7 Kennedy Street,

Windsor,

Brisbane 4030

6th March 2015

The Hon. Bob Baldwin M.P.

Parliamentary Secretary for the Minister for the Environment,

P.O.Box 6022

House of Representatives,

Parliament House

Canberra ACT 2600

Dear Sir,

INQUIRY INTO THE BUREAU OF METEOROLOGY

In corresponding with Jennifer Marohasy I have become aware of other submissions to your committee, many relating to the subject of incorrect temperature recording and data manipulation. There needs to be an urgent and far reaching inquiry into all aspects of the Bureau's operation especially their short term forecasting. It is obvious to me that almost all their meteorologists are either incompetent, ignorant of basic meteorology or poorly trained.

This has the potential to cause loss of life and even significant fatalities, as nearly happened with the terrible fog forecast at Adelaide airport in June 2013 which resulted in two domestic B737 's diverting to Mildura and the Virgin aircraft landing with ten minutes fuel left and never sighting the ground during the landing. So far the ATSB has still not delivered a final report after 20 months and there is no indication that anyone in the BOM has been demoted or sacked over such a grave incident. There is absolutely no understanding of what constitutes a severe thunderstorm, what is a CAT 5 cyclone, when fog will form and even when storms are likely to occur.

I can speak of the weather from first hand experience with over 50 years in aviation and having flown as a Captain with the former TAA/Australian Airlines. In recent years, severe storm warnings have been issued when none were present and on other occasions fine weather has been forecast when right at that very moment there have been lines of thunderstorms 30 miles from Brisbane.

All three cyclones Yasi, Ita and Marcia were only ever Cat 3 cyclones and the hype, over exaggeration and the inability to admit poor forecasting continues. A friend, a former airline pilot and before that a BOM meteorologist is also adamant that Yasi was only ever a CAT 3 cyclone.

I have downloaded many radar returns, warnings and forecasts from the past which I can present as evidence that they don't know what they are doing. Last Wednesday in company with two other retired Airline Captains of long aviation experience we flew from Archerfield to Lismore and down to Coffs Harbour and return. Without going into the details, every aerodrome that we saw or passed was totally at odds with their forecast weather which all seemed computer generated and straight out wrong and forecast for the whole day.

Because none of the meteorologists in the Bureau have ever experienced the weather at different altitudes, night and day and over the continent there needs to be more field based experience given to them and to stop relying on just computer models. There needs to be a classification system designed for Thunderstorms so that the public know what severity of weather to expect when a warning is issued. As an example, a severe thunderstorm needs to attain a height of at least 30,000 to generate significant wind, lightening, heavy rain and hail, but they don't even know this, often declaring storms only 20,000 high as severe. They just don't pop in thirty minutes and downgrade in thirty minutes like the Bureau says they do in some of their warnings. Maybe they should be graded in intensity like cyclones and the determining factor would be height, size, length of squall line and numbers of actual cells visible.

In the 1970's it was quite common in summer to see long lines of storms with tops to 70,000 approaching S.E. Queensland from the south west. These are not seen today because the weather is not hot enough to trigger development to those heights. I have experienced ATC and BOM advising fine weather for six hours and arriving in Perth at night to find the aerodrome closing with thunderstorms minutes after arriving. This sort of forecasting is a disgrace and they are getting worse as today's

forecasts and warning are bad. Often their warnings and general forecasts are different to their aviation forecasts which makes you wonder what is going on inside the department – on the day following cyclone Marcia they had a severe thunderstorm warning for the Sunshine Coast area, when none was present on their weather radar and there was no mention of thunderstorms on the Aviation Terminal Forecast for Maroochydore.

In closing I have to say that anyone who says there is such a thing as AVERAGE TEMPERATURE doesn't know much about the weather. It changes all the time, at every location and every change of altitude so there can never be an average that means anything and this applies to rainfall and wind as well. Higher minimums can give higher averages without higher maximums but this is all abstract stuff. Whenever you sit in an airline aircraft for take off the crew will be using the actual temperature to determine the length of runway required for the weight and not some abstract average which will be wrong anyway. Should you require further amplification of anything written here I would be happy to oblige and could arrange corroboration from other pilot colleagues with long time aviation and weather experience.

Yours sincerely

Richard Kleeman