STATUTORY INSTRUMENTS

1993 No. 2515

CUSTOMS AND EXCISE

The Export of Goods (Control) (Amendment No. 5) Order 1993

Made	-	-	-	-			29th September 1993
Coming in	ito fe	orce		-	-	-	21st October 1993

The Secretary of State, in exercise of powers conferred by section 1 of the Import, Export and Customs Powers (Defence) Act 1939(1) and now vested in him(2), and of all other powers enabling him in that behalf, hereby makes the following Order:

1. This Order may be cited as the Export of Goods (Control) (Amendment No. 5) Order 1993 and shall come into force on 21st October 1993.

- 2. The Export of Goods (Control) Order 1992(3) shall be further amended as follows:—
 - (a) in article 1(2), after the definition of "importation' and 'exportation'" there shall be inserted the following:

"isolated live cultures" includes live cultures in dormant form and in dried preparations;";

- (b) in Group 1 of Part III of Schedule 1:
 - (i) in entry ML6, for the words "Vehicles and related equipment" to "specially designed components therefor:" inclusive, there shall be substituted the following:

"Vehicles and related equipment, as follows, specially designed or modified for military use and components therefor specially designed or modified for military use:";

(ii) at the end of entry ML8, there shall be added the following:

"Note:In this entry "additives" means substances used in explosive formulations to improve their properties."

- (iii) in entry ML9, for the words "and specially designed components therefor:" there shall be substituted the words "and components therefor specially designed or modified for military use:";
- (iv) in entry ML10 head b., for the words "and specially designed components therefor;" there shall be substituted the words "and components therefor specially designed or modified for military use;";

^{(1) 1939} c. 69.

⁽²⁾ SeeS.I. 1970/1537.

⁽³⁾ S.I. 1992/3092, as amended by S.I. 1992/3305 and S.I. 1993/1020, 1692 and 1825.

- (v) in entry ML10 head c., for the words "and specially designed components therefor;" there shall be substituted the words "and components therefor specially designed or modified for military use;";
- (c) in Group 3 of Part III of Schedule 1:
 - (i) for the definition of "deformable mirrors" there shall be substituted the following:
 - ""deformable mirrors" (also known as adaptive optic mirrors) means mirrors having:
 - (a) a single continuous optical reflecting surface which is dynamically deformed by the application of individual torques or forces to compensate for distortions in the optical waveform incident upon the mirror; or
 - (b) multiple optical reflecting elements that can be individually and dynamically repositioned by the application of torques or forces to compensate for distortions in the optical waveform incident upon the mirror;";
 - (ii) after the definition of "fluoride fibres", there shall be inserted the following:

""focal plane array" means a linear or two-dimensional planar layer, or combination of planar layers, of individual detector elements, with or without readout electronics, which work in the focal plane; this is not intended to include a stack of single detector elements or any two, three or four element detectors provided time delay and integration is not performed within the element;";

(iii) for the definition of "maximum bit transfer rate" there shall be substituted the following:

"maximum bit transfer rate" of:

- (a) solid state storage equipment means the number of data bits per second transferred between the equipment and its controller;
- (b) a disk drive means the internal data transfer rate calculated as

 $B \times R \times T$ (bitspersecond)

where:

B = maximum number of data bits per track available to read or write in a single revolution;

- R =revolutions per second;
- T =number of tracks which can be read or written simultaneously; ";
- (iv) at the end of the definition of "microprocessor microcircuit" there shall be added the following:

": this includes chip sets which are designed to operate together to provide the function of amicroprocessor microcircuit;";

- (v) in entry 1C351, for the words "except: Isolated live cultures of a. to d. above in the form of vaccines" there shall be substituted the words "except: Any goodsspecified in this entry in the form of a vaccine";
- (vi) in entry 1C351 head c.8, for the words "Pseudomonas mallei" there shall be substituted the words "Pseudomonas mallei (Burkholderia mallei)";
- (vii) in entry 1C351 head c.9, for the words "Pseudomonas pseudomallei" there shall be substituted the words "Pseudomonas pseudomallei (Burkholderia pseudomallei)";

