

09/29/2016

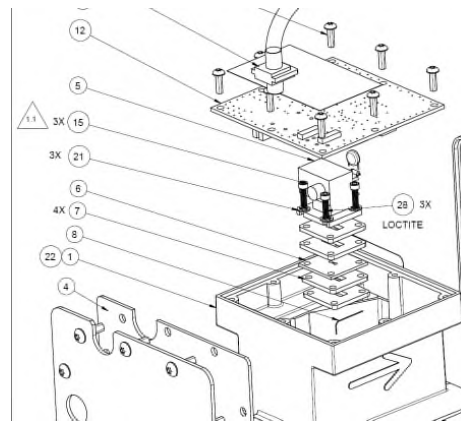
TUV SUD BABT
Octagon House, Concorde Way
Segensworth Rd N, Fareham
PO15 5RL

Attention: Director of Certification

FCC ID: B7JDJCRVSIII
IC: 5682A-DJCRVSIII
Model: 46783

We are requesting a Class II Permissive change for our DICKEY-john RVS III ground speed radar (K-band microwave 24.125GHz), see below description of the change:

The originally tested design includes a harmonic filter plate (part 6) between the transceiver and the antenna waveguide. What we have found is that we get better signal to noise at our mixing diode if we extend the waveguide slightly. We accomplish this by adding four spacer plates (part 7) between the transceiver and antenna waveguide, keeping the harmonic filter.



Increasing the waveguide length doesn't impact our power output or antenna characteristics, it only repositions the peaks of the standing wave in the waveguide so that a peak occurs at our mixing diode. This improves our sensitivity to the returned signal. As an additional verification we have performed Harmonic testing with TUV SUD America (project #: SD72120079-0916 Dickey-John) and results are within specification.

Yours sincerely,

A handwritten signature in cursive script that reads "Barry C. Mears".

Dr Barry C Mears
Senior Staff Engineer
(217) 438-2253
bmears@dickey-john.com