

1061. 8. 1. 4. Superposition and correlation, or fusion, of target data from two or more "geographically dispersed" and "interconnected radar sensors" to enhance and discriminate targets;  
NOTE:  
1061.8.1.4. does not embargo systems, equipment and assemblies used for marine traffic control.

## 1062. Test, Inspection and Production Equipment

1062. 1. *Acoustics* None.  
2. *Optical Sensors* None.  
3. *Cameras* None.  
4. *Optics*  
Equipment for measuring absolute reflectance to an accuracy of  $\pm 0.1\%$  of the reflectance value;  
5. *Lasers*  
Specially designed or modified equipment, including tools, dies, fixtures or gauges, as follows, and other specially designed components and accessories therefor:  
a. For the manufacture or inspection of:  
1. Free electron "laser" magnet wigglers;  
2. Free electron "laser" photo injectors;  
b. For the adjustment, to required tolerances, of the longitudinal magnetic field of free electron "lasers";  
6. *Magnetometers* None.  
7. *Gravimeters*  
Equipment to produce, align and calibrate land-based gravity meters with a static accuracy of better than 0.1 milligal;  
8. *Radar*  
Pulse radar cross-section measurement systems having transmit pulse widths of 100 ns or less and specially designed components therefor.

## 1063. Materials

1063. 1. *Acoustics* None.  
2. *Optical Sensors*  
a. Elemental tellurium (Te) of purity levels equal to or more than 99.9995%;  
b. Single crystals of cadmium telluride (CdTe) or mercury cadmium telluride (CdHgTe) of any purity level, including epitaxial wafers thereof;  
Technical Note:  
Purity verified in accordance with ASTM F574-83 standard or equivalents.  
c. "Optical fibre preforms" specially designed for the manufacture of high birefringence fibres embargoed by 1061.2.d.3.;  
3. *Cameras* None.  
4. *Optics*  
a. Zinc selenide (ZnSe) and zinc sulphide (ZnS) "substrate blanks" produced by the chemical vapour deposition process:  
1. Larger than  $100 \text{ cm}^3$  in volume; or  
2. Larger than 80 mm in diameter with a thickness equal to or more than 20 mm;  
b. Boules of the following electro-optic materials:  
1. Potassium titanyl arsenate (KTA);  
2. Silver gallium selenide (AgGaSe<sub>2</sub>);  
3. Thallium arsenic selenide (Tl<sub>3</sub>AsSe<sub>3</sub>, also known as TAS);  
c. Non-linear optical materials having:  
1. Third order susceptibility ( $\chi_3$ ) equal to or less than  $1 \text{ W/m}^2$ ; and  
2. A response time of less than 1 ms;  
d. "Substrate blanks" of silicon carbide or beryllium beryllium (Be/Be) deposited materials exceeding 300 mm in diameter or major axis length;  
e. Low optical absorption materials, as follows:  
1. Bulk fluoride compounds containing ingredients with a purity of 99.999% or better;  
NOTE:  
1063.4.e.1. embargoes fluorides of zirconium or aluminium and variants.  
2. Bulk fluoride glass made from compounds embargoed by 1063.4.e.1.;  
f. Glass, including fused silica, phosphate glass, fluorophosphate glass, zirconium fluoride (ZrF<sub>4</sub>) and hafnium fluoride (HfF<sub>4</sub>) with:

1. A hydroxyl ion (OH<sup>-</sup>) concentration of less than 5 ppm;  
2. Integrated metallic purity levels of less than 1 ppm; and  
3. High homogeneity (index of refraction variance) less than  $5 \times 10^{-6}$ ;  
g. Synthetically produced diamond material with an absorption of less than  $10^{-5} \text{ cm}^{-1}$  for wavelengths exceeding 200 nm but not exceeding 14,000 nm;  
h. "Optical fibre preforms" made from bulk fluoride compounds containing ingredients with a purity of 99.999% or better, specially designed for the manufacture of "fluoride fibres" embargoed by 1061.4.f.;

1063. 5. *Lasers*  
Crystalline "laser" host material in unfinished form, as follows:  
a. Titanium doped sapphire;  
b. Alexandrite;  
6. *Magnetometers* None.  
7. *Gravimeters* None.  
8. *Radar* None.

## 1064. Software

1064. 1. "Software" specially designed for the "development" or "production" of equipment embargoed by 1061.4., 1061.5., 1061.8. or 1062.8.;  
2. "Software" specially designed for the "use" of equipment embargoed by 1061.2.b., 1061.8. or 1062.8.;  
3. Other "software", as follows:  
a. *Acoustics*  
1. "Software" specially designed for acoustic beam forming for the "real time processing" of acoustic data for passive reception using towed hydrophone arrays;  
2. "Source code" for the "real time processing" of acoustic data for passive reception using towed hydrophone arrays;  
b. *Optical Sensors* None.  
c. *Cameras* None.  
d. *Optics* None.  
e. *Lasers* None.  
f. *Magnetometers*  
1. "Software" specially designed for magnetic compensation systems for magnetic sensors designed to operate on mobile platforms;  
2. "Software" specially designed for magnetic anomaly detection on mobile platforms;  
g. *Gravimeters*  
"Software" specially designed to correct motional influences of gravity meters or gravity gradiometers;  
h. *Radar*  
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";  
b. Accepting radar target data from more than four primary radars; or  
c. Automatically handing over primary radar target data (if not correlated with secondary surveillance radar (SSR) data) from the host ATC centre to another ATC centre;  
2. "Software" for the design or "production" of radomes which:  
a. Are specially designed to protect the "electronically steerable phased array antennae" embargoed by 1061.8.e.; and  
b. Limit the average side-lobe level increase by less than 13 dB for frequencies equal to or higher than 2 GHz;

## 1065. Technology

1065. 1. Technology according to the General Technology Note for the "development" of equipment, materials or "software" embargoed by 1061., 1062., 1063. or 1064.;  
2. Technology according to the General Technology Note for the "production" of equipment or materials embargoed by 1061., 1062. or 1063.;