TECHNICAL INFORMATION REQUIREMENTS

The <u>GOODS REVIEW LIST (GRL) (S/2002/515</u>) is divided into the following five sections containing items of potential dual use that are subject to review by the 661 Sanctions Committee before approval for export to Iraq may be granted:

Section A – Chemical Section Section B – Biological Section Section C – Missile Section Section D – Nuclear Section Section E – Conventional Section

In order that the supplier may provide necessary technical information pertaining to a particular set of questions, reference to that GRL entry is provided. The key to this entry is as follows:

If the entry starts with C, B, M, or N, this refers to Chemical, Biological, Missile, or Nuclear Section respectively. The subsequent number(s) then refer to the paragraph. For example C.10.4.1.3 refers to the GRL Section A - Chemical Section, paragraph 10.4.1.3.

Should the GRL Entry start with a number, this refers to the Conventional Section, that number being the Category. This section is divided into nine categories, 1 to 9. The subsequent letter / number combinations identify the paragraph specifically. For example, 9.A.1 refers to GRL Section E – Conventional Section, Category 9, paragraph A.1.

NOTE: This list is an advisory only and not a definite statement of items subject to review under resolution 1409(2002) and the Goods Review List.

Item: Technical Information Requested: GRL Entry:			
	Item:	Technical Information Requested:	GRL Entry:

Item:	Technical Information Requested:	GRL Entry:
Absorption columns	 (1) define the internal diameter (m)? (2) define the material of construction that come into direct contact with the fluids or gases being processed, to include any lining or coating. For those construction materials that are metal alloys (including stainless steel), give the percent of titanium, tantalum, zirconium, nickel, copper, chromium, and silver contained in the alloy? (3) state if the absorption column is made of, or lined with: glass, vitrified or enamelled coatings, ceramics, ferrosilicons, graphite or carbon/graphite, fluoropolymers? (4) describe the equipment, its mode of operation? 	C.10.4.1.3
Aero gas turbine engines	 (1) are the engines certified for the specific "civil aircraft" for which they are intended? (2) are the engines certified for civil use by the aviation authorities in a participating state? (3) are the engines designed to cruise at speeds exceeding Mach 1.2 for more than thirty minutes? 	9.A.1
Agitators for use in reactor vessels	 (1) describe the agitator? (2) define the material of construction that come into direct contact with the fluids or gases being processed, to include any lining or coating. For those construction materials that are metal alloys (including stainless steel), give the percent of titanium, tantalum, zirconium, nickel, copper, chromium, and silver contained in the alloy? (3) state if the agitator is made of, or lined with: glass, vitrified or enamelled coatings, ceramics, ferrosilicons, graphite or carbon/graphite, fluoropolymers? 	C.10.4.1.1
Air filtration equipment	→ Please use standard info sheet	C.10.4.8
Airborne altimeters	 (1) frequency of operation? (2) does it have power management? (3) does it use phase shift key modulation? 	7.A.6
Alloys with nickel and chromium or copper	→ <u>Please use standard info sheet</u>	Chemical Equipment

Item:	Technical Information Requested:	GRL Entry:
Aluminium alloys	→ Please use standard info sheet	N.2
Aluminium powder	➔ Please use standard info sheet	M.3.3
Analog-to-digital converters	(1) resolution (bits)?	3.A.1.a.5
	(2) total conversion time (micro/nano	
	seconds)?	
Any equipment using any	(1) what type and describe features?	5.A.2
type of cryptography		
Atomizers	→ <u>Please use standard info sheet</u>	B.7.2
Attitude control equipment	(1) define the equipment, its method of	M.6.2
	operation, and its intended use?	
Autoclaves (Biological)	(1) internal volume (m ³)?	B.2.5
	(2) single or double ended?	
Autonomous Respirators	(1) type of chemical(s) the respirator is	C.10.4.8
(also called gas masks or	designed to protect the user against?	
respirators)	(2) type of filter used?	
	(3) specially designed for fire-fighter use?	
Autonomous Respirators	(1) filter type?	B.2.6
(biological)	(2) full or half mask?	
	(3) describe air handling system?	
Batteries	(1) energy density (Wh/Kg)?	3.A.1.e.1
	(2) operating temperature range (K)?	6.A.1.a.1
	(3) specially designed for what	
	application?	• • •
Bearings	→ <u>Please use standard info sheet</u>	2.A.1
Bioreactor	(1) technical specifications?	B.3.1
	(2) working capacity of each vessel (in	
	litres)?	
Biosafety cabinet	(1) technical and functional specifications?	B.2.2
	(2) type and position of air filter used?	
	(3) air flow drawing?	
Biosafety isolator	(1) technical and functional specifications?	B.2.3
	(2) type and position of air filter used?	
D1 11	(3) air flow drawing?	1 4 1
Bladders	(1) material of construction?	1.A.1
	(2) specially designed for what	
	application?	1 4 5
Body armour and specially	(1) performance design standard?	1.A.5
designed components	(1) ropatition rate (H_z) ?	3.A.1.e.2
Capacitors (storage)	(1) repetition rate (Hz)?(2) voltage rating (kV)?	J.A.1.C.2
Carbon/graphita lined	(3) total energy capacity (J)?	Chemical
Carbon/graphite lined	(1) identify any chemical equipment, or	
equipment	part of the equipment, made of or lined with this material?	Equipment
Cell culture media		B.5
Cell culture media	→ <u>Please use standard info sheet</u>	D.J