- (viii) in entry 1C352, for the words "except: Isolated live cultures of a. or b. above in the form of vaccines" there shall be substituted the words "except: Any **goods**specified in this entry in the form of a vaccine";
- (ix) in entry 1C353 head a., for the words "or heads a. or b. of entry 1C352" there shall be substituted the words "or entries 1C352 or 1C354";
- (x) after entry 1C353, there shall be inserted the following entry:
 - "1C354 Plant pathogens, as follows:
 - (a) Bacteria, whether natural, enhanced or modified, either in the form of **isolated live cultures** or as material which has been deliberately inoculated or contaminated with such cultures, as follows:
 - (1) Xanthomonas albilineans;
 - (2) Xanthomonas campestris pv. citri including strains referred to as Xanthomonas campestris pv. citri types A, B, C, D, E or otherwise classified as Xanthomonas citri, Xanthomonas campestris pv. aurantifolia or Xanthomonas campestris pv. citrumelo;
 - (b) Fungi, whether natural, enhanced or modified, either in the form of **isolated live cultures** or as material which has been deliberately inoculated or contaminated with such cultures, as follows:
 - (1) Colletotrichum coffeanum var. virulans;
 - (2) Cochliobolus miyabeanus (Helminthosporium oryzae);
 - (3) Microcyclus ulei (syn. Dothidella ulei);
 - (4) Puccinia graminis (syn. Puccinia graminis f. sp. tritici);
 - (5) Puccinia striiformis (syn. Puccinia glumarum);
 - (6) Magnaporthe grisea (Pyricularia grisea/Pyricularia oryzae).";
- (xi) for entry 1C992, there shall be substituted the following:
 - "1C992 Vaccines for protection against either of the following:
 - (a) Bacillus anthracis; or
 - (b) Botulinum toxin.";
- (xii) for entry 2B350, there shall be substituted the following:
 - "2B350 Chemical manufacturing facilities and equipment, as follows:
 - (a) Reaction vessels or reactors, with or without agitators, with total internal (geometric) volume greater than 0.1 m^3 (100 litres) and less than 20 m³ (20,000 litres), where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:
 - (1) Alloys with more than 25% nickel and 20% chromium by weight;
 - (2) Fluoropolymers;
 - (3) Glass (including vitrified or enamelled coating or glass lining);
 - (4) Nickel or alloys with more than 40% nickel by weight;
 - (5) Tantalum or tantalum alloys;
 - (6) Titanium or titanium alloys; or

(7) Zirconium or zirconium alloys;

- (b) Agitators for use in reaction vessels or reactors where all surfaces of the agitator that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:
 - (1) Alloys with more than 25% nickel and 20% chromium by weight;
 - (2) Fluoropolymers;
 - (3) Glass (including vitrified or enamelled coatings or glass lining);
 - (4) Nickel or alloys with more than 40% nickel by weight;
 - (5) Tantalum or tantalum alloys;
 - (6) Titanium or titanium alloys; or
 - (7) Zirconium or zirconium alloys;
- (c) Storage tanks, containers or receivers with a total internal (geometric) volume greater than 0.1 m³ (100 litres) where all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:
 - Alloys with more than 25% nickel and 20% chromium by weight;
 - (2) Fluoropolymers;
 - (3) Glass (including vitrified or enamelled coatings or glass lining);
 - (4) Nickel or alloys with more than 40% nickel by weight;
 - (5) Tantalum or tantalum alloys;
 - (6) Titanium or titanium alloys; or
 - (7) Zirconium or zirconium alloys;
- (d) Heat exchangers or condensers with a heat transfer surface area of less than 20 m², where all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:
 - Alloys with more than 25% nickel and 20% chromium by weight;
 - (2) Fluoropolymers;
 - (3) Glass (including vitrified or enamelled coatings or glass lining);
 - (4) Graphite;
 - (5) Nickel or alloys with more than 40% nickel by weight;
 - (6) Tantalum or tantalum alloys;
 - (7) Titanium or titanium alloys; or
 - (8) Zirconium or zirconium alloys;
- (e) Distillation or absorption columns of internal diameter greater than 0.1 m, where all surfaces that come in direct contact with the

chemical(s) being processed are made from any of the following materials:

