NUMERICAL TABLE OF CONTENTS TO THE COMMERCE CONTROL LIST

ECCN	Description
0E001	"Technology" according to the Nuclear Technology Note for the "development", "production" or "use" of items controlled by this Category
0E018	"Technology" for the "development", "production" , or "use" of items controlled by 0A018.a through 0A018.c
0E918	"Technology" for the "development", "production", or "use" of bayonets
0E982	"Technology" exclusively for the "development" or "production" of equipment controlled by 0A982 or 0A985.
0E984	"Technology" for the "development" or "production" of shotguns controlled by 0A984 and buckshot shotgun shells.
	Category 1 - Materials, Chemicals, Microorganisms, and Toxins
1A001	Components made from fluorinated compounds
1A002	"Composite" structures or laminates
1A003	Manufactures of non-fluorinated polymeric substances controlled by 1C008.a.3 in film, sheet, tape or ribbon form
1A004	Protective and detection equipment and components, not specially designed for military use
1A005	Body armor, and specially designed components therefor, not manufactured to military standards or specifications, nor to their equivalents in performance
1A006	Equipment, specially designed or modified for the disposal of improvised explosive devices, as follows (see List of Items Controlled), and specially designed components and accessories therefor
1A007	Equipment and devices, specially designed to initiate charges and devices containing energetic materials, by electrical means, as follows (see List of Items Controlled)
1A101	Devices for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures, for applications usable in "missiles" and their subsystems
1A102	Resaturated pyrolized carbon-carbon components designed for rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300km. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
1A202	Composite structures, other than those controlled by 1A002, in the form of tubes with an inside diameter of between 75 mm and 400 mm made with any of the "fibrous or filamentary materials" specified in 1C210.a or with carbon prepreg materials controlled by 1C210.c
1A225	Platinized catalysts specially designed or prepared for promoting the hydrogen isotope exchange reaction between hydrogen and water for the recovery of tritium from heavy water or for the production of heavy water
1A226	Specialized packings for use in separating heavy water from ordinary water and made of phosphor bronze mesh (chemically treated to improve wettability) and designed for use in vacuum distillation towers
1A227	High-density (lead glass or other) radiation shielding windows greater than 0.09 m^2 on cold area and with a density greater than 3 g/cm^3 and a thickness of 100 mm or greater; and specially designed frames therefor
1A290	Depleted uranium (any uranium containing less than 0.711% of the isotope U-235) in shipments of more than 1,000 kilograms in the form of shielding contained in X-ray units, radiographic exposure or teletherapy devices, radioactive thermoelectric generators, or packaging for the transportation of radioactive materials
1A984	Chemical agents, including tear gas formulation containing 1 percent or less of orthochlorobenzalmalononitrile (CS), or 1 percent or less of chloroacetophenone (CN), *except in individual containers with a net weight of 20 grams or less*; smoke bombs; non-irritant smoke flares, canisters, grenades and charges; and other pyrotechnic articles having dual military and commercial use
1A985	Fingerprinting powders, dyes, and inks
1A995	Protective and detection equipment and components not specially designed for military use and not controlled by ECCN 1A004 or ECCN 2B351
1A999	Specific processing equipment
1B001	Equipment for the production of fibers, prepregs, preforms or "composites" controlled by 1A002 or 1C010, as follows (see List of Items Controlled), and specially designed components and accessories therefor
1B002	Equipment for producing metal alloys, metal alloy powder or alloyed materials, specially designed to avoid contamination and specially designed for use in one of the processes specified in 1C002.c.2
1B003	Tools, dies, molds or fixtures, for "superplastic forming" or "diffusion bonding" titanium or aluminum or their alloys
1B018	Equipment on the Wassenaar Arrangement Munitions List
1B101	Equipment, other than that controlled by 1B001, for the "production" of structural composites, fibers, prepregs or preforms as follows (see List of Items Controlled); and specially designed components, and accessories therefor
1B102	Metal powder "production equipment," other than that specified in 1B002, and components as follows (see List of Items Controlled)
1B115	Equipment, other than that controlled in 1B002 or 1B102, for the "production" of propellant or propellant constituents, and specially designed components therefor
1B116	Specially designed nozzles for producing pyrolitically derived materials formed on a mold, mandrel or other substrate from precursor gases which decompose in the 1,573 K (1,300 °C) to 3,173 K (2,900 °C) temperature range at pressures of 130 Pa to 20 kPa

ECCN	Description
1B117	Batch mixers with provision for mixing under vacuum in the range from zero to 13.326 kPa and with temperature control capability of the mixing chamber and having all of the following characteristics (see List of Items Controlled), and specially designed components therefor
1B118	Continuous mixers with provision for mixing under vacuum in the range from zero to 13.326 kPa and with temperature control capability of the mixing chamber and having all of the following characteristics (see List of Items Controlled), and specially designed components therefor
1B119	Fluid energy mills usable for grinding or milling propellant or propellant constituents specified in 1C011.a, 1C011.b or 1C111, or on the U.S. Munitions List, and specially designed components therefor
1B201	Filament winding machines, other than those controlled by 1B001 or 1B101, in which the motions for positioning, wrapping, and winding fibers are coordinated and programmed in two or more axes, specially designed to fabricate composite structures or laminates from "fibrous or filamentary materials" and capable of winding cylindrical rotors of diameter between 75 mm and 400 mm and lengths of 600 mm or greater and coordinating and programming controls and precision mandrels therefor
1B225	Electrolytic cells for fluorine production with a production capacity greater than 250 g of fluorine per hour
1B226	Electromagnetic isotope separators, designed for or equipped with single or multiple ion sources capable of providing a total ion beam current of 50 mA or greater
1B227	Ammonia synthesis converters or ammonia synthesis units in which the synthesis gas (nitrogen and hydrogen) is withdrawn from an ammonia/hydrogen high-pressure exchange column and the synthesized ammonia is returned to that column
1B228	Hydrogen-cryogenic distillation columns
1B229	Water-hydrogen sulphide exchange tray columns constructed from fine carbon steel with a diameter of 1.8 m or greater, which can operate at a nominal pressure of 2 MPa or greater, and internal contactors therefor
1B230	Pumps capable of circulating solutions of concentrated or dilute potassium amide catalyst in liquid ammonia (KNH_2/NH_3)
1B231	Tritium facilities, plant or equipment
1B232	Turboexpanders or turboexpander-compressor sets designed for operation at 35 K (-238° C) or less and a throughput of hydrogen gas of 1000 kg/hr or greater
1B233	Lithium isotope separation facilities, plant and equipment
1B999	Specific processing equipment
1C001	Materials specially designed for use as absorbers of electromagnetic waves, or intrinsically conductive polymers
1C002	Metal alloys, metal alloy powder and alloyed materials
1C003	Magnetic metals, of all types and of whatever form
1C004	Uranium titanium alloys or tungsten alloys with a "matrix" based on iron, nickel or copper
1C005	"Superconductive" "composite" conductors in lengths exceeding 100 m or with a mass exceeding 100 g
1C006	Fluids and lubricating materials
1C007	Ceramic base materials, non-"composite" ceramic materials, ceramic-"matrix" "composite" materials and precursor materials
1C008	Non-fluorinated polymeric substances
1C009	Unprocessed fluorinated compounds
1C010	"Fibrous or filamentary materials" which may be used in organic "matrix", metallic "matrix" or carbon "matrix" "composite" structures or laminates
1C011	Metals and compounds
1C012	Materials
1C018	Commercial charges and devices containing energetic materials on the Wassenaar Arrangement Munitions List and certain chemicals
1C101	Materials for Reduced Observables such as Radar Reflectivity, Ultraviolet/Infrared Signatures and Acoustic Signatures (i.e., Stealth Technology), Other than Those Controlled by 1C001, for applications usable in rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300km, and their subsystems
1C102	Resaturated pyrolized carbon-carbon materials designed for space launch vehicles specified in 9A004 or sounding rockets specified in 9A104. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
1C107	Graphite and ceramic materials, other than those controlled by 1C007
1C111	Propellants and constituent chemicals for propellants, other than those specified in 1C011, as follows (see List of Items Controlled)
1C116	Maraging steels (iron alloys generally characterized by high nickel, very low carbon content and the use of substitutional elements or precipitates to produce strengthening and age-hardening of the alloy) having an ultimate tensile strength equal to or greater than 1.5 GPa, measured at 293 K (20 °C), in the form of sheet, plate or tubing with a wall or plate thickness equal to or less than 5 mm
1C117	Tungsten, molybdenum and alloys of these metals in the form of uniform, spherical or atomized particles of 500 micrometer diameter or less with a purity of 97% or greater for fabrication of rocket motor components, i.e., heat shields, nozzle substrates, nozzle throats and thrust vector control surfaces

