

## **Form 442 Question 6: Description of Research Project**

Datron World Communications, Inc. (“Datron”) previously held the experimental license call sign WA2XOK which we now seek to update. Datron, along with a number of other manufacturers of tactical, professional and public safety radio equipment, has been actively engaged in an ongoing program to develop and enhance both traditional and software defined radios which span the HF, VHF and UHF frequency ranges. Apart from the now standard simulation and laboratory tests, it is important for us to be able to perform live field tests in order to validate the designs. This in turn will permit us to offer reliable and proven radio-based solutions. As Datron’s radio designs span the HF, VHF and UHF frequency ranges, we are requesting access to a broader range of frequencies as noted in Exhibit A. The coverage area remains the same as it permits reliable testing of our all of our products. More specifically, it will support both ground wave and ionospheric path (NVIS) tests for our HF product lines. Amongst Datron’s customers are the FBI, the National Guard, the U.S. Army and many other federal and local agencies.

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Requested frequencies & other data:  
(Note: Frequencies are in MHz)

<b>Frequency</b>	<b>Modes</b>
2.1116	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
4.8516	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
5.1276	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
6.9916	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
7.8786	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
10.3976	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
11.0776	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
12.9506	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
14.5266	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
16.4036	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
18.6036	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
20.9716	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
26.2926	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
27.3776	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D
27.4036	2K80J3E, 2K80J2A, 2K80H3E, 6K00B7D

Note: Other experimental modes will be used. However, they shall remain within the bandwidth limitations.

Requested Power Levels for the above: 4000W ERP (max)

<b>Frequency</b>	<b>Modes</b>
30.17	16K0F3E
39.15	16K0F3E
43.55	16K0F3E
47.525	16K0F3E
72.55	16K0F3E
75.975	16K0F3E

Requested Power Levels for the above: 100W ERP (max)

<b>Frequency</b>	<b>Modes</b>
136.000000	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 5K76G1E, 5K76G1D
140.750000	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 5K76G1E, 5K76G1D
145.500000	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 5K76G1E, 5K76G1D
150.250000	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 5K76G1E, 5K76G1D
155.000000	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 5K76G1E, 5K76G1D
159.750000	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 5K76G1E, 5K76G1D
164.500000	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 5K76G1E, 5K76G1D
169.250000	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 5K76G1E, 5K76G1D
174.000000	16K0F3E, 11K0F3E, 8K10F1E, 8K10F1D, 5K76G1E, 5K76G1D

Requested Power Levels for the above: 440W ERP (max)