

protected as military-unique satellites.”⁸⁰ Furthermore to make matters worse GPS jammers are commercially available⁸¹. There are two ways to interfere with GPS signals. The first and the simplest method is that of using a continuous wave jammer. A filter can easily protect a GPS receiver against such an apparatus. The second, and this is the most dangerous method, is the use of a broadband jammer. A broadband jammer alternates in a highly unpredictably manner around various frequencies⁸². The unpredictable operation of such a system makes it a very effective weapon and difficult to defend against⁸³. The range of effect of these jammers can be considerable, reaching easily over 20 kilometres⁸⁴.

⁸⁰ www.nationaldefensemagazine.org/article.cfm?id=5 at p. 3.

⁸¹ “During an air show in Russia in 1997, for example a \$4,000.00 jamming transmitter was on display and its manufacturers claimed the device foils the ability of GPS receivers to provide correct geographic coordinates” IBID.

⁸² IBID at 3.

⁸³ From a technical perspective “it is difficult to find a mathematical algorithm that allows you to anticipate what the jammer is going to do. IBID at 3.

⁸⁴ “Tests show that a one watt jammer can drive a commercial GPS receiver haywire at a distance of twenty-two kilometers and a large number of small jammers can be hard to find and destroy. Even a 1,000 watt jammer can be miniature enough to be man-portable. See Peter Grier *Journal of the Air Force Association April 1996, Vol. 79, No.4* www.afa.org/magazine/April1996/0496gpsin_print.html at p. 4.