

Supplemental Information Relevant to Frequency Requests

As explained at Exhibit 1, the nature of the AJCN program requires that BAE SYSTEMS demonstrate substantial operational and technical flexibility by receiving communications on a variety of frequencies in a variety of frequency bands, and then relaying the same communications on a variety of different frequencies in different frequency bands. In light of these requirements, the following is noted:

A. Antenna 1

Antenna 1 is a transmit and receive antenna, and will be capable of receiving and transmitting on each of the frequencies assigned to Antennas 3-10. Accordingly, all of the frequencies that are approved for Antennas 3-10 should also be approved for use under Antenna 1.

B. Antenna 2

Antenna 2 is a transmit and receive antenna, and will be capable of receiving and transmitting on each of the frequencies assigned to Antennas 11-12. Accordingly, all of the frequencies that are approved for Antennas 11-12 should also be approved for use under Antenna 2. In addition, BAE SYSTEMS is requesting grant of 6 additional frequencies (138.150 MHz, 144.000 MHz, 232.000 MHz, 352.000 MHz) (“Additional Antenna 2 Frequencies”) for Antenna 2 for transmit purposes in connection with the AJCN program. It is noted that BAE SYSTEMS can accept grant of the Additional Antenna 2 Frequencies within ± 1 MHz of the frequencies specified on the instant STA Request.

C. Antennas 3-8, 10-11

AJCN requirements make it necessary for BAE SYSTEMS to obtain grant of two frequencies for each of the Antennas 3-8, 10-11, and BAE SYSTEMS intends to use – at most – two frequencies for each of such antennas under the requested experimental license. Although more than two frequencies are included in the STA Request for a majority of these antennas, the following are BAE SYSTEMS’ bottom-line requirements for these antennas:

- i. Antenna 3 – Both specified frequencies are required.
- ii. Antenna 4 – Only 2 of the 3 listed frequencies are required.
- iii. Antenna 5 - Only 2 of the 3 listed frequencies are required.
- iv. Antenna 6 - Only 2 of the 4 listed frequencies are required, but one granted frequency must be from the 450 MHz band, and one granted frequency must be from the 460 MHz band.

v. Antenna 7 - Only 2 of the 4 listed frequencies are required, but (a) one of the granted frequencies must be either 808.5125 MHz or 817.6375 MHz; and (b) one of the granted frequencies must be either 853.5125 MHz or 862.6375 MHz

vi. Antenna 8 - Only 2 of the 4 listed frequencies are required, but (a) one of the granted frequencies must be from the 140 MHz band; and (b) one of the granted frequencies must be from the 440 MHz band.

vii. Antenna 10 – Two amateur frequencies will be required for Antenna 10. Currently, one 6 meter amateur band frequency is specified on Antenna 10 (i.e., 51.0125 MHz). BAE SYSTEMS is currently working on identifying two substitute amateur band frequencies that are not primary for amateur operations, and BAE SYSTEMS intends to insert those frequencies into the registration for Antenna 10 (and delete the existing frequency 51.0125 MHz) once the new non-primary amateur frequencies are identified.

viii. Antenna 11 - Both specified frequencies are required.

D. Antenna 9

AJCN requirements make it necessary for BAE SYSTEMS to obtain grant for four frequencies for Antenna 9. It is noted that, with respect to the frequency 51.0125 MHz, BAE SYSTEMS is currently working on identifying a substitute amateur band frequency that is not primary for amateur operations, and BAE SYSTEMS intends to insert such frequency into the registration for Antenna 9 (and delete the existing frequency 51.0125 MHz) once the new non-primary amateur frequency is identified.

E. Antenna 12

Both of the frequencies 43.150 MHz and 50.175 MHz are required. As to the additional frequencies listed under Antenna 12 (37.080 MHz, 37.280 MHz, 37.470 MHz, 37.670 MHz, 37.870 MHz, 38.170 MHz, 38.370 MHz, 38.570 MHz, 38.770 MHz and 38.970 MHz), BAE SYSTEMS notes that the AJCN system requires that BAE SYSTEMS demonstrate interoperability with a frequency hopping military radio utilizing a ten (10) frequency hop set, with 200 kHz spacing. Accordingly, BAE SYSTEMS has inserted this ten frequency hop set as part of its application, but the company could be agreeable to an alternative suggested set as long as such alternative is not inconsistent with AJCN program requirements.