ECCN	Description
1C118	Titanium-stabilized duplex stainless steel (Ti-DSS), having all of the following characteristics (see List of Items Controlled)
1C202	Alloys, other than those controlled by 1C002.a.2.c or .d
1C210	"Fibrous or filamentary materials" or prepregs, other than those controlled by 1C010.a, .b or .e
1C216	Maraging steel, other than that controlled by 1C116, "capable of" an ultimate tensile strength of 2,050 MPa or more, at 293 K (20 °C)
1C225	Boron and boron compounds, mixtures and loaded materials in which the boron-10 isotope is more than 20% by weight of the total boron content
1C226	Tungsten, tungsten carbide, and alloys containing more than 90% tungsten by weight, having a mass greater than 20 kg and in forms with a hollow cylindrical symmetry (including cylinder segments) with an inside diameter greater than 100 mm, but less than 300 mm, *except* manufactures specially designed for use as weights or gamma-ray collimators
1C227	Calcium (high purity) containing both less than 1,000 parts per million by weight of metallic impurities other than magnesium and less than 10 parts per million by weight of boron
1C228	Magnesium (high purity) containing both less than 200 parts per million by weight of metallic impurities other than calcium and less than 10 parts per million by weight of boron
1C229	Bismuth with a purity of 99.99% or greater by weight and containing less than 10 parts per million by weight of silver
1C230	Beryllium metal, alloys containing more than 50% of beryllium by weight, beryllium compounds, or manufactures thereof, and waste and scrap containing any of the foregoing
1C231	Hafnium metal, alloys and compounds of hafnium containing more than 60% hafnium by weight and manufactures thereof, and waste and scrap containing any of the foregoing
1C232	Helium-3, mixtures containing helium-3, and products or devices containing any of the foregoing, *except* a product or device containing less than 1 g of helium-3
1C233	Lithium enriched in the 6 isotope (^{6}Li) to greater than 6.5 weight percent (7.5 atom percent), alloys, compounds, or mixtures containing lithium enriched in the 6 isotope, and products or devices containing any of the foregoing, *except* thermoluminescent dosimeters
1C234	Zirconium with a hafnium content of less than 1 part hafnium to 500 parts zirconium by weight, in the form of metal, alloys containing more than 50% zirconium by weight, compounds, or manufactures thereof, *except* zirconium in the form of foil having a thickness not exceeding 0.10 mm
1C235	Tritium, tritium compounds, mixtures containing tritium in which the ratio of tritium to hydrogen atoms exceeds 1 part in 1000, and products or devices containing any of the foregoing; *except*, a product or device containing not more than 1.48 x 10^3 GBq (40 Ci) of tritium
1C236	Alpha-emitting radionuclides having an alpha half-life of 10 days or greater, but less than 200 years, compounds or mixtures containing any of these radionuclides with a total alpha activity of 37 GBq/kg (1 Ci/kg) or greater, and products or devices containing any of the foregoing, *except* a product or device containing less than 3.7 GBq (100 millicuries) of alpha activity
1C237	Radium-226, radium-226 alloys, radium-226 compounds, mixtures containing radium-226, manufactures thereof, and products or devices containing any of the foregoing, *except* medical applicators, or products or devices containing not more than 0.37 GBq (10 millicuries) of radium-226
1C238	Chlorine trifluoride (ClF_3)
1C239	High explosives, other than those controlled by the U.S. Munitions List, or substances or mixtures containing more than 2% thereof, with a crystal density greater than 1.8 gm per cm^3 and having a detonation velocity greater than 8,000 m/s.
1C240	Nickel powder or porous nickel metal, other than those controlled by 0C006
1C298	Graphite with a boron content of less than 5 parts per million and a density greater than 1.5 grams per cubic centimeter that is intended for use other than in a nuclear reactor
1C350	Chemicals that may be used as precursors for toxic chemical agents
1C351	Human and zoonotic pathogens and "toxins"
1C352	Animal pathogens
1C353	Genetic elements and genetically-modified organisms
1C354	Plant pathogens
1C355	Chemical Weapons Convention (CWC) Schedule 2 and 3 chemicals and families of chemicals not controlled by ECCN 1C350 or by the Department of State under the ITAR
1C360	Select agents not controlled under ECCN 1C351, 1C352, or 1C354
1C395	Mixtures and medical, analytical, diagnostic, and food testing kits not controlled by ECCN 1C350, as follows (see List of Items Controlled)
1C980	Inorganic chemicals listed in Supplement No. 1 to part 754 of the EAR that were produced or derived from the Naval Petroleum Reserves (NPR) or became available for export as a result of an exchange of any NPR produced or derived commodities
1C981	Crude petroleum including reconstituted crude petroleum, tar sands & crude shale oil listed in Supplement No. 1 to part 754 of the EAR