- (1) Alloys with more than 25% nickel and 20% chromium by weight;
- (2) Fluoropolymers;
- (3) Glass (including vitrified or enamelled coatings or glass lining);
- (4) Graphite;
- (5) Nickel or alloys with more than 40% nickel by weight;
- (6) Tantalum or tantalum alloys;
- (7) Titanium or titanium alloys; or
- (8) Zirconium or zirconium alloys;
- (f) Remotely operated filling equipment in which all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:
 - (1) Alloys with more than 25% nickel and 20% chromium by weight; or
 - (2) Nickel or alloys with more than 40% nickel by weight;
- (g) Multiple seal valves incorporating a leak detection port, bellowsseal valves, non-return (check) valves or diaphragm valves, in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:
 - (1) Alloys with more than 25% nickel and 20% chromium by weight;
 - (2) Fluoropolymers;
 - (3) Glass (including vitrified or enamelled coatings or glass lining);
 - (4) Nickel or alloys with more than 40% nickel by weight;
 - (5) Tantalum or tantalum alloys;
 - (6) Titanium or titanium alloys; or
 - (7) Zirconium or zirconium alloys;
- (h) Multi-walled piping incorporating a leak detection port, in which all surfaces that come in direct contact with the chemical(s) being processed or contained are made from any of the following materials:
 - (1) Alloys with more than 25% nickel and 20% chromium by weight;
 - (2) Fluoropolymers;
 - (3) Glass (including vitrified or enamelled coatings or glass lining);
 - (4) Graphite;
 - (5) Nickel or alloys with more than 40% nickel by weight;
 - (6) Tantalum or tantalum alloys;
 - (7) Titanium or titanium alloys; or

(8) Zirconium or zirconium alloys;

- (i) Multiple-seal, canned drive, magnetic drive, bellows or diaphragm pumps, with manufacturer's specified maximum flow-rate greater than 0.6 m³/hour, or vacuum pumps with manufacturer's specified maximum flow-rate greater than 5 m³/hour (under standard temperature (273 K (0°C)) and pressure (101.3 kPa) conditions), in which all surfaces that come in direct contact with the chemical(s) being processed are made from any of the following materials:
 - (1) Alloys with more than 25% nickel and 20% chromium by weight;
 - (2) Ceramics;
 - (3) Ferrosilicon;
 - (4) Fluoropolymers;
 - (5) Glass (including vitrified or enamelled coatings or glass lining);
 - (6) Graphite;
 - (7) Nickel or alloys with more than 40% nickel by weight;
 - (8) Tantalum or tantalum alloys;
 - (9) Titanium or titanium alloys; or
 - (10) Zirconium or zirconium alloys;
- (j) Incinerators designed to destroy chemicals specified in entry 1C350, having specially designed waste supply systems, special handling facilities and an average combustion chamber temperature greater than 1273 K (1000°C), in which all surfaces in the waste supply system that come into direct contact with the waste products are made from or lined with any of the following materials:
 - (1) Alloys with more than 25% nickel and 20% chromium by weight;
 - (2) Ceramics; or
 - (3) Nickel or alloys with more than 40% nickel by weight.";

(xiii) for entry 2B351 there shall be substituted the following:

"2B351 Toxic gas monitoring systems, as follows; and dedicated detectors therefor:

- (a) Designed for continuous operation and usable for the detection of chemical warfare agents, chemicals specified in entry 1C350 or organic compounds containing phosphorus, sulphur, fluorine or chlorine, at concentrations of less than 0.3 mg/m³ or
- (b) Designed for the detection of cholinesterase-inhibiting activity.";

(xiv) after entry 2E201 there shall be added the following entry:

- "(2E301) **Technology required** for the **use** of **goods** specified in entries 2B350 to 2B352.";
- (xv) in sub-category 3A for Notes 1 and 2 there shall be substituted the following:

"1. The control on export of equipment, devices and components described in entries 3A001 or 3A002, other than those described in sub-heads a.3. to a.10.

or sub-head a.12. of entry 3A001, which are specially designed for or which have the same functional characteristics as other equipment, is determined by the export control requirements applying to that other equipment.