Item:	Technical Information Requested:	GRL Entry:
Cell culture vessel	(1) describe the vessel?	B.3.2
	(2) effective growth surface area (in cm^2)?	
Centrifugal balancing	(1) maximum capacity (Kg)?	N.57
machines	(2) balancing speed (rpm)?	M.5.5.3
	(3) specially designed for what	7.B.3
	application?	
Centrifugal separators	(1) overall dimensions?	C.10.4.1.4
(for oil and gas field	(2) flow rate?	
applications)	(3) material of construction of parts of the	
	equipment that come into direct contact	
	with the chemical(s) to be processed. For	
	alloys, specify the percentage composition	
	of metals?	
Centrifuge fixtures for gyro	(1) define the equipment, its method of	7.B.3
bearings	operation, and its intended use?	
Centrifuges	(1) state whether or not it is a continuous or	B.4.1
	semi continuous centrifuge?	B.4.2
	(2) capacity?	
	(3) technical specifications?	
Ceramics	(1) identify any chemical equipment, or	Chemical
	part of the equipment, made of or lined with	Equipment
	this material?	
Chemical mixtures	→ <u>Please use standard info sheet</u>	Chemical
		Lists A & B
Chemical protection	(1) is the equipment capable of protection	C.10.4.8
equipment	against toxic chemicals?	
	(2) does it qualifies as a protection personal	
	suit or an autonomous respirator or an air	
	filtration equipment?	
Chemical reactors	(1) define the internal volume (m^3) ?	C.10.4.1.1
	(2) define the material of construction that	
	come into direct contact with the fluids or	
	gases being processed, to include any lining	
	or coating. For those construction materials	
	that are metal alloys (including stainless	
	steel), give the percent of titanium,	
	tantalum, zirconium, nickel, copper,	
	chromium, and silver contained in the	
	alloy?	
	(3) state if the reactor is made of, or lined	
	with: glass, vitrified or enamelled coatings,	
	ceramics, ferrosilicons, graphite or	
	carbon/graphite, fluoropolymers?	

Item:	Technical Information Requested:	GRL Entry:
Chemical spraying equipment	 (1) define the operating pressure (bar) and the size of the droplets formed (microns)? (2) define the material of construction that come into direct contact with the fluids or gases being processed, to include any lining or coating. For those construction materials that are metal alloys (including stainless steel), give the percent of titanium, tantalum, zirconium, nickel, copper, chromium, and silver contained in the alloy? (3) state if the equipment is made of, or lined with: glass, vitrified or enamelled coatings, ceramics, ferrosilicons, graphite or carbon/graphite, fluoropolymers? 	C.10.4.9
Chemicals	→ <u>Please use standard info sheet</u>	Chemical & Biological Lists
Chemostat	(1) technical specifications?(2) working capacity of each vessel (in litres)?	B.3.1
Columns (chemical equipment)	 (1) define the inner diameter (m)? (2) define the material of construction that come into direct contact with the fluids or gases being processed, to include any lining or coating. For those construction materials that are metal alloys (including stainless steel), give the percent of titanium, tantalum, zirconium, nickel, copper, chromium, and silver contained in the alloy? (3) state if the tower or columns are made of, or lined with: glass, vitrified or enamelled coatings, ceramics, ferrosilicons, graphite or carbon/graphite, fluoropolymers? (4) describe the equipment, its mode of operation? 	C.10.4.3
Composite materials Composite structures	 Please use standard info sheet (1) matrix type? (2) specific tensile strength (m)? (3) specific modulus (m)? (4) specially designed for what application? 	1.C.10 1.A.2
Computers	→ Please use standard info sheet	4.A.3
Condensers	→ Please use standard info sheet	C.10.4.1.2