ECCN	Description
1C982	Other petroleum products listed in Supplement No. 1 to part 754 of the EAR that were produced or derived from the Naval Petroleum Reserves (NPR) or became available for export as a result of an exchange of any NPR produced or derived commodities
1C983	Natural gas liquids and other natural gas derivatives listed in Supplement No. 1 to part 754 of the EAR that were produced or derived from the Naval Petroleum Reserves (NPR) or became available for export as a result of an exchange of any NPR produced or derived commodities
1C984	Manufactured gas and synthetic natural gas (except when commingled with natural gas and thus subject to export authorization from the Department of Energy) listed in Supplement No. 1 to part 754 of the EAR that were produced or derived from the Naval Petroleum Reserves (NPR) or became available for export as a result of an exchange of any NPR produced or derived commodities
1C988	Western red cedar (thuja plicata), logs and timber, and rough, dressed and worked lumber containing wane listed in Supplement No. 2 to part 754 of the EAR
1C990	Fibrous and filamentary materials, not controlled by 1C010 or 1C210, for use in "composite" structures and with a specific modulus of 3.18×10^6 m or greater and a specific tensile strength of 7.62×10^4 m or greater
1C991	Vaccines, immunotoxins, medical products, diagnostic and food testing kits
1C992	Commercial charges and devices containing energetic materials, n.e.s., and nitrogen trifluoride in a gaseous state
1C995	Mixtures not controlled by ECCN 1C350, ECCN 1C355 or ECCN 1C395 that contain chemicals controlled by ECCN 1C350 or ECCN 1C355 and medical, analytical, diagnostic, and food testing kits not controlled by ECCN 1C350 or ECCN 1C395 that contain chemicals controlled by ECCN 1C350.d, as follows (see List of Items Controlled)
1C996	Hydraulic fluids containing synthetic hydrocarbon oils, having all the following characteristics (see List of Items Controlled)
1C997	Ammonium nitrate, including fertilizers and fertilizer blends containing more than 15% by weight ammonium nitrate, except liquid fertilizers (containing any amount of ammonium nitrate) or dry fertilizers containing less than 15% by weight ammonium nitrate
1C998	Non-fluorinated polymeric substances, not controlled by 1C008, as follows (see List of Items Controlled)
1C999	Specific materials
1D001	"Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by 1B001 to 1B003
1D002	"Software" for the "development" of organic "matrix", metal "matrix" or carbon "matrix" laminates or "composites"
1D003	"Software" specially designed or modified to enable equipment to perform the functions of equipment controlled under 1A004.c.
1D018	"Software" specially designed or modified for the "development", "production", or "use" of items controlled by 1B018
1D101	"Software" specially designed or modified for the "use" of commodities controlled by 1B101, 1B102, 1B115, 1B117, 1B118, or 1B119
1D103	"Software" specially designed for reduced observables such as radar reflectivity, ultraviolet/infrared signatures and acoustic signatures, for applications usable in "missiles" or their subsystems
1D201	"Software" specially designed for the "use" of goods controlled by 1B201
1D390	"Software" for process control that is specifically configured to control or initiate "production" of chemicals controlled by 1C350
1D993	"Software" specially designed for the "development", "production", or "use" of equipment or materials controlled by 1C210.b or 1C990
1D999	Specific software
1E001	"Technology" according to the General Technology Note for the "development" or "production" of items controlled by 1A001.b, 1A001.c, 1A002, 1A003, 1A004, 1A005, 1A101, 1B (except 1B999), or 1C (except 1C355, 1C980 to 1C984, 1C988, 1C990, 1C991, 1C992, 1C995 to 1C999)
1E002	Other "technology"
1E101	"Technology" according to the General Technology Note for the "development" or "production" of items controlled by 1A001.b, 1A001.c, 1A002, 1A003, 1A004, 1A005, 1A006, 1A007, 1A101, 1B (except 1B999), or 1C (except 1C355, 1C980 to 1C984, 1C988, 1C990, 1C991, 1C992, 1C995 to 1C999)
1E102	"Technology" according to the General Technology Note for the "development" of software controlled by 1D001, 1D101 or 1D103.
1E103	"Technical data" (including processing conditions) and procedures for the regulation of temperature, pressure or atmosphere in autoclaves or hydroclaves, when used for the "production" of "composites" or partially processed "composites", usable for equipment or materials specified in 1C007, 1C102, 1C107, 1C116, 1C117, 1C118, 9A110, and 9C110
1E104	"Technology" for the "production" of pyrolytically derived materials formed on a mold, mandrel or other substrate from precursor gases which decompose in the 1,573 K (1,300°C) to 3,173 K (2,900°C) temperature range at pressures of 130 Pa (1 mm Hg) to 20 kPa (150 mm Hg), including "technology" for the composition of precursor gases, flow-rates and process control schedules and parameters

ECCN	Description
1E201	"Technology" according to the General Technology Note for the "use" of items controlled by 1A002, 1A007, 1A202, 1A225 to 1A227, 1B201, 1B225 to 1B232, 1B233.b, 1C002.a.2.c or .d, 1C010.a, 1C010.b, 1C010.e.1, 1C202, 1C210, 1C216, 1C225 to 1C240 or 1D201
1E202	"Technology" according to the General Technology Note for the "development" or "production" of goods controlled by 1A202 or 1A225 to 1A227
1E203	"Technology" according to the General Technology Note for the "development" or "production" of "software" controlled by 1D201
1E350	"Technology" according to the "General Technology Note" for facilities designed or intended to produce chemicals controlled by 1C350
1E351	"Technology" according to the "General Technology Note" for the disposal of chemicals or microbiological materials controlled by 1C350, 1C351, 1C352, 1C353, 1C354, or 1C360
1E355	"Technology" for the "production" of Chemical Weapons Convention (CWC) Schedule 2 and 3 chemicals
1E994	"Technology" for the "development", "production", or "use" of fibrous and filamentary materials controlled by 1C990.
1E998	"Technology" for the "development"or "production" of processing equipment controlled by 1B999, and materials controlled by 1C995, 1C996, 1C997, 1C998, and 1C999
	Category 2 - Materials Processing
2A001	Anti-friction bearings and bearing systems, as follows, (see List of Items Controlled) and components therefor
2A225	Crucibles made of materials resistant to liquid actinide metals
2A226	Valves 5 mm or greater in "nominal size", with a bellows seal, wholly made of or lined with aluminum, aluminum alloy, nickel, or nickel alloy containing more than 60% nickel by weight
2A290	Generators and other equipment specially designed, prepared, or intended for use with nuclear plants
2A291	Equipment, except items controlled by 2A290, related to nuclear material handling and processing and to nuclear reactors
2A292	Piping, fittings and valves made of, or lined with, stainless steel, copper-nickel alloy or other alloy steel containing 10% or more nickel and/or chromium
2A293	Pumps designed to move molten metals by electromagnetic forces
2A983	Explosives or detonator detection equipment, both bulk and trace based, consisting of an automated device, or combination of devices for automated decision making to detect the presence of different types of explosives, explosive residue, or detonators; and parts and components, n.e.s.
2A991	Bearings and bearing systems not controlled by 2A001
2A994	Portable electric generators and specially designed parts
2A999	Specific processing equipment
2B001	Machine tools and any combination thereof, for removing (or cutting) metals, ceramics or "composites", which, according to the manufacturer's technical specifications, can be equipped with electronic devices for "numerical control"; and specially designed components as follows (see List of Items Controlled)
2B002	Numerically controlled optical finishing machine tools equipped for selective material removal to produce non-spherical optical surfaces having all of the following characteristics (See List of Items Controlled)
2B003	"Numerically controlled" or manual machine tools, and specially designed components, controls and accessories therefor, specially designed for the shaving, finishing, grinding or honing of hardened (R_c = 40 or more) spur, helical and double-helical gears with a pitch diameter exceeding 1,250 mm and a face width of 15% of pitch diameter or larger finished to a quality of AGMA 14 or better (equivalent to ISO 1328 class 3)
2B004	Hot "isostatic presses", having all of the following characteristics described in the List of Items Controlled, and specially designed components and accessories therefor
2B005	Equipment specially designed for the deposition, processing and in-process control of inorganic overlays, coatings and surface modifications, as follows, for non-electronic substrates, by processes shown in the Table and associated Notes following 2E003.f, and specially designed automated handling, positioning, manipulation and control components therefor
2B006	Dimensional inspection or measuring systems and equipment
2B007	"Robots" having any of the following characteristics described in the List of Items Controlled and specially designed controllers and "end-effectors" therefor
2B008	Assemblies or units, specially designed for machine tools, or dimensional inspection or measuring systems and equipment, as follows (see List of Items Controlled)
2B009	Spin-forming machines and flow-forming machines, which, according to the manufacturer's technical specifications, can be equipped with "numerical control" units or a computer control
2B018	Equipment on the Wassenaar Arrangement Munitions List
2B104	"Isostatic presses" other than those controlled by 2B004
2B105	Chemical vapor deposition (CVD) furnaces, other than those controlled by 2B005.a, designed or modified for the densification of carbon-carbon composites
2B109	Flow-forming machines, other than those controlled by 2B009, and specially designed components therefor
2B116	Vibration test systems, equipment and components therefor

