

- a. For serially producing optical components at a rate exceeding 10 m² of surface area per year on any single spindle and with:
 - 1. An area exceeding 1 m²; and
 - 2. A surface figure exceeding lambda/10 rms at the designed wavelength;
 - b. Single point diamond turning techniques producing surface finish accuracies of better than 10 nm rms on non-planar surfaces exceeding 0.5 m²;
- (See also 1025.3.d.)

e. LASERS

- 1. Technology for optical filters with a bandwidth equal to or less than 10 nm, a field of view (FOV) exceeding 40° and a resolution exceeding 0.75 line pairs per mm;
- 2. "Technology" "required" for the "development", "production" or "use" of specially designed diagnostic instruments or targets in test facilities for "Super High Power Lasers" (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 a noise level:
- 1. Less than 0.05 nT rms per square root Hz at frequencies of less than 1 Hz; or
 - 2. 1×10^{-3} nT rms per square root Hz at frequencies of 1 Hz or more.

g. GRAVIMETERS None

h. RADAR None

NOTES:

ACOUSTICS

- 1. Governments may permit, as administrative exceptions, the shipment to the Czech Republic, Poland, and Slovak Republic of equipment:
 - a. Embargoed by 1061.1.b. or 1061.1.c., and "software" specially designed and technology "required" therefor embargoed by 1064. or 1065.;
 - b. Eligible for Administrative Exception treatment under Note 2 below.
- 2. Governments may permit, as administrative exceptions, the shipment to the People's Republic of China of acoustic systems or equipment for determining the position of surface vessels or underwater vehicles, provided:
 - a. They are not capable of processing responses from more than 8 beacons in the calculation of a point;
 - b. They do not have devices for correcting automatically speed-of-sound propagation errors for calculation of a point;
 - c. They do not use coherent "signal processing" between two or more beacons and the hydrophone unit carried by the surface vessel or underwater vehicle; and
 - d. Transducers, acoustic modules, beacons or hydrophones therefor are not designed to withstand pressures at depths exceeding 1,000 m.
- 3. Governments may permit, as administrative exceptions, the shipment of equipment embargoed by 1061.1.a.1.b.4. for use in civil research or civil exploration work.

OPTICAL SENSORS

- 4. Governments may permit, as administrative exceptions, the shipment in reasonable quantities to the Czech Republic, Poland, and Slovak Republic of non-ruggedised equipment operating in the visible spectrum, embargoed by 1061.2.c., and containing image intensifier tubes embargoed by 1061.2.a.2.a.3.a., provided they are to be used for civil certified end-uses by civil end-users.
- 5. Governments may permit, as administrative exceptions, the shipment to the People's Republic of China of image intensifier tubes incorporating microchannel-plates, not specially designed for cameras embargoed by 1061.3.;

N.B.:

Note 5 does not apply to tubes incorporating a gallium arsenide (or similar semiconductor) photocathode.

- 6. Governments may permit, as administrative exceptions, the shipment of "multispectral imaging sensors" embargoed by 1061.2.b.2.a. and 1061.2.b.2.b.2. provided the Instantaneous-Field-Of-View (IFOV) of the "multispectral imaging sensor" is equal to or more than 2.5 milliradians.

- 7. Governments may permit, as administrative exceptions, the shipment of reasonable quantities of non ruggedised image intensifier tubes embargoed by 1061.2.a.2.a.3.a. for bona fide medical use.
- 8. The Committee will favourably consider the export to the Czech Republic, Poland, and Slovak Republic, of everything embargoed by 1061.2., and "software" specially designed and technology "required" therefor embargoed by 1064. or 1065. The Committee will approve exception requests tabled under the provisions of this Note if no member country has filed an objection within four weeks of the receipt of complete information on the case.
- 9. The Committee will favourably consider the export of reasonable quantities of image intensifier tubes embargoed by 1061.2.a.2.a.3.a. which are non-ruggedised and intended for equipment listed in the Note to 1061.2.c. The Committee will approve the export of equipment described in this Note if no member country has raised an objection within four weeks of the receipt of complete information on the case.

CAMERAS

- 10. Governments may permit, as administrative exceptions, the shipment to the Czech Republic, Poland, and Slovak Republic, cameras embargoed by 1061.3.a.1 or 1061.3.a.5, and "software" specially designed and technology "required" therefor embargoed by 1064. or 1065.
- 11. Governments may permit, as administrative exceptions, the shipment to the People's Republic of China of mechanical framing cameras embargoed by 1061.3.a.2. designed for civil purposes (i.e., non-nuclear use) with a framing speed of not more than 2 million frames per second.

OPTICS

- 12. Governments may permit, as administrative exceptions, the shipment of the following for installation and use at ground-based bona fide academic or civilian astronomical research sites or in international air- or space-based bona fide academic or civilian astronomical research projects:

For the stated end-use, a limit of:

 - a. One optical mirror embargoed by 1061.4.a.1.;
 - b. Three optical mirrors embargoed by 1061.4.a.2.;
 - c. Three optical mirrors embargoed by 1061.4.a.4.;
 - d. Three optical components embargoed by 1061.4.b.;
 - e. Ten optical filters embargoed by 1061.4.d.1.a.;
 - f. One piece of optical control equipment embargoed by 1061.4.e.2. for each operational mirror;
 - g. Four pieces of optical control equipment embargoed by 1061.4.e.4.;
 - h. Three "substrate blanks" embargoed by 1063.4.a.;
 - i. A reasonable quantity of the bulk fluoride glass embargoed by 1063.4.e.2.
 - j. A reasonable quantity of the materials embargoed by 1063.4.f.

N.B.:

The above limitations refer to specific projects.

- 13. The Committee will favourably consider the export to the Czech Republic, Poland, and Slovak Republic, of everything embargoed by 1061.4., and "software" specially designed and technology "required" therefor embargoed by 1064. or 1065. The Committee will approve exception requests tabled under the provisions of this Note if no member country has filed an objection within four weeks of the receipt of complete information on the case.

LASERS

- 14. Governments may permit, as administrative exceptions, the shipment to the Czech Republic, Poland, and Slovak Republic of:
 - a. "Tunable" pulsed flowing-dye "lasers" having all of the following, and specially designed components therefor:
 - 1. An output wavelength less than 800 nm;
 - 2. A "pulse duration" not exceeding 100 ns; and
 - 3. A peak output power not exceeding 15 MW;
 - b. CO₂ or CO/CO₂ "lasers" having an output wavelength in the range from 9,000 to 11,000 nm and having either:
 - 1. A pulsed output not exceeding 2 J per pulse and a maximum rated average single or multimode output power not exceeding 5 kW; or
 - 2. A CW maximum rated single or multimode output power not exceeding 10 kW;
 - c. CO "lasers" having a CW maximum rated single or multimode output power not exceeding 10 kW.