Item:	Technical Information Requested:	GRL Entry:
Conduits Containment facility, room	 (1) define the inner diameter (m)? (2) define the material of construction that come into direct contact with the fluids or gases being processed, to include any lining or coating. For those construction materials that are metal alloys (including stainless steel), give the percent of titanium, tantalum, zirconium, nickel, copper, chromium, and silver contained in the alloy? (3) state if the conduits, pipes or tubes are made of, or lined with: glass, vitrified or enamelled coatings, ceramics, ferrosilicons, graphite or carbon/graphite, fluoropolymers? (1) describe its physical feature? 	GRL Entry: C.10.4.3 B.2.1
or enclosure	(2) list all equipments fitted?(3) type and position of air filter used?	
CNC Controllers (machine tools)	→ <u>Please use standard info sheet</u>	2.B.1
Coolants	(1) composition?(2) density?	1.C.6
Cooling fluids (fluorocarbon)	(1) composition?(2) density?	1.C.6
Cross-flow and tangential filtration equipment	(1) technical specifications?(2) surface area of filter cartridge?(3) principle of operation?	B.4.3
Data recorders (analog)	 (1) bandwidth per electronic track or channel (MHz)? (2) number of tracks / channels? (3) time displacement (base) error (nanoseconds)? 	3.A.2.a.1
Data recorders (digital)	(1) digital interface transfer rate (Mbit/s)?(2) specially designed for what application?(3) space qualified?	3.A.2.a.2
Demineralisation equipment. Detailed list of components that make up the equipment, i.e., pumps, pipes, tanks, etc.	 (1) the materials of construction of said components that come into direct contact with the process fluids. For alloys, specify the percentage composition of metals? (2) internal & overall dimensions? (3) internal lining material if any? (4) design parameters such as pressure, temperatures, process flow and processed fluids? 	Chemical List

Item:	Technical Information Requested:	GRL Entry:
Detonators (electrical)	(1) the type of electrical detonators?	N.71
Diaphragms	→ Please use standard info sheet	1.A.1
Digitally controlled radio	(1) number of channels?	5.A.1.b.4
receivers	(2) frequency switching time?	
	(3) capacity to automatically search or scan	
	part of the electromagnetic spectrum?	
	(4) capacity to identify the received signals	
	or the type of transmitter?	
Digital-to-analog converters	(1) resolution (bits)?	3.A.1.a.5
	(2) settling time (nanoseconds)?	
Dimensional inspection	(1) number of axes?	2.B.6
machines	(2) type?	
	(3) accuracy (microns)?	
Direct view imaging	(1) define its wavelength range of	6.A.2.c
equipment	operation?	
1 1	(2) does it incorporate an image intensifier	
	tube or focal plane array?	
Distillation columns	➔ Please use standard info sheet	C.10.4.1.3
Electrical discharge	(1) type?	2.B.1
machines	(2) number of axes?	
	(3) numerical controller capable?	
	(4) wire or non-wire operation?	
Electronic computers	→ Please use standard info sheet	4.A.1
Equipment for detecting,	➔ Please use standard info sheet	C.10.4.7
measuring the air		
concentration of toxic		
chemicals		
Explosives	→ Please use standard info sheet	1.C.12
Fermenters	(1) technical specifications?	B.3.1
	(2) working capacity of each vessel (in	
	litres)?	
Ferrosilicons	(1) identify any chemical equipment, or	Chemical
	part of the equipment, made of or lined with	Equipment
	this material?	
Fibrous or filamentary	→ Please use standard info sheet	1.C.10
materials		
Filament winding machines	(1) number of axes?	1.B.1.a
and specially designed	(2) specially designed for what	
components	application?	
Filters	→ Please use standard info sheet	B.2.4
Flow rate transducers	→ Please use standard info sheet	N.32

