GROUP 1 - COCOM INTERNATIONAL INDUSTRIAL LIST

The definitions set out in pages 60 to 67 of this Guide apply in respect to this group.

1000. GENERAL TECHNOLOGY NOTE

The export of "technology" which is "required" for the "development", "production" or "use" of products embargoed in the International Industrial List is controlled according to the provisions in each Category. "Technology" "required" for the "development", "production" or "use" of a product under embargo remains under embargo even when applicable to any unembargoed product.

Controls do not apply to that "technology" which is the minimum necessary for the installation, operation, maintenance (checking) and repair of those products which are unembargoed or whose export has been authorised.

N.B.:

This does not release the repair "technology" embargoed by Category 1085.2.a.

Controls do not apply to "technology" "in the public domain" or to "basic scientific research".

GENERAL "SOFTWARE" NOTE

This List does not embargo "software" which is either:

1. Generally available to the public by being:
   a. Sold from stock at retail selling points, without restriction, by means of:
      1. Over-the-counter transactions;
      2. Mail order transactions; or
      3. Telephone call transactions; and
   b. Designed for installation by the user without further substantial support by the supplier; or
2. "In the public domain".

1010. ADVANCED MATERIALS

1011. EQUIPMENT, ASSEMBLIES AND COMPONENTS

1011. 1. Components made from fluorinated compounds, as follows:
   a. Seals, gaskets, sealants or fuel bladders specially designed for aircraft or aerospace use made from more than 50% of any of the materials embargoed by 1013.9.b. or c.;
   b. Piezoelectric polymers and copolymers made from vinylidene fluoride:
      1. In sheet or film form; and
      2. With a thickness exceeding 200 micrometre;
   c. Seals, gaskets, valve seats, bladders or diaphragms made from fluoroelastomers containing at least one vinylether monomer, specially designed for aircraft, aerospace or missile use;

1011. 2. "Composite" structures or laminates:
   a. Having an organic "matrix" and made from materials embargoed by 1013.10.c., d. or e.; or
   b. Having a metal or carbon "matrix" and made from:
      1. Carbon "fibrous or filamentary materials" with:
         a. A specific modulus exceeding 10.15×10^6 m; and
         b. A specific tensile strength exceeding 17.7×10^4 m; or
      2. Materials embargoed by 1013.10.c.;

      Technical Notes:
      1. Specific modulus: Young's modulus in pascals, equivalent to N/m^2 divided by specific weight in N/m^3, measured at a temperature of (296 ± 2) K ((23 ± 2)°C) and a relative humidity of (50 ± 5)%.
      2. Specific tensile strength: ultimate tensile strength in pascals, equivalent to N/m^2 divided by specific weight in N/m^3, measured at a temperature of (296 ± 2) K((23 ± 2)°C) and a relative humidity of (50 ± 5)%.

NOTE:

1011.2. does not embargo composite structures or laminates made from epoxy resin impregnated carbon"fibrous or filamentary materials" for the repair of aircraft structures or laminates, provided the size does not exceed 1 m^2.

1011. 3. Manufactures of non-fluorinated polymeric substances embargoed by 1013.8.a., in film, sheet, tape or ribbon form:
   a. With a thickness exceeding 0.254 mm; or
   b. Coated or laminated with carbon, graphite, metals or magnetic substances.

1012. TEST, INSPECTION AND PRODUCTION EQUIPMENT

1012. 1. Equipment for the production of fibres, prepregs, preforms or "composites" embargoed by 1011.2 or 1013.10., as follows, and specially designed components and accessories therefor:
   a. Filament winding machines of which the motions for positioning, wrapping and winding fibres are coordinated and programmed in three or more axes, specially designed for the manufacture of "composite" structures or laminates from "fibrous or filamentary materials";
   b. Tape-laying or tow-placement machines of which the motions for positioning and laying tape, tows or sheets are coordinated and programmed in two or more axes, specially designed for the manufacture of "composite" airframe or missile structures;
   c. Multidirectional, multidimensional weaving machines or interlacing machines, including adapters and modification kits, for weaving, interlacing or braiding fibres to manufacture "composite" structures, except textile machinery not modified for the above end-uses;
   d. Equipment specially designed or adapted for the production of reinforcement fibres, as follows:
      1. Equipment for converting polymeric fibres (such as polyacrylonitrile, rayon, pitch or polycarbosilane) into carbon fibres or silicon carbide fibres, including special equipment to strain the fibre during heating;
      2. Equipment for the chemical vapour deposition of elements or compounds on heated filamentary substrates to manufacture silicon carbide fibres;
      3. Equipment for the wet-spinning of refractory ceramics(such as aluminium oxide);
      4. Equipment for converting aluminium containing precursor fibres into alumina fibres by heat treatment;
   e. Equipment for producing prepregs embargoed by 1013.10.e. by the hot melt method;
   f. Non-destructive inspection equipment capable of inspecting defects three dimensionally, using ultrasonic or X-ray tomography and specially designed for "composite" materials;
2. Systems and components therefor specially designed for producing metal alloys, metal alloy powder or alloyed materials embargoed by 1013.2.a.2., 1013.2.b. or 1013.2.c.;

1012. 3. Tools, dies, moulds or fixtures, for "superplastic forming" or "diffusion bonding" titanium or aluminium or their alloys, specially designed for the manufacture of:
   a. Airframe or aerospace structures;
   b. Aircraft or aerospace engines; or
   c. Specially designed components for those structures or engines.

1013. MATERIALS

1013. 1. Materials specially designed for use as absorbers of electromagnetic waves, or intrinsically conductive polymers, as follows:
   a. Materials for absorbing frequencies exceeding 2×10^8 Hz but less than 3×10^{12} Hz, except materials as follows:

      NOTE:

      Nothing in 1013.1.a. releases magnetic materials to provide absorption when contained in paint.

      a. 1. Hair type absorbers, constructed of natural or synthetic fibres, with non-magnetic loading to provide absorption;
         2. Absorbers having no magnetic loss and whose incident surface is non-planar in shape, including pyramids, cones, wedges and convoluted surfaces;
         3. Planar absorbers:
            a. Made from:

               Technical Note:

               Absorption test samples for 1013.1.a.3.a. should be a square at least 5 wavelengths of the centre fre-