1061.2.a.2.a. con't.

a. S-20, S-25 or multialkali photocathodes with a luminous sensitivity exceeding 240 µA/lm;
b. GaAs or GaInAs photocathodes;
c. Other III-V compound semiconductor photocathodes;

Note:
1061.2.a.2.a.3.c. does not control compound semiconductor photocathodes with a maximum radiant sensitivity of 10 mA/W or less.

b. Specially designed components, as follows:
1. Microchannel plates having a hole pitch (centre-to-centre spacing) of 15 µm or less;
2. GaAs or GaInAs photocathodes;
3. Other III-V compound semiconductor photocathodes;

Note:
1061.2.a.2.b.3. does not control compound semiconductor photocathodes with a maximum radiant sensitivity of 10 mA/W or less.

2. a. 3. Non-"space-qualified" "focal plane arrays", as follows:

Technical Note:
Linear or two-dimensional multi-element detector arrays are referred to as "focal plane arrays".

Notes:
1. *1061.2.a.3. includes photoconductive arrays and photovoltaic arrays.*
2. *1061.2.a.3. does not control:*
   a. *Silicon "focal plane arrays";*
   b. *Multi-element (not to exceed 16 elements) encapsulated photo-conductive cells using either lead sulphide or lead selenide;*
   c. *Pyroleictric detectors using anyof the following:*
      1. *Triglycine sulphate and variants:*
      2. *Lead-lanthanum-zirconium titanate and variants:*
      3. *Lithiuim tantalate:*
      4. *Polyvinylidene fluoride and variants;* **or**
      5. *Strontium barium niobate and variants*

a. Non-"space-qualified" "focal plane arrays", having all of the following:
1. Individual elements with a peak response within the wavelength range exceeding 900 nm but not exceeding 1,050 nm; **and**
2. A response "time constant" of less than 0.5 ns;

b. Non-"space-qualified" "focal plane arrays", having all of the following:
1. Individual elements with a peak response in the wavelength range exceeding 1,050 nm but not exceeding 1,200 nm; **and**
2. A response "time constant" of 95 ns or less;

c. Non-"space-qualified" "focal plane arrays", having individual elements with a peak response in the wavelength range exceeding 1,200 nm but not exceeding 30,000 nm.

2. b. "Monospectral imaging sensors" and "Multispectral imaging sensors" designed for remote sensing applications, having any of the following:
1. An Instantaneous-Field-Of-View (IFOV) of less than 200 µr (microradians); **or**
2. Being specified for operation in the wavelength range exceeding 400 nm but not exceeding 30,000 nm and having all of the following:
   a. Providing output imaging data in digital format; **and**
   b. Being any of the following:
      1. "Space-qualified"; **or**
      2. Designed for airborne operation, using other than silicon detectors, and having an IFOV of less than 2.5 mr (milliradians).

c. Direct view imaging equipment operating in the visible or infrared spectrum, incorporating any of the following:
1. Image intensifier tubes having the characteristics listed in 1061.2.a.2.a.; **or**
2. "Focal plane arrays" having the characteristics listed in 1061.2.a.3.

Technical Note:
'Direct view' refers to imaging equipment, operating in the visible or infrared spectrum, that presents a visual image to a human observer without converting the image into an electronic signal for television display, and that cannot record or store the image photographically, electronically or by any other means.

Note:
1061.2.c. does not control the following equipment incorporating other than GaAs or GaInAs photocathodes:
a. *Industrial or civilian intrusion alarm, traffic or industrial movement control or counting systems;*
b. *Medical equipment;*
c. *industrial equipment used for inspection, sorting or analysis of the properties of materials;*
d. *Flame detectors for industrial furnaces;*
e. *Equipment specially designed for laboratory use.*

d. Special support components for optical sensors, as follows:
1. "Space-qualified" cryocoolers;
2. Non-"space-qualified" cryocoolers, having a cooling source temperature below 218 K (-55°C), as follows:
   a. Closed cycle type with a specified Mean- Time-To-Failure (MTTF), or Mean-Time- Between-Failures (MTBF), exceeding 2,500 hours;
   b. Joule-Thomson (JT) self-regulating mini-coolers having bore (outside) diameters of less than 8 mm;
3. Optical sensing fibres specially fabricated either compositionally or structurally, or modified by coating, to be acoustically, thermally, inertially, electromagnetically or nuclear radiation sensitive.

e. "Space qualified" "focal plane arrays" having more than 2,048 elements per array and having a peak response in the wavelength range exceeding 300 nm but not exceeding 900 nm.

3. Cameras

N.B.:
For cameras specially designed or modified for underwater use, see 1081.2.d. and 1081.2.e.

a. Instrumentation cameras and specially designed components therefore, as follows:

Note:
Instrumentation cameras, controlled by 1061.3.a.3. to 1061.3.a.5., with modular structures should be evaluated by their maximum capability, using plug-ins available according to the camera manufacturer's specifications.

1. High-speed cinema recording cameras using any film format from 8 mm to 16 mm inclusive, in which the film is continuously advanced throughout the recording period, and that are capable of recording at framing rates exceeding 13,150 frames/s;

Note:
1061.3.a.1. does not control cinema recording cameras designed for civil purposes.