Item:	Technical Information Requested:	GRL Entry:
Flow-forming machines	(1) number of axes coordinated	2.B.9
_	simultaneously?	
	(2) rolling force (kN)?	
	(3) capable of numerical or computer	
	control?	
Fluids (hydraulic)	(1) composition?	1.C.6
	(2) flash point (K)?	
	(3) pour point (K)?	
	(4) viscosity index?	
Fluoropolymers	(1) identify any chemical equipment, or	Chemical
	part of the equipment, made of or lined with	Equipment
	this material?	
Focal plane arrays	(1) specify the material?	6.A.2.a.3
	(2) define the number of elements, their	6.A.2.e
	peak response wavelength, their response	
	time constant?	
	(3) is it space qualified?	
Foggers	→ <u>Please use standard info sheet</u>	B.7.3
Freeze-drying	(1) technical specifications?	B.4.5
(lyophilisation) equipment	(2) specially designed for what	
	application?	
	(3) condenser capacity (Kg of ice in 24	
	hours)?	
Frequency synthesised	(1) frequency range (GHz)?	3.A.2.d
signal generators	(2) maximum frequency (GHz)?	
Furnace	(1) is it capable of the disposal of toxic	C.10.4.6
	chemicals? If not, justify and explain why?	
	(2) average chamber combustion	
	temperature?	
	(3) catalytic incineration or not?	
	(4) describe the equipment, its mode of	
	operation?	
Furnace (Oxidation)	(1) type of furnace?	N.61
	(2) power ratings?	
	(3) chamber size and number of chambers?	
	(4) provision to supply gases to chamber?	
	(5) type of gases supplied to furnace?	
Gas masks	(1) does it use liquid or solid adsorption	C.10.4.8
	agent?	
Glass	(1) identify any chemical equipment, or	Chemical
	part of the equipment, made of or lined with	Equipment
	this material?	
Global navigation systems	(1) does it employ decryption?	7.A.5
receiving equipment	(2) does it have a null-steerable antenna?	

Technical Information Requested:	GRL Entry:
(1) density (Kg/m3)?	M.8.1.1
(2) particle size (microns)?	N.49.12
	Chemical
	Equipment
	1 1
(1) type?	2.B.1
	B.4.6
	B.5
	7.A.4
	/ .1 1. 1
	7.A.2
	/.11.2
→ Please use standard info sheet	C.10.4.1.2
➔ Please use standard info sheet	9.A.13
→ Please use standard info sheet	B.2.4
(1) inside diameter of chamber cavity	2.B.4
(mm)?	
(2) maximum pressure (MPa)?	
(1) define the inertial equipment and the	7.D.3.b
other sensor or localization equipment	
(Doppler radar, GPS or GLONASS, terrain	
data from data bases, etc). Define the	
hybridising of the two equipments?	
(1) does it possess a microchannel plate?	6.A.2.a.2
(2) define its photocathode	
	 (1) density (Kg/m3)? (2) particle size (microns)? (3) 'boron equivalent' figure? (4) identify any chemical equipment, or part of the equipment, made of or lined with this material? (1) type? (2) number of axes? (3) positioning accuracy (microns)? (4) numerical controller capable? (1) manufacturer's data sheets? (2) capacity? (3) particle size of finished product? → Please use standard info sheet (1) confirm that the device derives position or orientation by tracking celestial bodies or satellites? (2) azimuth accuracy (expressed in seconds of arc)? (1) drift rate stability when measured in a 1g environment over a period of three months and with respect to a fixed calibration value (expressed in ° per hour) at linear acceleration levels below 10g and at levels from 10g to 100g inclusive? (2) are they specified to function at linear acceleration levels exceeding 100g? → Please use standard info sheet → Please use standard info sheet (1) inside diameter of chamber cavity (mm)? (2) maximum pressure (MPa)? (3) maximum temperature? (1) define the inertial equipment and the other sensor or localization equipment (Doppler radar, GPS or GLONASS, terrain data from data bases, etc). Define the hybridising of the two equipments? (1) does it possess a microchannel plate?

Item:	Technical Information Requested:	GRL Entry:
Imaging cameras	(1) define its type: video, scanning, etc?	6.A.3.b
	(2) define its sensor, including number of	
	pixels, or detectors per array, total number	
	of pixels or detectors, as appropriate?	
	(3) type of image intensifier tube if	
	appropriate?	
	(4) type of focal plane array if appropriate?	
Incineration equipment	→ Please use standard info sheet	C.10.4.6
Incubators (shakers/orbital)	(1) the aggregated flask volume?	B.3.3
	(2) technical & functional specifications?	
Inertial measurement	(1) provide full technical specifications?	M.5.5.1
equipment	(2) intended use?	
Inertial navigation systems	(1) is it designed for aircraft, land vehicle	7.A.3
(gimballed or strapdown)	or spacecraft for attitude, guidance or	
and inertial equipment	control?	
1 1	(2) navigation error subsequent to normal	
	alignment (expressed in nautical mile per	
	hour at 50% CEP)?	
	(3) is it specified to function at linear	
	acceleration levels exceeding 10g?	
Inorganic fibrous or	➔ Please use standard info sheet	1.C.10
filamentary materials		
Integrated circuits	(1) operating temperature range (minimum	3.A.1.a.2
_	(K), and maximum (K))?	
Isostatic presses (Hot)	(1) inside diameter of chamber cavity	2.B.4
	(mm)?	
	(2) maximum pressure (MPa)?	
	(3) maximum temperature?	
Laminates	→ Please use standard info sheet	1.A.2
Lasers, components and	➔ Please use standard info sheet	6.A.5
optical equipment		
Linear accelerometers	(1) are they designed for use in inertial	7.A.1
	navigation or guidance systems?	
	(2) maximum bias stability (expressed in	
	micro g) with respect to a fixed calibration	
	value?	
	(3) maximum scale factor stability	
	(expressed in ppm) with respect to a fixed	
	calibration value over a period of one year?	
	(4) are the accelerometers specified to	
	function at linear acceleration levels	
	exceeding 100g?	

