

**1064.3. con't.**

1. Air Traffic Control “software” application “programmes” hosted on general purpose computers located at Air Traffic Control centres and capable of any of the following:
  - a. Processing and displaying more than 150 simultaneous “system tracks”; **or**
  - b. Accepting radar target data from more than four primary radars;
2. “Software” for the design or “production” of radomes which:
  - a. Are specially designed to protect the “electronically steerable phased array antennae” controlled by 1061.8.e.; **and**
  - b. Result in an antenna pattern having an average side lobe level more than 40 dB below the peak of the main beam level.

**Technical Note:**

*‘Average side lobe level’ in 1064.3.h.2.b. is measured over the entire array excluding the angular extent of the main beam and the first two side lobes on either side of the main beam.*

**1065. Technology**

1. “Technology” according to the General Technology Note for the “development” of equipment, materials or “software” controlled by 1061., 1062., 1063. or 1064.
2. “Technology” according to the General Technology Note for the “production” of equipment or materials controlled by 1061., 1062. or 1063.
3. Other “technology”, as follows:
  - a. Acoustics - None;
  - b. Optical Sensors - None;
  - c. Cameras - None;
  - d. Optics  
 “Technology”, as follows:
    1. Optical surface coating and treatment “technology” “required” to achieve uniformity of 99.5% or better for optical coatings 500 mm or more in diameter or major axis length and with a total loss (absorption and scatter) of less than  $5 \times 10^{-3}$ ;  
**N.B.:**  
 See also 1025.3.f.
    2. Optical fabrication “technology” using single point diamond turning techniques to produce surface finish accuracies of better than 10 nm rms on non-planar surfaces exceeding 0.5 m<sup>2</sup>;
  - e. Lasers  
 “Technology” “required” for the “development”, “production” or “use” of specially designed diagnostic instruments or targets in test facilities for “SHPL” testing or testing or evaluation of materials irradiated by “SHPL” beams;
  - f. Magnetometers  
 “Technology” “required” for the “development” or “production” of fluxgate “magnetometers” or fluxgate “magnetometer” systems, having any of the following:
    1. A “noise level” of less than 0.05 nT rms per square root Hz at frequencies of less than 1 Hz; **or**

2. A “noise level” of less than  $1 \times 10^{-3}$  nT rms per square root Hz at frequencies of 1 Hz or more;
- g. Gravimeters - None;
- h. Radar - None.

**Category 1070: Navigation and Avionics**

**1071. Systems, Equipment and Components**

**N.B.1:**

*For automatic pilots for underwater vehicles, see Category 1080.; For radar, see Category 1060.*

**N.B.2:**

*For inertial navigation equipment for ships or submersibles, see Item 2009.e. on the Munitions List.*

1. Linear accelerometers designed for use in inertial navigation or guidance systems and having any of the following characteristics, and specially designed components therefore:
  - a. A “bias” “stability” of less (better) than 130 micro g with respect to a fixed calibration value over a period of one year;
  - b. A “scale factor” “stability” of less (better) than 130 ppm with respect to a fixed calibration value over a period of one year; **or**
  - c. Specified to function at linear acceleration levels exceeding 100 g.  
**N.B.** For angular or rotational accelerometers, see 1071.2.
2. Gyros, and angular or rotational accelerometers having any of the following characteristics, and specially designed components therefore:
  - a. A “drift rate” “stability”, when measured in a 1 g environment over a period of three months and with respect to a fixed calibration value, of:
    1. Less (better) than 0.1° per hour when specified to function at linear acceleration levels below 10 g, **or**
    2. Less (better) than 0.5° per hour when specified to function at linear acceleration levels from 10 g to 100 g inclusive; **or**
  - b. Specified to function at linear acceleration levels exceeding 100 g.
3. Inertial Navigation Systems (INS) and specially designed components, as follows:
  - a. Inertial navigation systems (gimballed and strapdown) and inertial equipment designed for “aircraft”, land vehicle or “spacecraft” for attitude, guidance or control having any of the following characteristics, and specially designed components therefore:
    1. Navigation error (free inertial) subsequent to normal alignment of 0.8 nautical mile per hour (nm/hr) (Circular Error Probable (CEP)) or less (better); **or**
    2. Specified to function at linear acceleration levels exceeding 10 g.
  - b. Hybrid Inertial Navigation Systems embedded with Global Navigation Satellite System(s) (GNSS) or “Data-Based Referenced Navigation” (“DBRN”) System(s) for attitude, guidance or control, subsequent to normal alignment, having an INS navigation position accuracy, after loss of GNSS or “DBRN” for a period of up to 4 minutes, of less (better) than 10 meters CEP.