ECCN	Description
2B117	Equipment and process controls, other than those controlled by 2B004, 2B005.a, 2B104 or 2B105, designed or modified for the densification and pyrolysis of structural composite rocket nozzles and reentry vehicle nose tips
2B119	Balancing machines and related equipment, as follows (see List of Items Controlled)
2B120	Motion simulators or rate tables (equipment capable of simulating motion), having all of the following characteristics (see List of Items Controlled)
2B121	Positioning tables (equipment capable of precise rotary position in any axis), other than those controlled in 2B120, having all the following characteristics (See List of Items Controlled)
2B122	Centrifuges capable of imparting accelerations above 100 g and having slip rings capable of transmitting electrical power and signal information
2B201	Machine tools, other than those controlled by 2B001 for removing or cutting metals, ceramics or "composites", which, according to manufacturer s technical specification, can be equipped with electronic devices for simultaneous "contouring control" in two or more axes
2B204	"Isostatic presses," not controlled by 2B004 or 2B104, capable of achieving a maximum working pressure of 69 Mpa (10,000 psi) or greater and having a chamber cavity with an inside diameter in excess of 152 mm (6 inches) and specially designed dies, molds, and controls therefor
2B206	Dimensional inspection machines, devices or systems, other than those controlled by 2B006
2B207	"Robots" or "end-effectors", other than those controlled by 2B007, specially designed to comply with national safety standards applicable to handling high explosives (for example, meeting electrical code ratings for high explosives) and specially designed controllers therefor
2B209	Flow forming machines, or spin forming machines capable of flow forming functions, other than those controlled by 2B009 or 2B109, and mandrels
2B225	Remote manipulators that can be used to provide remote actions in radiochemical separation operations or hot cells
2B226	Controlled atmosphere (vacuum or inert gas) induction furnaces capable of operation above 1,123 K (850 °C) and having induction coils 600 mm or less in diameter, and designed for power inputs of 5 kW or more, and power supplies specially designed therefor with a specified power output of 5 kW or more
2B227	Vacuum or other controlled atmosphere metallurgical melting and casting furnaces and specially configured computer control and monitoring systems therefor
2B228	Rotor fabrication and assembly equipment, rotor straightening equipment, and bellows-forming mandrels and dies
2B229	Centrifugal multiplane balancing machines, fixed or portable, horizontal or vertical
2B230	"Pressure transducers" capable of measuring absolute pressure at any point in the range 0 to 13 kPa, with pressure sensing elements made of or protected by nickel, nickel alloy with more than 60% nickel by weight, aluminum or aluminum alloy
2B231	Vacuum pumps with an input throat size of 380 mm or greater with a pumping speed of 15 m^3/s or greater and capable of producing an ultimate vacuum better than 13.3 mPa
2B232	Multistage light gas guns or other high-velocity gun systems (coil, electromagnetic, electrothermal, and other advanced systems) capable of accelerating projectiles to 2 km/s or greater
2B290	"Numerically controlled" machine tools not controlled by 2B001 or 2B201
2B350	Chemical manufacturing facilities and equipment, except valves controlled by 2A226 or 2A292
2B351	Toxic gas monitoring systems and their dedicated detecting components (i.e., detectors, sensor devices, and replaceable sensor cartridges), as follows, except those systems and detectors controlled by ECCN 1A004.c (see List of Items Controlled)
2B352	Equipment capable of use in handling biological materials
2B991	Numerical control units for machine tools and numerically controlled machine tools, n.e.s.
2B992	Non-"numerically controlled" machine tools for generating optical quality surfaces, and specially designed components therefor
2B993	Gearmaking and/or finishing machinery not controlled by 2B003 capable of producing gears to a quality level of better than AGMA 11
2B996	Dimensional inspection or measuring systems or equipment not controlled by 2B006
2B997	"Robots" not controlled by 2B007 or 2B207 that are capable of employing feedback information in real-time processing from one or more sensors to generate or modify "programs" or to generate or modify numerical program data
2B998	Assemblies, units or inserts specially designed for machine tools controlled by 2B991, or for equipment controlled by 2B993, 2B996 or 2B997
2B999	Specific processing equipment
2D001	"Software", other than that controlled by 2D002, specially designed or modified for the "development", "production" or "use" of equipment controlled by 2A001 or 2B001 to 2B009
2D002	"Software" for electronic devices, even when residing in an electronic device or system, enabling such devices or systems to function as a "numerical control" unit, capable of coordinating simultaneously more than 4 axes for "contouring control"
2D018	"Software" for the "development", "production" or "use" of equipment controlled by 2B018
2D101	"Software" specially designed or modified for the "use" of equipment controlled by 2B104, 2B105, 2B109, 2B116, 2B117, or 2B119 to 2B122

