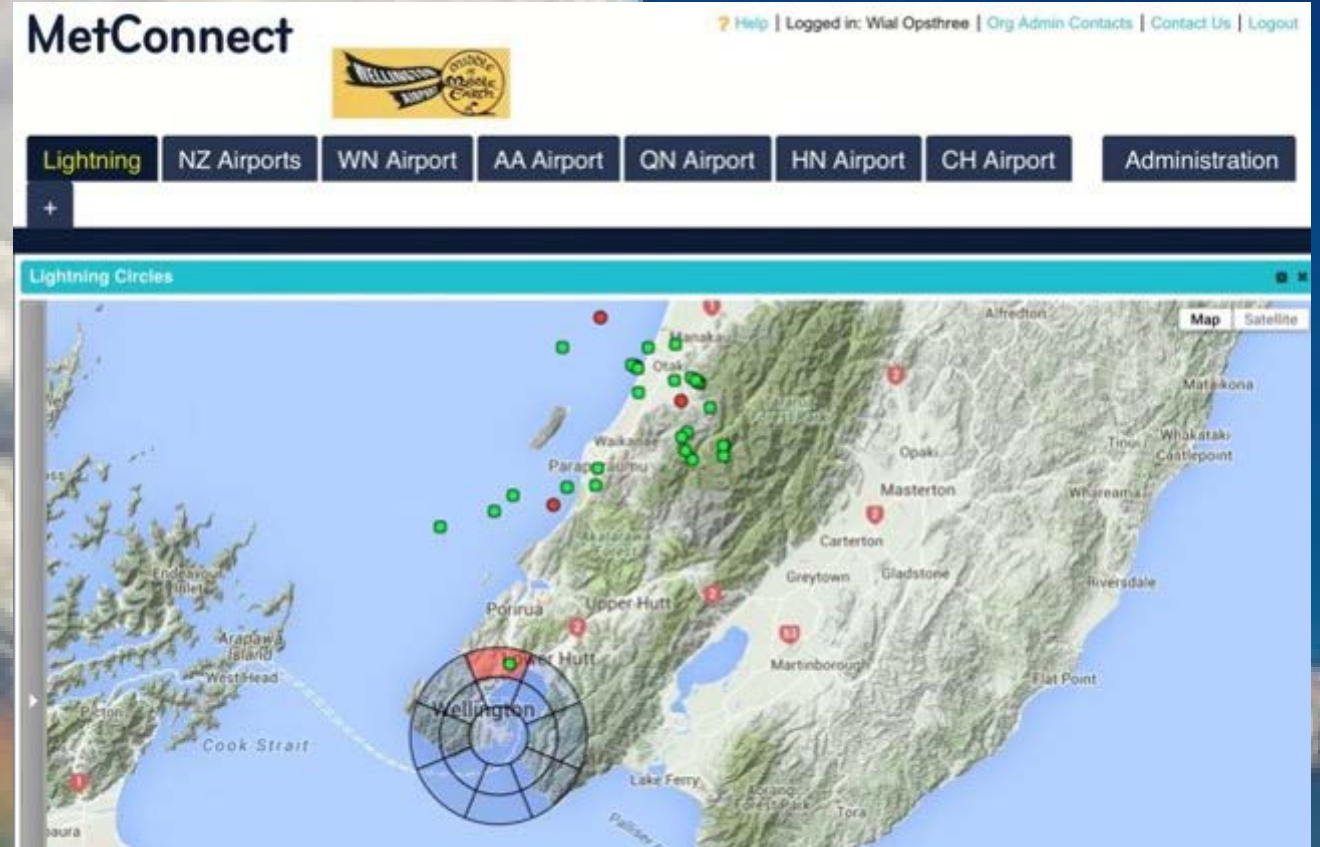


SUPPORTING TALPA

- Real Time Runway Condition Reporting
- Currently a requirement upon all NZ certified airports. Is this appropriate?
- RCAM
- Information dissemination of RWYCC +

