TEST of GORMAN-REDLICH Mfg. Co.
Universal Intermediate Device Model CAP-DEC 1
In High RF Field

FEBRUARY 17,2012

MidAmerica Electronics Service, Inc.
New Albany, IN

February 17, 2012

Test of Gorman-Redlich Mfg. Co. Universal Intermediate Device
CAP-DEC 1 SN552

Operation in a high radio frequency field

Federal Communications Commission Regulations Part 11:32(d) and11:33(c) requires tests to prove satisfactory operation of EAS encoder and decoder equipment in a severe RF environment.

To satisfy this requirement, we set up the CAP-DEC 1 SN552 unit at a commercial broadcast transmitter site located in Louisville, KY. This is a common AM and FM site containing a 5KW transmitter with RF directional phasor cabinets. Also at this site are two 50KW FM stations with associated transmitters and dummy loads.

For the AM requirement, the CAP-DEC 1 was set up near the open rear door of the RF cabinet. The AM field was measured using a Potomac Instruments FIM-41 SN472 Field Intensity Meter belonging to this firm. The field was measured to exceed 1 OVolts per meter on 790Khz.

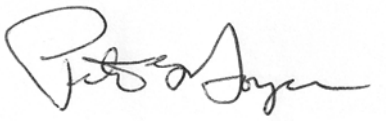
Photograph is attached to this report showing the meter at full scale on the 10 Volt scale along with the test CAP-DEC 1 unit.

For the FM requirement, the CAP-DEC 1 unit was set up on top of an air-cooled FM dummy load in order to gain access to the required 0.5volt RF field.
The field was measured using a Potomac Instruments FIM-71 SN260 with calibrated Potomac Instruments antenna SN260, also belonging to this firm.
The FM RF field was measured to be 0.75 volts at 98.9 Mhz.

In each of these severe RF environments the CAP-DEC 1 universal intermediate device was operated with a simulated emergency message provided by a laptop computer fed thru a standard Linksys router. The CAP-DEC 1 was feeding the Gorman-Redlich EAS-1 Encoder-decoder.

Photographs are attached showing the AM and FM test setups.

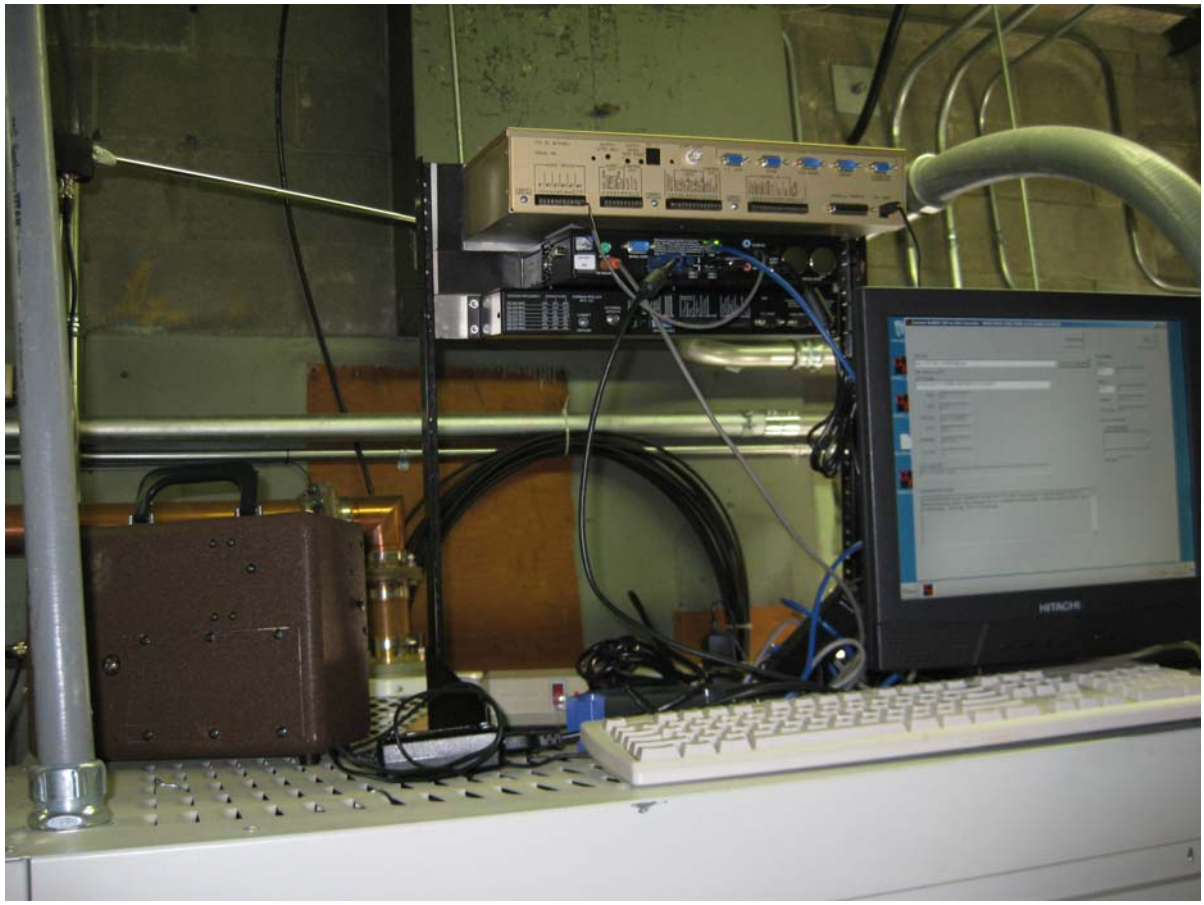
I certify that the CAP-DEC 1 universal intermediate device operated correctly in the high RF fields and provided correct information from the simulated alert.



Peter C. L. Boyce, President
MidAmerica Electronics Service, Inc.

Test conducted February 17, 2012

Outside view – AM & FM Transmitter site



FM Test – RF Field Meter on Left (Rear View)

FM Test – FM Field Meter on Left (Rear View)

FM Test – FM Field excess of 0.5 V/m

AM Test – AM Field Meter on Right (showing excess of 10 V/m)

AM Test – AM RF Field Meter on Left (Rear View)

AM Test – RF Field excess of 10 V/m

MIDAMERICA

ELECTRONICS SERVICE, INC.

Peter C. L. Boyce, President

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QUALIFICATIONS OF ENGINEER

Peter C. L. Boyce states that he is President of MidAmerica Electronics Service, Inc., located in New Albany, Indiana.

He further states that he is a graduate of Louisville Radio School, Division of Electronics Laboratories, Inc. and that he is holder of FCC Lifetime Radiotelephone License No. PG-18-11969 and that the attached engineering information was prepared by him or under his direction. That he believes it to be true and correct, That he has been associated with the technical phases of broadcasting for more than thirty consecutive years and that his engineering work has been accepted by the Federal Communications Commission.

3/26/2012

Date

City of New Albany

State of Indiana

Peter C. L. Boyce

President

Midamerica Electronics Service, Inc.