- (d) All liaison aircraft bearing an "L" designation.
- (e) All observation aircraft bearing "O" designations and using reciprocating engines.

§121.4 [Reserved]

§ 121.5 Apparatus and devices under Category IV(c).

Category IV includes but is not limited to the following: Fuzes and components specifically designed, modified or configured for items listed in that category, bomb racks and shackles, bomb shackle release units, bomb ejectors, torpedo tubes, torpedo and guided missile boosters, guidance systems equipment and parts, launching racks and projectors, pistols (exploders), ignitors, fuze arming devices, intervalometers, thermal batteries, hardened missile launching facilities, guided missile launchers and specialized handling equipment, including transporters, cranes and lifts designed to handle articles in paragraphs (a) and (b) of this category for preparation and launch from fixed and mobile sites. The equipment in this category includes robots, robot controllers and robot end-effectors specially designed or modified for military applications.

§§ 121.6-121.7 [Reserved]

§ 121.8 End-items, components, accessories, attachments, parts, firmware, software and systems.

- (a) An *end-item* is an assembled article ready for its intended use. Only ammunition, fuel or another energy source is required to place it in an operating state.
- (b) A component is an item which is useful only when used in conjunction with an end-item. A major component includes any assembled element which forms a portion of an end-item without which the end-item is inoperable. (EXAMPLE: Airframes, tail sections, transmissions, tank treads, hulls, etc.) A minor component includes any assembled element of a major component.
- (c) Accessories and attachments are associated equipment for any component, end-item or system, and which are not necessary for their operation, but which enhance their usefulness or ef-

fectiveness. (EXAMPLES: Military riflescopes, special paints, etc.)

- (d) A part is any single unassembled element of a major or a minor component, accessory, or attachment which is not normally subject to disassembly without the destruction or the impairment of design use. (EXAMPLES: Rivets, wire, bolts, etc.)
- (e) Firmware and any related unique support tools (such as computers, linkers, editors, test case generators, diagnostic checkers, library of functions and system test diagnostics) specifically designed for equipment or systems covered under any category of the U.S. Munitions List are considered as part of the end-item or component. Firmware includes but is not limited to circuits into which software has been programmed.
- (f) Software includes but is not limited to the system functional design, logic flow, algorithms, application programs, operating systems and support software for design, implementation, test, operation, diagnosis and repair. A person who intends to export software only should, unless it is specifically enumerated in §121.1 (e.g., XIII(b)), apply for a technical data license pursuant to part 125 of this subchapter.
- (g) A *system* is a combination of enditems, components, parts, accessories, attachments, firmware or software, specifically designed, modified or adapted to operate together to perform a specialized military function.

§ 121.9 [Reserved]

§121.10 Forgings, castings and machined bodies.

Articles on the U.S. Munitions List include articles in a partially completed state (such as forgings, castings, extrusions and machined bodies) which have reached a stage in manufacture where they are clearly identifiable as defense articles. If the end-item is an article on the U.S. Munitions List (including components, accessories, attachments and parts as defined in §121.8), then the particular forging, casting, extrusion, machined body, etc., is considered a defense article subject to the controls of this subchapter, except for such items as are in normal commercial use.