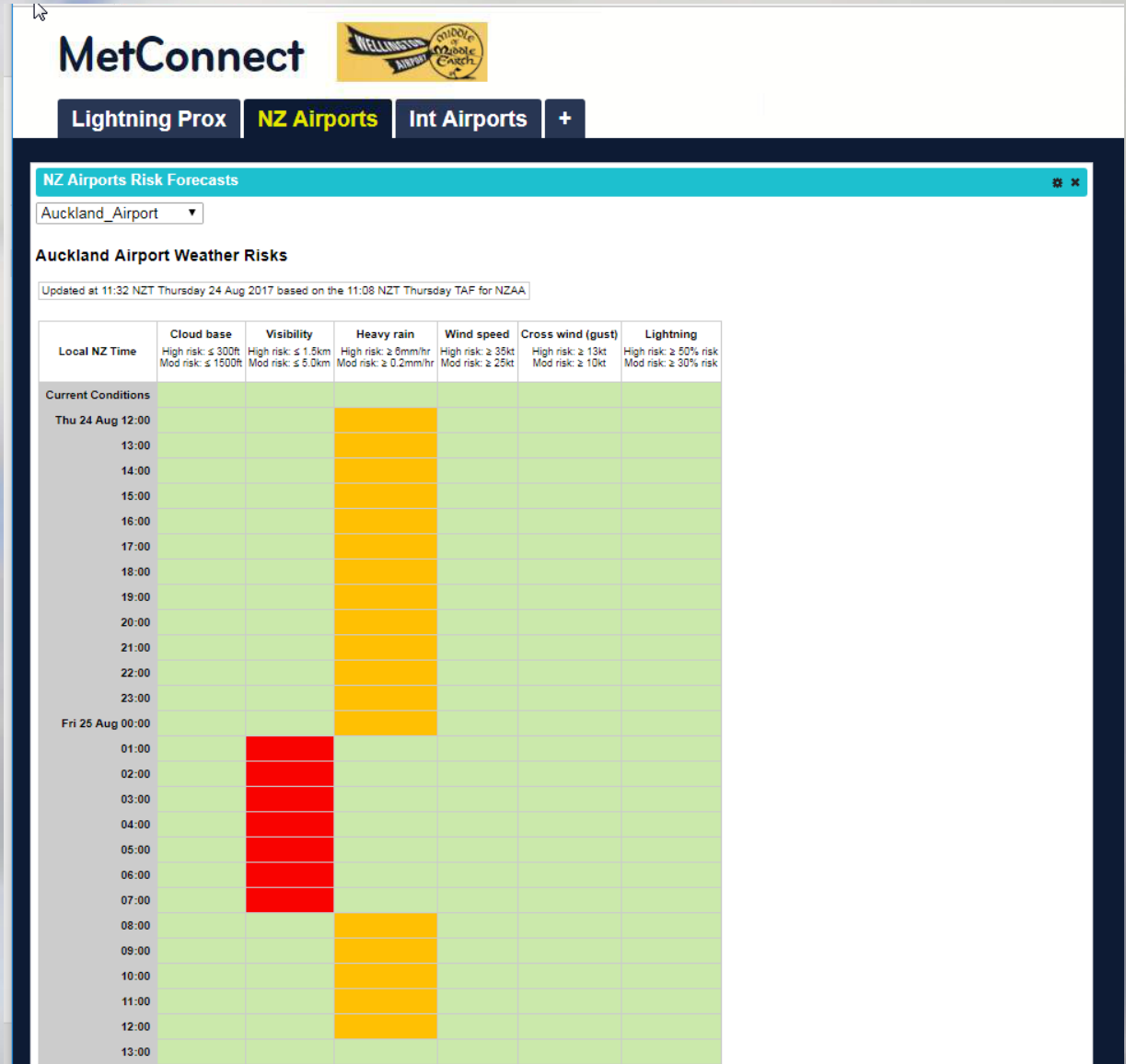
CBs and TCUs

- Obligation as a PCBU to airside stakeholders
- Minimise disruption
- Lightning detection
- Dissemination of information both visual and via SMS
- Overlay the rain radar



Interpreting the Information

- TAF and METAR
- Graphical presentation
 - What else is happening around the traps e.g. main trunk and regional
- ATIS - largely automated equipment feed. Cloud at night and effect upon capacity.
- Volcanic Ash



A-CDM

- Situational Awareness
- T- CDM
- CAM and Capacity

CDM Portal | Airport 20... x 1634

Secure | https://acdm.wellingtonairport.co.nz/webclient#cdm

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CDM PORTAL *Ground Handler*

100% / 65% AirNZ Reg	94% / 61% AirNZ Dom	67% / 33% AirNZ Int	100% / 100% Aerocare Reg	50% / 50% Aerocare Dom	N/A Aerocare Int	100% / 0% PlaneBiz Int	100% / 80% Sounds Air Reg	100% / 70% Reg	93% / 64% Dom	75% / 25% INT	92% / 61% ALL
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6 Alerted	0 On Approach	3 Taxi In	0 Mobilise Departure	0 Boarding	0 Target Off-Block	0 Off-Blocks	0 Taxi Out
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FLIGHT | STAND | GATE | CARRIER | GROUND HANDLER | ALERT | STATUS | SERVICE TYPE | AIRCRAFT TYPE | REGION

FLIGHT TYPE | MILESTONE | SORT BY: DEPARTURE

Flight	Flight				Inbound		Turnaround				Outbound	
	Flight	O/D	Reg	Stand	Take-Off	Landing	In-Blocks	Boarding	Off-Blocks	FIDS	Push	Take-Off
 JQ257 JQ256	AKL	VFY	21		10:15 ATOT	11:05 ALDT	11:09 AIBT	11:48 AEBT	12:00 AOBT	12:05 STD	11:58 ASAT	12:10 ATOT
 NZ5793 NZ5353	NPL CHC	MVG	78/18		10:00 ATOT	10:44 ALDT	10:50 AIBT	11:55 AEBT	12:05 AOBT	12:05 STD	12:06 ASAT	12:11 ATOT
 NZ8255 NZ8260	TRG	NEO	11		10:32 ATOT	11:38 ALDT	11:41 AIBT	12:05 AEBT	12:15 TOBT	12:15 STD	12:12 ASAT	12:18 ETOT
 NZ682 NZ605	DUD ZQN	OXE	13		10:34 ATOT	11:31 ALDT	11:35 AIBT	12:07 AEBT	12:15 TOBT	12:15 STD	12:15 TSAT	12:24 CTOT
 S8276 S8117	BHE PCN	SAA	4/3 4		11:36 ATOT	12:04 ALDT	12:13 EIBT	12:15 ESBT	12:30 TOBT	12:30 STD	12:30 TSAT	12:33 ETOT
 NZ5348 NZ5355	CHC	MVK	79/19		10:41 ATOT	11:28 ALDT	11:30 AIBT	12:20 ESBT	12:35 TOBT	12:35 STD	12:35 TSAT	12:42 CTOT

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WELLINGTON

Thanks for listening

Any Questions?