2. The control on export of integrated circuits described in sub– heads a.3. to a.9. or sub–head a.12. of entry 3A001, which are unalterably programmed or designed for a specific function in a piece of equipment, is determined by the export control requirements applying to that equipment.

NB:

- 1. When the export control requirements applying to the equipment cannot be determined, the integrated circuits are evaluated against the parameters in entry 3A001.
- 2. For silicon based **microcomputer microcircuits** or microcontroller microcircuits, having an operand (data) word length of 8 bit or less, the export control requirements thereof are determined only by sub-head a.3. of entry 3A001.";

(xvi) in entry 3A001:

(a) for sub-head a.1. there shall be substituted the following:

"1. Integrated circuits, designed or rated as radiation hardened to withstand either of the following:

- (a) A total dose of 5×10^5 rads(Si) or higher; or
- (b) A dose rate upset of 5×10^8 rads(Si)/s or higher;";
- (b) for sub-head a.2. there shall be substituted the following:

"2. Integrated circuits described in sub-heads a.3. to a.10. or sub-head a.12. of this entry, as follows:

- (a) Rated for operation at an ambient temperature above 398 K (125°C);
- (b) Rated for operation at an ambient temperature below 218 K $(-55^{\circ}C)$; or

Note: Sub-head a.2. does not apply to integrated circuits for civil automobile or railway train applications.";

- (c) in sub-head a.3. Note 1. shall be deleted and for the words "Notes: 2" there shall be substituted the word "Note:";
- (d) in sub-head a.3.d., for "2.4 Mbyte/s" there shall be substituted "2.5 Mbyte/s";
- (e) for sub-head a.4. there shall be substituted the following:

"4. Electrically erasable programmable read–only memories (EEPROMs), static random–access memories (SRAMs) and storage integrated circuits manufactured from a com– pound semiconductor, as follows:

- (a) EEPROMs with a storage capacity:
 - (1) Exceeding 16 Mbit per package for flash memory types; or

- (2) Exceeding either of the following limits for all other EEPROM types:
 - (a) 4 Mbit per package; or
 - (b) 1 Mbit per package and having a maximum access time of less than 80 ns;
- (b) SRAMs with a storage capacity:
 - (1) Exceeding 4 Mbit per package; or
 - (2) Exceeding 1 Mbit per package and having a maximum access time of less than 20 ns;
- (c) Storage integrated circuits manufactured from a compound semiconductor;";
- (f) in sub-head a.5., for the words "Converter integrated circuits, as follows:" there shall be substituted the words "Analogue-to-digital and digital-toanalogue converter integrated circuits, as follows:";
- (g) in sub-head a.7.a., after the words "An equivalent" there shall be added the word "usable";
- (h) in sub-head a.8.a., for the words "An equivalent gate count of more than 5000" there shall be substituted the words "An equivalent usable gate count of more than 30,000";
- (i) in sub-head a.8.b., for "100 MHz" there shall be substituted "133 MHz";
- (j) in sub-head a.11., after the words "described in sub-heads a.3. to a.10." there shall be added the words "or sub-head a.12.";
- (k) after sub-head a.11. there shall be inserted the following sub-head:

"12. Fast Fourier Transform (FFT) processors having any of the following:

- (a) A rated execution time for a 1,024 point complex FFT of less than 1 ms;
- (b) A rated execution time for an N-point complex FFT of other than 1,024 points of less than N log₂ N/10,240 ms, where N is the number of points; or
- (c) A butterfly throughput of more than 5.12 MHz;";
- (l) in Note 1 to sub-head b.1., after the words "frequency agile" there shall be inserted the word "magnetron";
- (m) in sub-head b.1.a.3., after the words "or derivatives thereof" there shall be added the following "with an **instantaneous bandwidth** of more than 7% or a peak power exceeding 2.5 kW";
- (n) for sub-head b.1.a.4. there shall be substituted the following:

"4. Helix tubes, or derivatives thereof, with any of the following characteristics:

- (a) An **instantaneous bandwidth** of more than one octave, and average power
 - (expressed in kW) times frequency
 - (expressed in GHz) of more than 0.5;