ECCN	Description
2D201	"Software" specially designed for the "use" of equipment controlled by 2B204, 2B206, 2B207, 2B209, 2B227 or 2B229
2D202	"Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by 2B201
2D290	"Software" specially designed or modified for the "development", "production" or "use" of items controlled by 2A290, 2A291, 2A292, 2A293, or 2B290
2D351	Dedicated "software" for toxic gas monitoring systems and their dedicated detecting components controlled by ECCN 2B351
2D983	"Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by 2A983
2D991	"Software" specially designed for the "development", "production", or "use" of equipment controlled by 2B991, 2B993, or 2B996, 2B997, and 2B998
2D992	Adaptive control software
2D994	"Software" specially designed for the "development" or "production" of portable electric generators controlled by 2A994
2E001	"Technology" according to the General Technology Note for the "development" of equipment or "software" controlled by 2A (except 2A983, 2A991, or 2A994), 2B (except 2B991, 2B993, 2B996, 2B997, or 2B998), or 2D (except 2D983, 2D991, 2D992, or 2D994)
2E002	"Technology" according to the General Technology Note for the "production" of equipment controlled by 2A (except 2A983, 2A991, or 2A994), or 2B (except 2B991, 2B993, 2B996, 2B997, or 2B998)
2E003	Other "technology"
2E018	"Technology" for the "use" of equipment controlled by 2B018
2E101	"Technology" according to the General Technology Note for the "use" of equipment or "software" controlled by 2B004, 2B009, 2B104, 2B105, 2B109, 2B116, 2B117, 2B119 to 2B122, 2D001, 2D002 or 2D101
2E201	"Technology" according to the General Technology Note for the "use" of equipment or "software" controlled by 2A225, 2A226, 2B001, 2B006, 2B007.b, 2B007.c, 2B201, 2B204, 2B206, 2B207, 2B209, 2B225 to 2B232, 2D002, 2D201 or 2D202 for NP reasons
2E290	"Technology" according to the General Technology Note for the "use" of equipment controlled by 2A290, 2A291, 2A292, 2A293, and 2B290
2E301	"Technology" according to the "General Technology Note" for "use" of items controlled by 2B350, 2B351 and 2B352
2E983	"Technology" specially designed or modified for the "development", "production" or "use" of equipment controlled by 2A983, or the "development" of software controlled by 2D983
2E991	"Technology" for the "use" of equipment controlled by 2B991, 2B993, 2B996, or 2B997
2E994	"Technology" for the "use" of portable electric generators controlled by 2A994
	Category 3 - Electronics
3A001	Electronic components and specially designed components therefor, as follows
3A002	General purpose electronic equipment and accessories therefor, as follows
3A003	Spray cooling thermal management systems employing closed loop fluid handling and reconditioning equipment in a sealed enclosure where a dielectric fluid is sprayed onto electronic components using specially designed spray nozzles that are designed to maintain electronic components within their operating temperature range, and specially designed components therefor
3A101	Electronic equipment, devices and components, other than those controlled by 3A001
3A201	Electronic components, other than those controlled by 3A001
3A225	Frequency changers (also known as converters or inverters) or generators, other than those controlled by 0B001.c.11
3A226	High-Power direct current power supplies, other than those controlled by 0B001.j.6, capable of continuously producing, over a time period of 8 hours, 100 V or greater with current output of 500 A or greater and with current or voltage regulation better than 0.1%
3A227	High-voltage direct current power supplies, other than those controlled by 0B001.j.5, capable of continuously producing, over a time period of 8 hours, 20,000 V or greater with current output of 1 A or greater and with current or voltage regulation better than 0.1% over a time period of 8 hours
3A228	Switching devices
3A229	Firing sets and equivalent high-current pulse generators (for detonators controlled by 3A232)
3A230	High-speed pulse generators with output voltages greater than 6 volts into a resistive load of less than 55 ohms, and with pulse transition times less than 500 picoseconds
3A231	Neutron generator systems, including tubes, designed for operation without an external vacuum system and utilizing electrostatic acceleration to induce a tritium-deuterium nuclear reaction
3A232	Detonators and multipoint initiation systems
3A233	Mass spectrometers, other than those controlled by 0B002.g, capable of measuring ions of 230 atomic mass units or greater and having a resolution of better than 2 parts in 230, and ion sources therefor

ECCN	Description
5A002	"Information security" systems, equipment and components therefor, as follows
5A992	Equipment not controlled by 5A002
5B002	Information Security - test, inspection and "production" equipment
5D002	Information Security - "Software"
5D992	"Information Security" "software" not controlled by 5D002
5E002	"Technology" according to the General Technology Note for the "development", "production" or use" of equipment controlled by 5A002 or 5B002 or "software" controlled by 5D002
5E992	"Information Security" "technology", not controlled by 5E002

Category 6 - Sensors and Lasers

6A001	Acoustic systems, equipment and components, as follows
6A002	Optical sensors
6A003	Cameras
6A004	Optics
6A005	"Lasers" (other than those described in 0B001.g.5 or .h.6), components and optical equipment
6A006	"Magnetometers", "magnetic gradiometers", "intrinsic magnetic gradiometers", underwater electric field sensors, and "compensation systems", and specially designed components therefor, as follows (see List of Items Controlled)
6A007	Gravity meters (gravimeters) and gravity gradiometers
6A008	Radar systems, equipment and assemblies having any of the following characteristics (see List of Items Controlled), and specially designed components therefor
6A102	Radiation hardened detectors, other than those controlled by 6A002, specially designed or modified for protecting against nuclear effects (e.g., Electromagnetic Pulse (EMP), X-rays, combined blast and thermal effects) and usable for "missiles", designed or rated to withstand radiation levels which meet or exceed a total irradiation dose of 5×10^5 rads (silicon)
6A103	Radomes designed to withstand a combined thermal shock greater than 100 cal/sq cm accompanied by a peak over pressure of greater than 50 kPa, usable in protecting "missiles" against nuclear effects (e.g. Electromagnetic Pulse (EMP), X-rays, combined blast and thermal effects), and usable for "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
6A107	Gravity meters (gravimeters) and specially designed components for gravity meters and gravity gradiometers, as follows (see List of Items Controlled)
6A108	Radar systems and tracking systems, other than those controlled by 6A008
6A202	Photomultiplier tubes with a photocathode area of greater than 20 cm^2 having an anode pulse rise time of less than 1 ns
6A203	Cameras and components, other than those controlled by 6A003
6A205	"Lasers", "laser" amplifiers and oscillators, other than those controlled by 0B001.g.5, 0B001.h.6, or 6A005, as follows (see List of Items Controlled)
6A225	Velocity interferometers for measuring velocities in excess of 1 km/s during time intervals of less than 10 microseconds
6A226	Pressure sensors
6A991	Marine or terrestrial acoustic equipment, n.e.s., capable of detecting or locating underwater objects or features or positioning surface vessels or underwater vehicles; and specially designed components, n.e.s.
6A992	Optical Sensors, not controlled by 6A002
6A993	Cameras not controlled by 6A003 or 6A203, as follows (see List of Items Controlled)
6A994	Optics, not controlled by 6A004
6A995	"Lasers" (see List of Items Controlled)
6A996	"Magnetometers" not controlled by 6A006, "Superconductive" electromagnetic sensors, and specially designed components therefore, as follows (see List of Items Controlled)
6A997	Gravity meters (gravimeters) for ground use, n.e.s.
6A998	Radar systems, equipment and assemblies, n.e.s., (see List of Items Controlled), and specially designed components therefor.
6A999	Specific processing equipment
6B004	Optical equipment
6B007	Equipment to produce, align and calibrate land-based gravity meters with a static accuracy of better than 0.1 mgal
6B008	Pulse radar cross-section measurement systems having transmit pulse widths of 100 ns or less and specially designed components therefor
6B108	Systems, other than those controlled by 6B008, specially designed for radar cross section measurement usable for rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km and their subsystems
6B995	Specially designed or modified equipment, including tools, dies, fixtures or gauges, and other specially designed components and accessories therefor
6C002	Optical sensor materials
6C004	Optical materials