Item:	Technical Information Requested:	GRL Entry:
Lubricants	(1) composition?	1.C.6
	(2) flash point (K)?	
	(3) pour point (K)?	
	(4) viscosity index?	
Machine tools	→ Please use standard info sheet	2.B.1
Magnetic materials	(1) initial relative permeability?	1.C.3
	(2) thickness (mm)?	
Magnetometers	(1) define the type of magnetometer and its	6.A.6
	principle of operation?	
	(2) noise level or sensitivity expressed in	
	nT rms per square root Hz?	1015
Maraging steel	→ <u>Please use standard info sheet</u>	M.8.1.5
Mana an atus matang	$(1) t_{2} = 1 t_{2} = 1 $	N.12 Various
Mass spectrometers	(1) technical & functional specifications?	various
	(2) type?(3) construction of ion source?	
	(4) unit resolution?	
Materials	(1) material composition?	Various
Waterials	(2) does the material absorb electro-	v arrous
	magnetic waves?	
	(3) is the material intrinsically conductive?	
	(4) tensile strength (N/m^2) ?	
	(5) compressive strength (N/m^2) ?	
	(6) absorption frequency range?	
Metal alloy powders	→ Please use standard info sheet	1.C.2
		1.C.11
Metal alloys	→ <u>Please use standard info sheet</u>	1.C.2
		1.C.11
Micro-encapsulation	→ Please use standard info sheet	B.11
equipments (including		
interfacial polycondensors,		
phase separators, fluid bed		
coaters, etc.)	Diagona standard info shoot	2 A 1 a 2
Microprocessors	→ <u>Please use standard info sheet</u> (1)	3.A.1.a.3
Microwave equipment and	(1) operating frequency (GHz)?(2) description of item?	3.A.1.b.3
components Microwave test receiver		2 A 2 f
where we test receiver	(1) frequency range (GHz)?(2) maximum frequency (GHz)?	3.A.2.f
Milling machines (machine	 → Please use standard info sheet 	2.B.1.
tools)		<i>4.D.</i> 1.
Milling machines (size	(1) manufacturer's data sheets?	B.4.6
reduction)	(1) manufacturer's data sheets? (2) capacity?	. I.V
1000000000	(3) particle size of finished product?	
Nebulisers	 Please use standard info sheet 	B.7.2

Item:	Technical Information Requested:	GRL Entry:
Network analyser	(1) frequency range (GHz)?	3.A.2.e
	(2) maximum frequency (GHz)?	
Nickel or nickel alloys	→ <u>Please use standard info sheet</u>	Chemical
		Equipment
Non-civil certified aircraft,	(1) are all of the aircraft for civil certified	9.A.12
all aero gas turbine engines,	use?	
unmanned aerial vehicles,	(2) are any of the aircraft engines and its	
and parts and components	specially designed parts or components for	
	non-civil certified aircraft?	
	(3) are any gas turbine engines or its parts	
	and components designed for other than	
	stationary power generation applications?	
	(4) are any parts and components going into civil-certified aircraft?	
Non doctructive test (NDT)		9.B.7
Non-destructive test (NDT) equipment	(1) is the equipment specially designed for inspecting the integrity of rocket motors	9.D./
equipment	using non-destructive test (NDT)	
	techniques other than planar X-ray or basic	
	physical or chemical analysis?	
Non-fluorinated polymeric	(1) composition?	1.C.8
substances		
Optical components	(1) define its material?	6.A.4.b
1 1	(2) wavelength range of operation?	6.A.5.e
	(3) volume, diameter, thickness?	
	(4) is it space qualified (weight, coating &	
	composition)?	
	(5) are the components partially	
	transmissive?	
Optical detectors	(1) specify the material?	6.A.2.a
	(2) specify the peak response wavelength?	
	(3) specify the response time constant?	
0 1 1 1	(4) is it space qualified?	5 4 1
Optical fibre	(1) length (m)?	5.A.1.c
<u> </u>	(2) material type?	1.0.10
Organic fibrous or	→ <u>Please use standard info sheet</u>	1.C.10
filamentary materials	Diagona atom dan din Grahast	N 90
Oscilloscopes (digital and analogue)	→ <u>Please use standard info sheet</u>	N.80
Particulate metals or	→ <u>Please use standard info sheet</u>	1.C.2
materials		1.C.11
Perforation charges	→ <u>Please use standard info sheet</u>	1.C.12
Personal protection suits	(1) describe air handling system?	B.2.6
(biological)	(2) filter type?	

