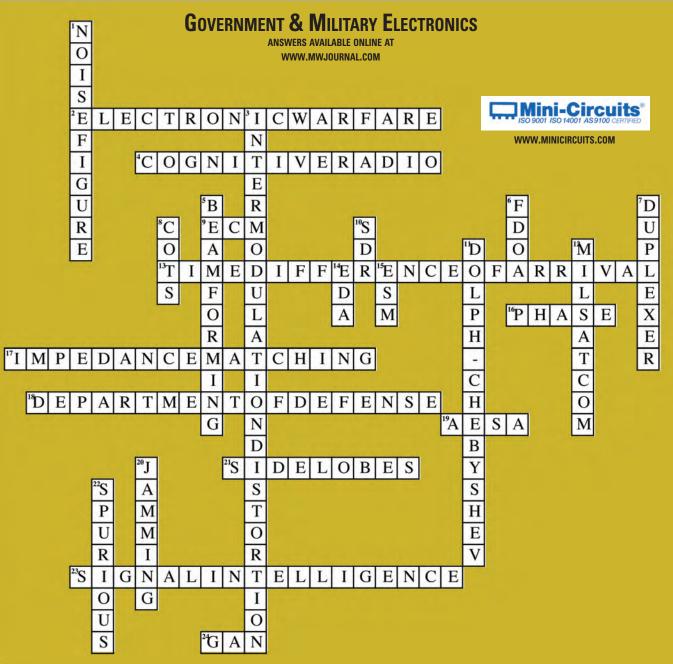


MWJ Puzzler



Across

2 EW (2 words)

4 A wireless communication system that changes its transmission or reception parameters to communicate efficiently avoiding interference with other channels being used (2 words)

9 Electronic Counter Measures

13 Technique for estimating the location of a radio emitter based on signal observations from other points based on timing (4 words)

 ${\bf 16}$ The fraction of a complete wave cycle corresponding to an offset in the displacement from a specified reference point at time = 0

17 Designing the input impedance of an electrical load or the output impedance of its corresponding signal source in order to maximize the power transfer and minimize reflections (2 words)

18 DoD (3 words)

19 Active Electronically Scanned Array

21 Beams of the far field radiation pattern that are not the

- main beam (2 words)
- 23 SIGINT (2 words)

24 Wide band gap material gaining use for very high power, broadband amplifiers

Down

1 10 log(SNR_{in}/SNR_{out}) (2 words)

3 IMD (2 words)

5 A signal processing technique used in sensor arrays for directional signal transmission or reception (2 words)

6 Short for Frequency Difference Of Arrival

7 A device that allows bi-directional communication over a single channel

8 Commercial off-the-shelf components

10 Short for software-defined radio

11 Optimization method that allows minimization of mainlobe width for a specific sidelobe level in beam forming (hyphenated)

12 Short for Military Satellite Communications

14 Short for European Defense Agency

15 Electronic Support Measures

20 The transmission of radio signals that disrupt communications by decreasing the signal to noise ratio

22 Any signal present in the output spectrum that is not present at the input