Electromagnetic Emission Test

E U T	**Manufacturer:** Tactical Tech **Model#** J2E FCC ID# IP975XVI **Serial #** 13000 **Mode:** TRANSMITTER ON	**Date:** 9/1/05 **Test Instruments:** RSI #32.1,33.1,75, 80, 91,391, 501, 502, 503, 708 **Frequency Range:** 170.25MHz-1.7025MHz.	Test Code **RE** Technician Engineer

Temperature:80° F **Humidity:37%**	**Additional Info:**	**Test Spec:** FCC Part 15 Sub.C
Radiated Distance: 3 meter Antenna: Bicon / Log.P./Horn	[X] HORIZ. [ ] BB [X] NB [X] VERT. [ ] H [X] E	**Conducted** Line: Function: [ ] BB [ ] NB

FREQ.	IND. Level		ANT.	Cable loss	Generator		ERP @3 M		Remarks
MHz	**dBµV**		**dBi**	**dB**	**dBm**	**dBd**	**mW**		
170.25	97.5		-2.6	3.2	+26	**-4.74**	63.97		Vertical
340.5	38.2		+2.8	4.3	-39	**.66**	.000045		
510.75	12.3		+5.9	5.1	-67	**+3.76**	.00014uW		
170.95	79.4								Horizontal
340.5	16.8								
510.75	0.6								

The only harmonics that were detected @ 3 meters was the second and third harmonic of the Fundamental frequency 170.250 Mhz. The substitution method was done on all three frequencies in the vertical plane. The IND. Level was the measured power @ 3 meters with the EUT transmitting into its antenna. The EUT was then replaced with the a substitution antenna driven by a RF signal generator to obtain the same IND. Level from the transmitter. The formula for the ERP (dBm) = Signal generator – cable loss + dbd antenna.