ECCN	Description
6C005	Synthetic crystalline "laser" host material in unfinished form
6C992	Optical sensing fibers not controlled by 6A002.d.3 which are modified structurally to have a 'beat length' of less than 500 mm (high birefringence) or optical sensor materials not described in 6C002.b and having a zinc content of equal to or more than 6% by 'mole fraction.'
6C994	Optical materials
6D001	"Software" specially designed for the "development" or "production" of equipment controlled by 6A004, 6A005, 6A008 or 6B008
6D002	"Software" specially designed for the "use" of equipment controlled by 6A002.b, 6A008 or 6B008
6D003	Other "software"
6D102	"Software" specially designed or modified for the "use" of goods controlled by 6A108
6D103	"Software" that processes post-flight, recorded data, enabling determination of vehicle position throughout its flight path, specially designed or modified for "missiles"
6D991	"Software" specially designed for the "development", "production", or "use" of equipment controlled by 6A002.e, 6A991, 6A996, 6A997, or 6A998
6D992	"Software" specially designed for the "development" or "production" of equipment controlled by 6A992, 6A994, or 6A995
6D993	Other "software" not controlled by 6D003
6D994	"Software" designed or modified for cameras incorporating "focal plane arrays" specified by 6A002.a.3.f and designed or modified to remove a frame rate restriction and allow the camera to exceed the frame rate specified in 6A003.b.4. Note 3.a.
6E001	"Technology" according to the General Technology Note for the "development" of equipment, materials or "software" controlled by 6A (except 6A991, 6A992, 6A994, 6A995, 6A996, 6A997, or 6A998), 6B (except 6B995), 6C (except 6C992 or 6C994), or 6D (except 6D991, 6D992, or 6D993)
6E002	"Technology" according to the General Technology Note for the "production" of equipment or materials controlled by 6A (except 6A991, 6A992, 6A994, 6A995, 6A996, 6A997 or 6A998), 6B (except 6B995) or 6C (except 6C992 or 6C994)
6E003	Other "technology"
6E101	"Technology" according to the General Technology Note for the "use" of equipment or "software" controlled by 6A002, 6A007.b and .c, 6A008, 6A102, 6A107, 6A108, 6B108, 6D102 or 6D103
6E201	"Technology", not controlled by 6E001 or 6E002, according to the General Technology Note for the "use" of equipment controlled by 6A003.a.2. 6A003.a.3, 6A003.a.4; 6A005.a.2, 6A005.a.4, 6A005.b.2.b, 6A005.b.3.a, 6A005.b.4.b, 6A005.b.6.b, 6A005.c.1.b, 6A005.c.2.b, 6A005.d.3.c, or 6A005.d.4.c (as described in the license requirement note to 6A005); 6A202, 6A203, 6A205, 6A225 or 6A226
6E991	"Technology" for the "development", "production" or "use" equipment controlled by 6A991, 6A996, 6A997, or 6A998
6E992	"Technology" for the "development" or "production" of equipment, materials or "software" controlled by 6A992, 6A994, or 6A995, 6B995, 6C992, 6C994, or 6D993
6E993	Other "technology", not controlled by 6E003
	Category 7 - Navigation and Avionics
7A001	Accelerometers as follows (see List of Items Controlled), and specially designed components therefor
7A002	Gyros or angular rate sensors, having any of the following characteristics (see List of Items Controlled), and specially designed components therefor
7A003	Inertial Systems and specially designed components therefor.
7A004	Gyro-astro compasses, and other devices which derive position or orientation by means of automatically tracking celestial bodies or satellites, with an azimuth accuracy of equal to or less (better) than 5 seconds of arc
7A005	Global navigation satellite systems (i.e. GPS or GLONASS) receiving equipment, and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
7A006	Airborne altimeters operating at frequencies other than 4.2 to 4.4 GHz inclusive
7A008	Underwater sonar navigation systems, using Doppler velocity or correlation velocity logs integrated with a heading source, having a positioning accuracy of equal to or less (better) than 3% of distance traveled Circular Error Probable (CEP), and specially designed components therefore
7A101	Accelerometers, other than those controlled by 7A001 (see List of Items Controlled), and specially designed components therefore
7A102	All types of gyros, other than those controlled by 7A002, usable in rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km, with a rated "drift rate" 'stability' of less than 0.5 degrees (1 sigma or rms) per hour in a 1 g environment and specially designed components therefor
7A103	Instrumentation, navigation equipment and systems, other than those controlled by 7A003, and specially designed components therefor
7A104	Gyro-astro compasses and other devices, other than those controlled by 7A004, which derive position or orientation by means of automatically tracking celestial bodies or satellites and specially designed components therefor