(b) An **instantaneous bandwidth** of one octave or less, and average power

(expressed in kW) times frequency

(expressed in GHz) of more than 1; or

(c) Space qualified;";

- (o) in sub-head b.4. the Note shall be deleted;
- (p) for sub-head b.7. there shall be substituted the following:

"7. Mixers and converters designed to extend the frequency range of equipment described in heads c., e. or f. of entry 3A002 beyond the limits stated therein;";

(q) for sub-head c.1., there shall be substituted the following:

"1. Surface acoustic wave and surface skimming (shallow bulk) acoustic wave devices (i.e., signal processing devices employing elastic waves in materials), having any of the following:

- (a) A carrier frequency exceeding 2.5 GHz;
- (b) A carrier frequency of 2.5 GHz or less, and:
 - (1) A frequency side-lobe rejection exceeding 55 dB;
 - (2) A product of the maximum delay time and the bandwidth (time in microseconds and bandwidth in MHz) of more than 100; or
 - (3) A dispersive delay of more than 10 microseconds; or
- (c) A carrier frequency exceeding 1 GHz and a bandwidth of 250 MHz or more;";
- (r) in sub-head c.3. the Note shall be deleted;
- (s) in sub-head e.1.a., for "350 Wh/kg" there shall be substituted "480 Wh/kg";
- (t) in sub-head e.3., for the words "discharged in less than one minute" there shall be substituted the words "discharged in less than one second";
- (u) for sub-head e.3.a., there shall be substituted the following:
 - "(a) Energy delivered during the discharge exceeding 10 kJ in the first second;";
- (v) in sub-head e.5. for the words "including tubes" there shall be substituted the words "and tubes therefor".

(xvii) in entry 3A002:

- (a) in sub-head a.2., for the words "television recording as" there shall be substituted the words "television recording using a signal format";
- (b) for sub-head a.3. there shall be substituted the following:

"3. Digital instrumentation magnetic tape data recorders employing helical scan techniques or fixed head techniques, having either of the following:

- (a) A maximum digital interface transfer rate exceeding 175 Mbit/s; or
- (b) Space qualified;

Note:Sub-head a.3. of this entry does not specify analogue gnetic tape recorders equipped with HDDR conversion electronics and configured to record only digital data.";

- (c) in sub-head a.4., for "60 Mbit/s" there shall be substituted "175 Mbit/s";
- (d) after sub-head a.4. there shall be inserted the following sub-head:

"5. Waveform digitisers and transient recorders with both of the following:

- (a) Digitising rates equal to or more than 200 million samples per second and a resolution of 10 bits or more; and
- (b) A continuous throughput of 2 Gbit/s or more;

Technical Note: For those instruments with a parallel bus architecture, the continuous throughput rate is the highest word rate multiplied by the number of bits in a word. "Continuous throughput" is the fastest data rate the instrument can output to mass storage without the loss of any information whilst sustaining the sampling rate and analogue–to–digital conversion.";

- (xviii) in entry 3A202, after the words "Oscilloscopes and transient recorders" there shall be inserted the following "other than those specified in sub-head a.5. of entry 3A002,";
- (xix) in entry 3B003 head b., for the words "in entry 3B006" there shall be substituted the words "in entry 3B005";
- (xx) in entry 3B004 head b., for the words "in entry 3B006" there shall be substituted the words "in entry 3B005";
- (xxi) entry 3B005 shall be deleted;
- (xxii) entry 3B006 shall be re-designated 3B005;
- (xxiii) entry 3B007 shall be re-designated 3B006, and for head a. thereof there shall be substituted the following:
 - "(a) Align and expose step and repeat equipment for wafer processing using photo–optical or X–ray methods, having either of the following:
 - (1) A light source wavelength shorter than 400 nm; or
 - (2) Capable of producing a pattern with a minimum resolvable feature size of 0.7 micrometre or less when calculated by the following formula:

$$MRF = \frac{(wavelengthinmicrometre) \times (Kfactor)}{numerical aperture}$$

where

"MRF" is the minimum resolvable feature size;

the "K factor" = 0.7; and

"wavelength" is the exposure light source wavelength. ";