Item:	Technical Information Requested:	GRL Entry:
Personal protection suits	(1) indicate the type of chemical or	C.10.4.8
(chemical)	medium heat the suit is designed to protect	
	against?	
Pesticides	→ <u>Please use standard info sheet</u>	Chemical &
		Biological Lists
pH tranducers	→ Please use standard info sheet	N.32
Pharmaceuticals	→ Please use standard info sheet	Chemical &
		Biological Lists
Phased array antenna	(1) number of active elements?	5.A.1.d
2	(2) capacity of electronic control of beam	
	shaping?	
	(3) will it be used for landing systems?	
Pipes	(1) define the inner diameter (m)?	C.10.4.3
I	(2) define the material of construction that	
	come into direct contact with the fluids or	
	gases being processed, to include any lining	
	or coating. For those construction materials	
	that are metal alloys (including stainless	
	steel), give the percent of titanium,	
	tantalum, zirconium, nickel, copper,	
	chromium, and silver contained in the	
	alloy?	
	(3) state if the conduits, pipes or tubes are	
	made of, or lined with: glass, vitrified or	
	enamelled coatings, ceramics, ferrosilicons,	
	graphite or carbon/graphite, fluoro-	
Plates of materials	polymers?	C 10 4 1 6
Polymeric substances (non-	 Please use standard info sheet (1) composition? 	C.10.4.1.6 1.C.8
fluorinated)	(1) composition?	1.0.0
Polymers made from	(1) material form?	1.A.1.b
vinylidene fluoride	(1) material form? (2) thickness (microns)?	1.A.1.0
Preforms		1 C 10
Preforms	(1) specific tensile strength (m)?	1.C.10
	(2) specific modulus (m)?	
	(3) glass transition temperature (K)?	
D	(4) composition?	1 0 10
Prepregs	(1) specific tensile strength (m)?	1.C.10
	(2) specific modulus (m)?	
	(3) glass transition temperature (K)?	
	(4) composition?	
Pressure transducers	→ Please use standard info sheet	N.32
Protection personal suit	(1) is it external ventilated?	C.10.4.8
	(2) is it semi or full protection?	
Pumps	→ <u>Please use standard info sheet</u>	C.10.4.2

Item:	Technical Information Requested:	GRL Entry:
Radar	(1) frequency and bandwidth of operation. Is the bandwidth tunable?	6.A.8
	(2) output power, peak and average, pulse	
	width and energy per pulse?	
	(3) antenna type?	
	(4) coherent or non-coherent mode of	
	operation?	
	(5) capacity to operate simultaneously on	
	more than two carrier frequencies?	
	(6) capacity of operating in synthetic aperture?	
	(7) Doppler signal processing?	
	(8) capacity of aircraft detection and	
	tracking?	
	(9) capacity of height finding non	
	cooperative targets?	
	(10) is it specially designed for airborne (including balloon) operation?	
	(11) pulse compression signal processing?	
	(12) automatic target tracking data	
	processing?	
	(13) for non periodic scanning rates radars:	
	capacity to calculate target velocity?	
	(14) capacity to recognize, identify or	
	classify targets?	
	(15) capacity of data fusion from two or	
	more radars?	
Radiation detection /	(1) designed to measure / detect what?	3.A.2.h
analyser equipment	(2) how does it accomplish (1)?	

