

**Emily Dowding-Smith**

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**From:** Ross Marsden [ross.marsden@metservice.com]  
**Sent:** Monday, 12 May 2008 09:40 am  
**To:** Rod Sullivan  
**Subject:** RE: Visibility and Cloudbase Information - Ardmore AWIB

Dear Rod,

Essentially I was describing an AWIB system. Examples of these already installed around the country are:

- 1) Paraparaumu and Hokitika: our automatic weather station (all sensors in one place) sends data every minute to a system (operated by the airport company) that "voices" it, and broadcasts an AWIB.
- 2) Taupo, Ardmore, Whangarei: our automatic weather station (all sensors in one place) sends data every minute to a system (operated by MetService) that "voices" it, and broadcasts an AWIB.
- 3) Masterton: similar but the whole system is owned and operated by the airport company.

The difference in the Ardmore situation is that the visibility and cloud sensors would be located off the aerodrome and in Clevedon. The AWIB would need to be programmed to give the NZAR info in 2 parts ...

"Ardmore: Weather MIKE: Ardmore: 250 14 knots gusts 25 knots, 18 degrees, ... QNH 1016; Clevedon: visibility 30 kilometres, cloud scattered 1500 feet, broken 2200 feet; (some communication instructions)" .. or whatever - I've never heard an AWIB; I imagine it is similar to an ATIS which go something like that.

Usually all the sensors are in one place and directly connected to a computer that passes the data to an AWIB system for "voicing". The technical issue of the proposed Ardmore situation is that the visibility and cloud sensors would be remote from the wind, temperature and pressure sensors and they need to be brought together before being passed to the AWIB.

This is not a totally unique situation. At Wellington Airport the cloud sensor is located at Shelly Bay, several kilometres from the other sensors on the west side of the runway south of the apron there. The cloud sensor data is conveyed somehow to our Wellington Airport automatic weather station (a computer) and 1-minute data is made available to the control tower and sent to MetService.

It's all been done in one way or another. Having some sensors located away from the aerodrome is not an issue. .. as long as the content of the AWIB is clear that some data is sensed (and indicates the conditions) at a place other than the nominal "location" of the AWIB (NZAR, in this case).

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I hope this explains the situation. There is no question about capability of these systems as MetService is certified to ICAO rule 174 and provides data to Airways Corporation for ATC at all secondary airports. Aspects of what is proposed are already implemented elsewhere, not in exactly the same configuration; combining them is not a problem.

Regards.

Ross Marsden  
Consultant Meteorologist  
MetService  
DDI 04 470 0787  
Mob 0275 611 650  
Fax 04 473 5231  
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-----Original Message-----

From: Rod Sullivan [<mailto:rod.s@randl.net.au>]  
Sent: Sunday, 11 May 2008 17:58  
To: Ross Marsden  
Subject: Visibility and Cloudbase Information - Ardmore AWIB

Ross

You may recall last year when you did some work in relation to a proposed transmission line in the Clevedon Valley you suggested that a possible safety enhancement for aviation could be to install an automatic met station in the Clevedon Valley. This station could then be used to advise (through the Ardmore ATIS) cloud base and visibility in the Clevedon Valley.

Could you please confirm that such technology is readily available in New Zealand, cite some examples of where it is used and confirm the equipment capability?

Thanks Ross, this would be most helpful.

Rod Sullivan

+61 408 008 474

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