- (xxiv) entry 3B008 shall be re-designated 3B007;
- (xxv) entry 3B009 shall be re-designated 3B008, and in head b. thereof the following shall be deleted "and electronic assemblies thereof";
- (xxvi) in entry 3C002, for head a. there shall be substituted the following:

- "(a) Positive resists for semiconductor lithography specially adjusted (optimised) for use at wavelengths below 370 nm;";
- (xxvii) in entry 3E001 Note b., for the words "sub-heads a.3. to a.11." there shall be substituted the words "sub-heads a.3. to a.12.";
- (xxviii) in entry 3E002, after head c. there shall be inserted the following head:
 - "(d) Substrates of films of diamond for electronic components.";
- (xxix) in entry 4A001:
 - (a) in sub-head a.1. for the words "or above 343 K (70°C)" there shall be substituted the words "or above 358 K (85°C)";
 - (b) in the Note to sub-head a.1. for the words "railway engine applications" there shall be substituted the words "railway train applications";
- (xxx) in entry 4A003:
 - (a) in Note 2., for the words "**Digital computers** or related equipment described in this entry are specified by the entry that refers to other equipment or systems provided:" there shall be substituted the following:

"The control on export of **digital computers** or related equipment described in this entry is determined by the export control requirements applying to the other equipment or systems, provided:"

- (b) in sub-head e.1. for "25 Mbit/s" there shall be substituted "47 Mbit/s";
- (c) in sub-head e.2. for "36 Mbit/s" there shall be substituted "80 Mbit/s";
- (xxxi) in entry 4A102, for the Note there shall be substituted the following:

"Note: This entry only applies when the equipment is supplied with software specified in entries 7D103 or 9D103.";

- (xxxii) in the Technical Note to Category 4:
 - (a) for the words "Note: This aggregation should not be applied to computers connected through a local area network not specified in entry 5A001", there shall be substituted the following:

"Notes:

1. For aggregations of multiple CEs which have both shared and unshared memory subsystems, the calculation of CTP is completed hierarchically, in two steps: first, aggregate the groups of CEs sharing memory, second calculate the CTP of the groups using the calculation method for multiple CEs not sharing memory.

2. This aggregation should not be applied to computers connected through a **local area network**not specified in entry 5A001.

3. CEs that are limited to input/output and peripheral functions (e.g. disk drive, communication and video display controllers) are not aggregated into the CTP calculation.";

(b) in Note X, for the words "If a single CE has both scalar function and vector function, use larger value" there shall be substituted the words "If a single CE has both scalar function and vector function, use the shorter execution time value"; (c) in the Note to the heading "TP for each supported operand length WL" there shall be added the following:

"The combination of a mantissa ALU and an exponent ALU of a floating point processor or unit is considered to be one **computing element** (CE) with a Word Length (WL) equal to the number of bits in the data representation (typically 32 or 64) for purposes of the **Composite Theoretical Performance** (CTP) calculation.";

- (d) for the heading "CTP for CPUs and aggregation of CEs" there shall be substituted "CTP for aggregations of CEs, including CPUs";
- (e) for the words "where Si = sum of maximum data rates (in units of MBytes/ sec) for all data channels connected to the ith CE or CPU,", there shall be substituted the following:

"where Si = sum of the maximum data rates (in units of MByte/s) for all data channels connected to the ith CE or group of CEs sharing memory.";

(f) for the Note at the end of the Technical Note there shall be substituted the following:

"Note:

If Ci exceeds 0.75, the formula for a CE or group of CEs sharing direct addressable memory applies (i.e., Ci cannot exceed 0.75).";

(xxxiii) in entry 5A001, for sub-head b.3.a. there shall be substituted the following:

"(a) Modems using the **bandwidth of one voice channel** with a **data signalling rate** exceeding 19,200 bit/s;";

(xxxiv) in entry 6A001:

(a) for the Note to sub-head a.1. there shall be substituted the following:

"Note:

Sub-head a.1. to this entry does not specify:

- (a) Depth sounders operating vertically below the apparatus, not including a scanning function exceed- ing ±10°, and limited to measuring the depth of water, the distance of submerged or buried objects or fish finding;
- (b) Acoustic beacons, as follows:
 - (1) Acoustic emergency beacons; or
 - (2) Pingers specially designed for relocating or returning to an underwater position.";
- (b) for sub-head a.1.b.6. there shall be substituted the following:

"6. Designed to operate with an unambiguous display range exceeding 5,120 m;";

(c) for the Note to sub-head a.1.c. there shall be substituted the following:

"Notes:

1. The control on export of acoustic projectors, including transducers, specially designed for other equipment is determined by the export control requirements applying to that equipment.