Item:	Technical Information Requested:	GRL Entry:
Radio equipment	(1) frequency and bandwidth of operation?	5.A.1.b.2
	(2) adaptive techniques to suppress an	5.A.1.b.3
	interfering signal and level of suppression?	
	(3) automatically predicts and selects	
	frequencies and "total digital transfer rates"	
	per channel to optimize the transmission?	
	(4) incorporates a linear power amplifier	
	configuration having a capability to support	
	multiple signals simultaneously? If so	
	provide the output power, frequency of	
	operation and instantaneous bandwidth for	
	which the output harmonic and distortion	
	content is better than –80dB?	
	(5) employs spread spectrum techniques,	
	including frequency hopping techniques?	
	Are the spreading codes programmable by	
	the user? Provide the maximum value of the	
	ratio of the total transmitted bandwidth to	
	the bandwidth of the information channels?	5 4 1 1 5
Radio relay	(1) frequency and bandwidth of operation?	5.A.1.b.5
communications equipment,		
assemblies and components		
therefore	(1) designed to measure / detect what?	3.A.2.h
Radioisotope detection /	(1) designed to measure / detect what?	3.A.2.fl
analyser equipment	(2) how does it accomplish (1)?	C.10.4.1.1
Reactor vessels	(1) define the internal volume (m^3) ?	C.10.4.1.1
	(2) define the material of construction that come into direct contact with the fluids or	
	gases being processed, to include any lining	
	or coating. For those construction materials	
	that are metal alloys (including stainless	
	steel), give the percent of titanium,	
	tantalum, zirconium, nickel, copper,	
	chromium, and silver contained in the	
	alloy?	
	(3) state if the reactor is made of, or lined	
	with: glass, vitrified or enamelled coatings,	
	ceramics, ferrosilicons, graphite or	
	carbon/graphite, fluoropolymers?	

Item:	Technical Information Requested:	GRL Entry:
Remote-controlled filling equipment	 (1) describe the equipment, its mode of operation? (2) define the material of construction that come into direct contact with the fluids or 	C.10.4.5
	gases being processed, to include any lining or coating. For those construction materials that are metal alloys (including stainless steel), give the percent of titanium,	
	tantalum, zirconium, nickel, copper, chromium, and silver contained in the alloy?	
	(3) state if the remote-controlled filling equipment, or parts of it are made of, or lined with: glass, vitrified or enamelled coatings, ceramics, ferrosilicons, graphite or	
	carbon/graphite, fluoropolymers?	
Respirator filters	→ <u>Please use standard info sheet</u>	B.2.4
Scrubbers	 define the material of construction that come into direct contact with the fluids or gases being processed, to include any lining or coating. For those construction materials that are metal alloys (including stainless steel), give the percent of titanium, tantalum, zirconium, nickel, copper, chromium, and silver contained in the alloy? state if the scrubber is made of, or lined with: glass, vitrified or enamelled coatings, ceramics, ferrosilicons, graphite or carbon/graphite, fluoropolymers. describe the equipment, its mode of operation? 	C.10.4.1.4
Sealants	(1) material of construction?(2) specially designed for what application?	1.A.1
Seals	→ Please use standard info sheet	1.A.1

Item:	Technical Information Requested:	GRL Entry:
Separators for use in scrubbers	 (1) define the material of construction that come into direct contact with the fluids or gases being processed, to include any lining or coating. For those construction materials that are metal alloys (including stainless steel), give the percent of titanium, tantalum, zirconium, nickel, copper, chromium, and silver contained in the alloy? (2) state if the separator is made of, or lined with: glass, vitrified or enamelled coatings, ceramics, ferrosilicons, graphite or carbon/graphite, fluoropolymers? (3 describe the equipment, its mode of operation? 	C.10.4.1.4
Servovalves	→ <u>Please use standard info sheet</u>	M.2.5.1
Sheets of materials	→ <u>Please use standard info sheet</u>	C.10.4.1.6
Signal analysers	(1) frequency range (GHz)?(2) maximum frequency (GHz)?	3.A.2.c
Silver	(1) identify any chemical equipment, or part of the equipment, made of or lined with this material?	Chemical Equipment
Spin forming machines	 (1) number of axes coordinated simultaneously? (2) rolling force (kN)? (3) capable of numerical or computer control? 	2.B.9
Spray drying equipment	(1) technical specifications?(2) specially designed for what application?(3) particle size distribution?	B.4.4
Stainless steels - nitrogen stabilized duplex (N-DSS)	→ <u>Please use standard info sheet</u>	M.8.1.6
Steels	→ <u>Please use standard info sheet</u>	M.8.1.5 N.12
Superconductive electromagnetic sensors	(1) temperature of operation relative to the critical temperatures of their superconductive constituents?(2) frequency at which they detect electromagnetic field variations?	6.A.6.h

