

Environment Canada solid state modulators, May 2004
(msj@cban.com)

Hi John:

I can confirm that during the period 1997 to 2004 Environment Canada purchased from your company state-of-the-art solid state modulators for the newly designed and constructed C-Band national weather radar network. The network of 30 weather radars starts on the west coast of the continent (Duncan, Vancouver Island, BC., longitude 123 degrees west) and ends on the continental east coast near St John's Newfoundland, longitude 53 degrees west. The most northerly radar system near 57 degrees north latitude complements the most southerly near 43 degrees north latitude. Operating temperature extremes experienced to date are +45C to -60C.

The organization's satisfaction with the modulators has allowed consideration towards expanding, within the next 2 years, the Doppler radar network northwards to cover all of the continental boreal forest to beyond the Arctic circle.

The 35 modulator sets (systems + spares) provide the desired RF pulse Characteristics with minimal leading edge and top end ringing. The modulator's stable operation is one of many factors allowing our coherent-on-receive magnetron transmitter/digital receiver system to repeatably provide 0.3 degree phase figures on real targets near the system's maximum Doppler processing range.

Thank you for providing a big step forward in magnetron/modulator control and operation.

Martin

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Laptop: Martin Stanley-Jones, P.Eng.
> Chief Engineer - National Radar Project;
> System Design, Assembly, Integration, & Installation
> Environment Canada
> Mail addressing: 4999 - 98 Avenue
> Edmonton, Alberta, Canada, T6B 2X3
> Shipping address: 9345 - 49 Street
> Edmonton, Alberta, Canada, T6B 2L8
> NRP Systems assembly building: 9455 - 47 Street, Edmonton
>
> Tel: 780+495-2333 Fax:780+495-5431