2. Sub-head a.l.c. of this entry does not specify electronic sources which direct the sound vertically only, or mechanical (e.g., air gun or vapour-shock gun) or chemical (e.g., explosive) sources.";

- (d) the Note after sub-head a.1.c.4. shall be deleted;
- (e) in sub-head a.2.b., after the words "Towed acoustic hydrophone arrays with" there shall be added the words "any of the following";
- (f) at the end of sub-head a.2.b.2., the word "or" shall be deleted;
- (g) for sub-head a.2.b.4. there shall be substituted the following:

"4. Heading sensors specified by sub-head a.2.d of this entry;";

- (h) after sub-head a.2.c. there shall be inserted the following sub-head:
 - "(d) Heading sensors having an accuracy of better than $\pm 0.5^{\circ}$; and
 - Designed to be incorporated within the array hosing and to operate at depths exceeding 35 m or having an adjustable or removable depth sensing device in order to operate at depths exceeding 35 m; or
 - (2) Designed to be mounted external to the array hosing and having a sensor unit capable of operating with 360° roll at depths exceeding 35 m;";

(xxxv) in entry 6A002:

(a) in sub-head a.1. for the words "**Space qualified**" to "any of the following:" inclusive there shall be substituted the following:

"1. Space qualified solid-state detectors having any of the following:";

(b) for sub-head a.1.a.1. there shall be substituted the following:

"1. A peak response in the wavelength range exceeding 10 nm but not exceeding 300 nm; and";

- (c) in sub-head a.3., the words "linear or two dimensional" shall be deleted;
- (d) immediately before the word "Notes" in sub-head a.3., there shall be inserted the following:

"Tehnical Note:Linear or two–dimensional multi–element detector arrays are referred to as **focal plane arrays**.";

- (e) for sub-head a.4.a. there shall be substituted the following:
 - "(a) A peak response in the wavelength range exceeding 1,200 nm but not exceeding 30,000 nm; and";
- (f) for sub-head b.2.b.2. there shall be substituted the following:

"2. Designed for airborne operation, using other than silicon detectors, and having an IFOV of less than 2.5 milli– radians;";

- (g) in sub-head d.2. after the words "Non- **space qualified** cryo- coolers," there shall be inserted the words "with a cooling source temperature below 218 K (-55°C),";
- (xxxvi) in entry 6A004 sub-head a.4., after the words "of major axis" there shall be inserted the words "which maintain a flatness of lambda/2 or better (lambda is equal to 633 nm)";

(xxxvii) in entry 6A008:

(a) at the end of the first Note, there shall be added the following:

"(d) Meteorological (weather) radar.";

(b) for the Note to head i. there shall be substituted the following:

"Note:

Head i. of this entry does not specify:

- (a) Fishing ground surveillance radar;
- (b) Ground radar equipment specially designed for enroute air traffic control and **software** specially designed for the use thereof, provided:
 - (1) It has a maximum instrumented range of 500 km or less;
 - (2) It is configured so that radar target data can be transmitted only one way from the radar site to one or more civil ATC centres;
 - (3) It contains no provisions for remote control of the radar scan rate from the enroute ATC centre; and
 - (4) It is to be permanently installed.

N.B.The **use software** must be limited to **object code** and the minimum amount of **source code** necessary for installation, operation or maintenance.";

(xxxviii) for entry 6B004 there shall be substituted the following:

"6B004

- a. Equipment for measuring absolute reflectance to an accuracy of $\pm 0.1\%$ of the reflectance value;
- b. Equipment other than optical surface scattering measure– ment equipment, having an unobscured aperture of more than 10 cm, specially designed for the non–contact optical measurement of a non–planar optical surface figure (pro– file) to an **accuracy** of 2 nm or less (better) against the required profile.

