

Re-establishment of Meteorological observations and Terminal Aerodrome Forecast (TAF) for Ardmore Aerodrome (NZAR)

Brief description of the existing meteorological instrumentation at Ardmore and the services it provides:

MetService operates a meteorological data acquisition, display and VHF broadcasting system at Ardmore airport, under contract to Ardmore Airport Limited. The weather station measures wind speed and direction, barometric pressure (QNH), air temperature and dew point, with instantaneous and averaged data graphically displayed in the control tower for airport staff using MetService MetDISPLAY software. In addition, up-to-the-minute data from the equipment is broadcast, along with operational data entered by airport staff, on a MetService MetATIS system.

Brief description of an upgraded system consisting of additional sensors for Vis and Cloud located in Clevedon Valley with the facility to transmit data to MetService:

A MetService iSTAR weather station, equipped with a laser ceilometer to measure cloud height and cloud cover, could be installed at any location with a mains power supply. iSTAR uses industry standard processing (the United States National Weather Service ASOS algorithm) to produce 'state of sky' information from the ceilometer record. A present weather sensor could be added if required. The present weather sensor measures visibility (meteorological optical range), and a comprehensive range of precipitation and obscuration conditions such as mist, fog, drizzle, rain, showers. The additional sensor is costed below as Option 2.

Data would be sent every minute, using either broadband internet or cellular communications, to MetService. The data would be available for immediate access (via the Internet) by customers at any location.

Estimate of annual service charge for a 5 year contract

Option 1: Ceilometer, radio linked to Ardmore tower, data broadcast on existing MetATIS: \$16,400

Option 2: Ceilometer and present weather sensor, radio linked to Ardmore, MetATIS broadcast: \$29,900

Pricing assumes that a clear line-of-sight path is available for a radio-modem connection between the Clevedon site and Ardmore control tower.

Annual fee includes:

1. Annual preventative maintenance by MetService engineer
2. Fault repairs as required (including travel and staff costs)
3. Spares support from MetService equipment pool
4. Radio frequency licence

No provision has been made for site rental, nor for any consents that may be required.

The initial establishment costs are absorbed into the annual servicing charge, and the equipment and support systems for processing and communications remain the property of MetService.

Circumstances leading the cessation of the observation programme and the TAF service for NZAR

For economic reasons, tempered by operational considerations, Airways Corporation withdrew their Air Traffic Control services from Ardmore in the autumn of 1998. As a consequence the manual observations ceased and the requirement for aerodrome forecasts (TAFs) provided by MetService, was also relinquished.

Availability of TAF NZAR to users:

Provided that manual and/or automated observations from Ardmore Aerodrome (possibly supplemented by automated observations from Clevedon valley), TAF NZAR could be made available through the usual channels (such as how TAF NZAA is now available through Airway's IFIS, AWIB, MetATIS) as well as from MetService through their "MetFlight GA", "MetFlight Commercial", "Metjet" services, or by individual arrangement. There would be 2 scheduled issues, 4am and 10am, and a continuous weather watch for amendments to the TAF. This is the same as the TAF service provided for aerodromes with similar operating hours.

Estimate of monthly cost for the provision of TAF NZAR:

\$435 plus GST or \$5220/annum subject to Producers Price Index adjustment

There would be no establishment costs.