ECCN	Description
7A105	Receiving equipment for Global Navigation Satellite Systems (GNSS) (e.g. GPS, GLONASS, or Galileo) having any of the following characteristics, and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls See 22 CFR part 121)
7A106	Altimeters, other than those controlled by 7A006, of radar or laser radar type, designed or modified for use in "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
7A107	Three axis magnetic heading sensors having *all* of the following characteristics, and specially designed components therefor.
7A115	Passive sensors for determining bearing to specific electromagnetic source (direction finding equipment) or terrain characteristics, designed or modified for use in "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
7A116	Flight control systems (hydraulic, mechanical, electro-optical, or electro-mechanical flight control systems (including fly-by-wire systems) and attitude control equipment) designed or modified for "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
7A117	"Guidance sets" capable of achieving system accuracy of 3.33% or less of the range (e.g., a "CEP" of 10 km or less at a range of 300 km). (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
7A994	Other navigation direction finding equipment, airborne communication equipment, all aircraft inertial navigation systems not controlled under 7A003 or 7A103, and other avionic equipment, including parts and components, n.e.s.
7B001	Test, calibration or alignment equipment specially designed for equipment controlled by 7A (except 7A994)
7B002	Equipment, as follows (see List of Items Controlled), specially designed to characterize mirrors for ring laser" gyros.
7B003	Equipment specially designed for the "production" of equipment controlled by 7A (except 7A994)
7B101	"Production equipment", and other test, calibration, and alignment equipment, other than that described in 2B119 to 2B122, 7B003, and 7B102, designed or modified to be used with equipment controlled by 7A001 to 7A004 or 7A101 to 7A104
7B102	Equipment, other than those controlled by 7B002, designed or modified to characterize mirrors, for laser gyro equipment, as follows (see List of Items Controlled)
7B103	Specially designed "production facilities" for equipment controlled by 7A117 (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121.).
7B994	Other equipment for the test, inspection, or "production" of navigation and avionics equipment
7D001	"Software" specially designed or modified for the "development" or "production" of equipment controlled by 7A (except 7A994) or 7B (except 7B994)
7D002	"Source code" for the "use" of any inertial navigation equipment including inertial equipment not controlled by 7A003 or 7A004, or Attitude and Heading Reference Systems (AHRS) (except gimballed AHRS)
7D003	Other "software"
7D101	"Software" specially designed or modified for the "use" of equipment controlled by 7A001 to 7A006, 7A101 to 7A107, 7A115, 7A116, 7B001, 7B002, 7B003, 7B101, 7B102, or 7B103
7D102	Integration "software", as follows (See List of Items Controlled)
7D103	"Software" specially designed for modelling or simulation of the "guidance sets" controlled by 7A117 or for their design integration with "missiles". (This entry is subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121.)
7D994	"Software", n.e.s., for the "development", "production", or "use" of navigation, airborne communication and other avionics
7E001	"Technology" according to the General Technology Note for the "development" of equipment or "software" controlled by 7A (except 7A994), 7B (except 7B994) or 7D (except 7D994)
7E002	"Technology" according to the General Technology Note for the "production" of equipment controlled by 7A (except 7A994) or 7B (except 7B994)
7E003	"Technology" according to the General Technology Note for the repair, refurbishing or overhaul of equipment controlled by 7A001 to 7A004
7E004	Other "technology"
7E101	"Technology", according to the General Technology Note for the "use" of equipment controlled by 7A001 to 7A006, 7A101 to 7A107, 7A115 to 7A117, 7B001, 7B002, 7B003, 7B101, 7B102, 7B103, or 7D101 to 7D103
7E102	"Technology" for protection of avionics and electrical subsystems against electromagnetic pulse (EMP) and electromagnetic interference (EMI) hazards, from external sources
7E104	Design "Technology" for the integration of the flight control, guidance, and propulsion data into a flight management system, designed or modified for "missiles", for optimization of rocket system trajectory. (This entry is subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121.)
7E994	"Technology", n.e.s., for the "development", "production", or "use" of navigation, airborne communication, and other avionics equipment

Category 8 - Marine

ECCN	Description
8A001	Submersible vehicles and surface vessels
8A002	Systems, equipment and components, as follows (see List of Items Controlled)
8A018	Items on the Wassenaar Arrangement Munitions List
8A918	Marine boilers
8A992	Vessels, marine systems or equipment, not controlled by 8A001, 8A002 or 8A018, and specially designed parts therefor
8B001	Water tunnels, having a background noise of less than 100 dB (reference 1 μPa, 1 Hz) in the frequency range from 0 to 500 Hz, designed for measuring acoustic fields generated by a hydro-flow around propulsion system models
8C001	Syntactic foam designed for underwater use
8D001	"Software" specially designed or modified for the "development", "production" or "use" of equipment or materials controlled by 8A (except 8A018 or 8A992), 8B or 8C
8D002	Specific "software" specially designed or modified for the "development", "production", repair, overhaul or refurbishing (re-machining) of propellers specially designed for underwater noise reduction
8D992	"Software" specially designed or modified for the "development", "production" or "use" of equipment controlled by 8A992
8E001	"Technology" according to the General Technology Note for the "development" or "production" of equipment or materials controlled by 8A (except 8A018 or 8A992), 8B or 8C
8E002	Other "technology"
8E992	"Technology" for the "development", "production" or "use" of equipment controlled by 8A992
	Category 9 - Aerospace and Propulsion
9A001	Aero gas turbine engines incorporating any of the "technologies" controlled by 9E003.a
9A002	Marine gas turbine engines with an ISO standard continuous power rating of 24,245 kW or more and a specific fuel consumption not exceeding 0.219 kg/kWh in the power range from 35 to 100%, and specially designed assemblies and components therefor
9A003	Specially designed assemblies and components, incorporating any of the "technologies" controlled by 9E003.a, for gas turbine engine propulsion systems
9A004	Space launch vehicles and "spacecraft"
9A005	Liquid rocket propulsion systems containing any of the systems or components controlled by 9A006. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A006	Systems and components specially designed for liquid rocket propulsion systems. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A007	Solid rocket propulsion systems. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A008	Components specially designed for solid rocket propulsion systems. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A009	Hybrid rocket propulsion systems. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A010	Specially designed components, systems and structures for launch vehicles, launch vehicle propulsion systems or "spacecraft". (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A011	Ramjet, scramjet or combined cycle engines and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A012	Non-military "unmanned aerial vehicles," ("UAVs"), associated systems, equipment and components, as follows
9A018	Equipment on the Wassenaar Arrangement Munitions List
9A101	Turbojet and turbofan engines (including turbocompound engines), other than those controlled by 9A001, as follows (see List of Items Controlled)
9A103	Liquid propellant tanks specially designed for the propellants controlled in ECCNs 1C011, 1C111 or other liquid propellants used in "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A104	Sounding rockets, capable of a range of at least 300 km. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A105	Liquid propellant rocket engines. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A106	Systems or components, other than those controlled by 9A006, usable in "missiles", as follows (see List of Items Controlled), and specially designed for liquid rocket propulsion systems
9A107	Solid propellant rocket engines, usable in rockets with a range capability of 300 Km or greater, other than those controlled by 9A007, having total impulse capacity equal to or greater than 8.41×10^5 Ns, but less than 1.1×10^6 Ns. (These items are