Note: This entry does not specify microscopes.";

- (xxxix) in entry 6C002:
 - (a) in head b., for the words "or mercury cadmium telluride (CdHgTe)" there shall be substituted the following ", cadmium zinc telluride (CdZnTe) or mercury cadmium telluride (HgCdTe)";
 - (b) the Technical Note to head b. shall be deleted;
 - (xl) in entry 6E003 sub-head b.1., for the words "0.75 line pairs per mm" there shall be substituted the words "0.75 line pairs per milliradian";

(xli) after entry 7D102 there shall be inserted the following entry:

"7D103

Software specially designed for modelling or simulation of the**guidance sets** specified in entry 7A117 or for their design integration with the systems specified in entries 9A004 or 9A104.;

Note:**Software** specified in this entry remains controlled when combined with specially designed hardware specified in entry 4A102.";

- (xlii) in entry 7E101, for ", 7D101 or 7D102.", there shall be substituted "or 7D101 to 7D103.";
- (xliii) in entry 9A110 for "9A105, 9A106, 9A108 and 9A116" there shall be substituted "9A105 to 9A108, 9A116 or 9A119";
- (xliv) in entry 9A990, for "680 kg" there shall be substituted "390 kg";
- (xlv) in entry 9A991, for "680 kg" there shall be substituted "390 kg"; and
- (xlvi) for entry 9D103, there shall be substituted the following:

"9D103

Software specially designed for modelling, simulation or design integration of the systems specified in entries 9A004 or 9A104 or the sub–systems specified in entries 9A005, 9A007, 9A105 to 9A108, 9A116 or 9A119.

Note:**Software** specified in this entry remains controlled when combined with specially designed hardware specified in entry 4A102.".

29th September 1993

M. V. Coolican An Assistant Secretary Department of Trade and Industry

EXPLANATORY NOTE

(This note is not part of the Order)

This Order amends the Export of Goods (Control) Order 1992:

1. by relaxing control in relation to certain dual-use goods as follows:

storage integrated circuits, field programmable logic arrays, travelling wave tubes, acoustic wave devices, primary cells and batteries;

recording equipment, disk drives and solid state computer storage, modems;

acoustic beacons, enroute air traffic control radar and related use software;

2. by extending controls on:

chemical manufacturing equipment;

radiation hardened integrated circuits, Fast Fourier Transform integrated circuits;

waveform digitisers and transient analysers;

civil aircraft engines, components and equipment, to include those for aircraft with an all up weight of between 680 kg and 390 kg, for export to Libya, Iran, Iraq, Syria or South Africa only;

3. by removing control on certain dual-use goods as follows:

flexible waveguides:

certain multifunctional focussed ion-beam semiconductor processing equip- ment, electronic assembly test equipment;

meteorological (weather) radar;

civil aircraft having a maximum all up weight of between 390 kg and 680 kg, for export to destinations other than Libya, Iran, Iraq, Syria or South Africa;

4. by introducing control on:

certain plant pathogens, technology relating to the use of chemical or biological manufacturing equipment;

mixers and converters designed to extend the frequency range of signal analysers, network analysers or microwave test receivers beyond their control limits;

technology for the development or production of substrates of diamond films for electronic components;

certain non-contact optical measuring equipment;

software for modelling, simulation or design integration of guidance sets usable in missiles;

5. by redefining or clarifying the scope of the following:

the definitions of "deformable mirrors", "maximum bit transfer rate" and "microprocessor microcircuit";

entries ML6, ML8, ML9, ML10, 1C351, 1C352, 1C353, 1C992, 2B351, 3A001, 3A002, 3B007 (re-designated as 3B006), 3C002, 4A102, 6A001, 6A002, 6A004, 6C002, 6E003, 7E101, 9A110, 9D103;

the Notes to sub-Category 3A (electronic equipment, assemblies and components) the Technical Note to Category 4 (computers);

- 6. by re-designating entries 3B006 to 3B009 as 3B005 to 3B008;
- 7. by introducing definitions for "isolated live cultures" and "focal plane arrays".