Item:	Technical Information Requested:	GRL Entry:
Superconductive	(1) inner diameter of current carry winding	3.A.1.e.3
electromagnets	(mm)?	
	(2) magnetic induction rating (T)?	
	(3) overall current density in winding	
	$(A/mm^2)?$	
	(4) energy discharge in first second (kJ)?	
Superconductive solenoids	(1) inner diameter of current carry winding	3.A.1.e.3
	(mm)?	
	(2) magnetic induction rating (T)?	
	(3) overall current density in winding	
	$(A/mm^2)?$	
	(4) energy discharge in first second (kJ)?	
Tanks (storage)	→ <u>Please use standard info sheet</u>	C.10.4.1.5
Tantalum or tantalum alloys	(1) identify any chemical equipment, or	Chemical
	part of the equipment, made of or lined with	Equipment
	this material?	
Tape-laying, tow-placement	(1) number of axes?	1.B.1.b
machines	(2) specially designed for what	
	application?	
Telecom digital signal	(1) does it employs functions providing	5.A.1.b.6
processing equipment	voice coding?	
	(2) if (1) provide the rate (bits/s)?	
Telecommunication	(1) describe the equipment?	5.A.1
equipment	(2) describe the telecommunications	
	equipment ?	
	(3) does the corresponding	
	telecommunication equipment employ	
	digital techniques?	
	(4) does it employs a laser?	
	(5) does it employs optical switching?	
	(6) does it employ QAM techniques? In	
	which case, indicate the level?	
	(7) does it employs common channel	
	signalling?	
Temperature transducer	→ <u>Please use standard info sheet</u>	N.32
Test equipment specially	(1) full technical specifications?	3.B.2
designed for testing finished		
or unfinished		
semiconductor devices		
Titanium or titanium alloys	→ <u>Please use standard info sheet</u>	N.14
		Chemical
		Equipment

Item:	Technical Information Requested:	GRL Entry:
Towers (chemical equipment)	 (1) define the inner diameter (m)? (2) define the material of construction that come into direct contact with the fluids or gases being processed, to include any lining or coating. For those construction materials that are metal alloys (including stainless steel), give the percent of titanium, tantalum, zirconium, nickel, copper, chromium, and silver contained in the alloy? (3) state if the tower or columns are made of, or lined with: glass, vitrified or enamelled coatings, ceramics, ferrosilicons, graphite or carbon/graphite, fluoropolymers? (4) describe the equipment, its mode of operation? 	C.10.4.3
Toxic gas detectors	→ Please use standard info sheet	C.10.4.7
Transducers	(1) are the 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)?	9.B.8
Transducers (pressure, temperature)	→ Please use standard info sheet	N.32
Transient recorders	(1) number of samples per second at a resolution of 10 bits or more?(2) continuous throughput rate (Gbit/s)?	3.A.2.a.5
Transmitters (absolute pressure)	→ <u>Please use standard info sheet</u>	N.32
Travelling wave tubes	(1) operating frequency?(2) specially designed for what application?	3.A.1.b.1

Item:	Technical Information Requested:	GRL Entry:
Tubes	(1) define the inner diameter (m)?	C.10.4.3
	(2) define the material of construction that	
	come into direct contact with the fluids or	
	gases being processed, to include any lining	
	or coating. For those construction materials	
	that are metal alloys (including stainless	
	steel), give the percent of titanium,	
	tantalum, zirconium, nickel, copper,	
	chromium, and silver contained in the	
	alloy?	
	(3) state if the conduits, pipes or tubes are	
	made of, or lined with: glass, vitrified or	
	enamelled coatings, ceramics, ferrosilicons,	
	graphite or carbon/graphite, fluoro-	
	polymers?	
Ultra-HEPA filters	→ <u>Please use standard info sheet</u>	B.2.4
Vaccine	→ <u>Please use standard info sheet</u>	B.9
Valve seats	→ <u>Please use standard info sheet</u>	1.A.1
Valves	→ <u>Please use standard info sheet</u>	C.10.4.4
Valves (servo)	→ <u>Please use standard info sheet</u>	M.2.5.1
Vessels (storage)	→ <u>Please use standard info sheet</u>	C.10.4.1.5
Vibration monitor	(1) specifications including dimensions,	M.9.1
	weight, frequency ranges, acceleration	
	resolution, accuracy and linearity?	
	(2) specifications for any accelerometers	
	associated with the equipment?	
Vibration test equipment	(1) is the vibration test equipment capable	9.B.10
	of simulating flight conditions?	
	(2) are these specially designed parts and	
	components for the above listed equipment.	
Vinylidene fluoride	(1) material form?	1.A.1.b
polymers	(2) thickness (microns)?	
Welders	→ <u>Please use standard info sheet</u>	M.2.1
X-ray and NDT inspection	(1) technical specifications?	M.2.1
equipment.		
X-ray tubes and heads	(1) peak electron energy?	N.65
	(2) figure of merit?	M.2.1
	(3) peak power?	
Zirconium or zirconium	→ <u>Please use standard info sheet</u>	N.16
alloys		Chemical
		Equipment