ECCN	Description
	subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A108	Solid rocket propulsion components, other than those controlled by 9A008, usable in rockets with a range capability of 300 Km or greater. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A109	Hybrid rocket motors, usable in rockets with a range capability of 300 Km or greater, other than those controlled by 9A009, and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A110	Composite structures, laminates and manufactures thereof, other than those controlled by entry 9A010, specially designed for use in "missiles" or the subsystems controlled by entries 9A005, 9A007, 9A105.a, 9A106 to 9A108, 9A116, or 9A119
9A111	Pulse jet engines, usable in rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300km, and specially designed components therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121.)
9A115	Apparatus, devices and vehicles, designed or modified for the transport, handling, control, activation and launching of rockets, missiles, and unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A116	Reentry vehicles, usable in "missiles", and equipment designed or modified therefor. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A117	Staging mechanisms, separation mechanisms, and interstages therefor, usable in "missiles". (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A118	Devices to regulate combustion usable in engines which are usable in rockets with a range capability greater than 300 Km or greater, controlled by 9A011 or 9A111. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A119	Individual rocket stages, usable in rockets with a range capability greater than 300 Km or greater, other than those controlled by 9A005, 9A007, 9A009, 9A105, 9A107 and 9A109. (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9A120	Complete unmanned aerial vehicles, not specified in 9A012, having all of the following
9A980	Nonmilitary mobile crime science laboratories; and parts and accessories, n.e.s.
9A990	Diesel engines, n.e.s., and tractors and specially designed parts therefor, n.e.s.
9A991	"Aircraft", n.e.s., and gas turbine engines not controlled by 9A001 or 9A101 and parts and components, n.e.s.
9A992	Complete canopies, harnesses, and platforms and electronic release mechanisms therefor, except such types as are in normal sporting use
9B001	Specially designed equipment, tooling and fixtures, as follows (see List of Items Controlled), for manufacturing gas turbine blades, vanes or tip shroud castings
9B002	On-line (real time) control systems, instrumentation (including sensors) or automated data acquisition and processing equipment, specially designed for the "development" of gas turbine engines, assemblies or components incorporating "technologies" controlled by 9E003.a
9B003	Equipment specially designed for the "production" or test of gas turbine brush seals designed to operate at tip speeds exceeding 335 m/s, and temperatures in excess of 773 K (500°C), and specially designed components or accessories therefor
9B004	Tools, dies or fixtures for the solid state joining of "superalloy", titanium or intermetallic airfoil-to-disk combinations described in 9E003.a.3 or 9E003.a.6 for gas turbines
9B005	On-line (real time) control systems, instrumentation (including sensors) or automated data acquisition and processing equipment, specially designed for use with any of the following wind tunnels or devices
9B006	Acoustic vibration test equipment capable of producing sound pressure levels of 160 Db or more (referenced to 20 μPa) with a rated output of 4 kW or more at a test cell temperature exceeding 1,273 K (1,000°C), and specially designed quartz heaters therefor
9B007	Equipment specially designed for inspecting the integrity of rocket motors using non-destructive test (NDT) techniques other than planar X-ray or basic physical or chemical analysis
9B008	Transducers specially designed for the direct measurement of the wall skin friction of the test flow with a stagnation temperature exceeding 833 K (560°C)
9B009	Tooling specially designed for producing turbine engine powder metallurgy rotor components capable of operating at stress levels of 60% of ultimate tensile strength (UTS) or more and metal temperatures of 873 K (600°C) or more
9B010	Equipment specially designed for the production of "UAVs" and associated systems, equipment and components controlled by 9A012
9B105	Wind tunnels for speeds of Mach 0.9 or more, usable for rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km and their subsystems

ECCN	Description
9B106	Environmental chambers usable for rockets, missiles, or unmanned aerial vehicles capable of achieving a "range" equal to or greater than 300 km and their subsystems, as follows (see List of Items Controlled)
9B115	Specially designed "production equipment" for the systems, sub-systems and components controlled by 9A004 to 9A009, 9A011, 9A101, 9A104 to 9A109, 9A111, 9A116 to 9A119
9B116	Specially designed "production facilities" for the systems, sub-systems, and components controlled by 9A004 to 9A009, 9A011, 9A012, 9A101, 9A104 to 9A109, 9A111, 9A116 to 9A119
9B117	Test benches and test stands for solid or liquid propellant rockets, motors or rocket engines
9B990	Vibration test equipment and specially designed parts and components, n.e.s.
9B991	Specially designed equipment, tooling or fixtures, not controlled by 9B001, as described in the List of Items Controlled, for manufacturing or measuring gas turbine blades, vanes or tip shroud castings
9C110	Resin impregnated fiber prepregs and metal coated fiber preforms therefor, for composite structures, laminates and manufactures specified in 9A110, made either with organic matrix or metal matrix utilizing fibrous or filamentary reinforcements having a "specific tensile strength" greater than 7.62 x 104 m and a "specific modulus" greater than 3.18 x 106 m
9D001	"Software" specially designed or modified for the "development" of equipment or "technology" controlled by 9A (except 9A018, 9A990 or 9A991), 9B (except 9B990 or 9B991) or 9E003
9D002	"Software" specially designed or modified for the "production" of equipment controlled by 9A (except 9A018, 9A990, or 9A991) or 9B (except 9B990 or 9B991)
9D003	"Software" specially designed or modified for the "use" of full authority digital electronic engine controls (FADEC) for propulsion systems controlled by 9A (except 9A018, 9A990 or 9A991) or equipment controlled by 9B (except 9B990 or 9B991), as follows (see List of Items Controlled)
9D004	Other "software"
9D018	"Software" for the "use" of equipment controlled by 9A018
9D101	"Software" specially designed or modified for the "use" of commodities controlled by 9B105, 9B106, 9B116, or 9B117
9D103	"Software" specially designed for modelling, simulation or design integration of "missiles", or the subsystems controlled by 9A005, 9A007, 9A105.a, 9A106, 9A108, 9A116 or 9A119. (This entry is subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9D104	"Software" specially designed and modified for the "use" of equipment controlled by 9A001, 9A005, 9A006.d, 9A006.g, 9A007.a, 9A008.d, 9A009.a, 9A010.d, 9A011, 9A012 (for MT controlled items only), 9A101, 9A105, 9A106.c and .d, 9A107, 9A108.c, 9A109, 9A111, 9A115.a, 9A116.d, 9A117, or 9A118
9D105	"Software" that coordinates the function of more than one subsystem, specially designed or modified for "use" in "missiles." (These items are subject to the export licensing authority of the U.S. Department of State, Directorate of Defense Trade Controls. See 22 CFR part 121)
9D990	"Software", n.e.s., for the "development" or "production" of equipment controlled by 9A990 or 9B990
9D991	"Software", for the "development" or "production" of equipment controlled by 9A991 or 9B991
9E001	"Technology" according to the General Technology Note for the "development" of equipment or "software" controlled by 9A001.b, 9A004 to 9A012, 9B (except 9B990 or 9B991), or 9D (except 9D990 or 9D991)
9E002	"Technology" according to the General Technology Note for the "production" of equipment controlled by 9A001.b, 9A004 to 9A011 or 9B (except 9B990 or 9B991)
9E003	Other "technology" as follows
9E018	"Technology" for the "development", "production", or "use" of equipment controlled by 9A018
9E101	"Technology" according to the General Technology Note for the "development", "production", or "use" of commodities or software controlled by 9A012, 9A101, 9A104 to 9A111, 9A115 to 9A119, 9C110, 9D101, 9D103, 9D104 or 9D105.
9E102	"Technology" according to the General Technology Note for the "use" of space launch vehicles specified in 9A004, or commodities or software controlled by 9A005 to 9A012, 9A101, 9A104 to 9A111, 9A115 to 9A119, 9B105, 9B106, 9B115, 9B116, 9B117, 9D101, 9D103, 9D104 or 9D105
9E990	"Technology", n.e.s., for the "development" or "production" or "use" of equipment controlled by 9A990 or 9B990
9E991	"Technology", for the "development", "production" or "use" of equipment controlled by 9A991 or 9B991
9E993	Other "technology" not described in 9E003