

## ENVIRONMENTAL QUALIFICATION FORM

NOMENCLATURE: NAVIGATION ANTENNA  
 TYPE/MODEL/PART NO.: AV-12 TSO NO.: C40c  
 MANUFACTURER'S SPECIFICATION AND/OR OTHER APPLICABLE SPECIFICATION: AV-12  
PRODUCT DRAWING PACKAGE AND ELECTRICAL TEST SPECIFICATION 34-162  
 MANUFACTURER: R.A. MILLER INDUSTRIES, INC.  
 ADDRESS: 14500 168TH AVENUE GRAND HAVEN, MI 49417

CONDITIONS	SECTION	DESCRIPTION OF CONDUCTED TESTS
TEMPERATURE AND ALTITUDE  LOW TEMPERATURE HIGH TEMPERATURE IN-FLIGHT LOSS OF COOLING  ALTITUDE DECOMPRESSION OVERPRESSURE	4.0 REV. 1  4.5.1 4.5.2 & 4.5.3 4.5.4  4.6.1 4.6.2 4.6.3	EQUIPMENT TESTED TO CATEGORY D2       (IN-FLIGHT LOSS OF COOLING TEST IS NOT APPLICABLE)
TEMPERATURE VARIATION	5.0	EQUIPMENT TESTED TO CATEGORY A
HUMIDITY	6.0	EQUIPMENT TESTED TO CATEGORY C
SHOCK  OPERATIONAL CRASH SAFETY	7.0  7.2 7.3	EQUIPMENT TESTED TO OPERATIONAL TEST ONLY
VIBRATION	8.0	EQUIPMENT TESTED TO CATEGORY S
EXPLOSION	9.0	EQUIPMENT IDENTIFIED AS CATEGORY X - NO TEST REQUIRED
WATERPROOFNESS	10.0	EQUIPMENT TESTED TO CATEGORY S
FLUIDS SUSCEPTIBILITY	11.0	EQUIPMENT IDENTIFIED AS CATEGORY X - NO TEST REQUIRED
SAND AND DUST	12.0	EQUIPMENT TESTED TO CATEGORY D
FUNGUS	13.0	EQUIPMENT IDENTIFIED AS CATEGORY F - NO TEST REQUIRED
SALT SPRAY	14.0	EQUIPMENT TESTED TO CATEGORY S

ENVIRONMENTAL QUALIFICATION FORM – CONTINUED

MAGNETIC EFFECT	15.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
POWER INPUT	16.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
VOLTAGE SPIKE	17.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
AUDIO FREQUENCY SUSCEPTIBILITY	18.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
INDUCED SIGNAL SUSCEPTIBILITY	19.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
RADIO FREQUENCY SUSCEPTIBILITY	20.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
RADIO FREQUENCY EMISSION	21.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
LIGHTNING INDUCED TRANSIENT SUSCEPTIBILITY	22.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
LIGHTNING DIRECT EFFECTS TEST	23.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
ICING	24.0	EQUIPMENT IDENTIFIED AS CATEGORY X – NO TEST REQUIRED
OTHER TEST		