

No. of Company 2242542

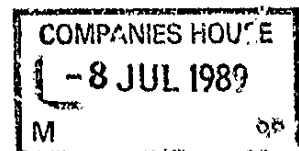
The Companies Act 1985

PRIVATE COMPANY LIMITED BY SHARES

MEMORANDUM AND ARTICLES OF ASSOCIATION

SPECTRA PARK SCIENTIFIC (UK) LIMITED

(Incorporated the 11th day of April 1988)



Hart & Co. Limited
Company Formation and Information Services
Printers and Publishers
47, Brunswick Place, London N1 6EE
Telephone 01-250-1841 Telex 24653

THE COMPANIES ACT 1985

PRIVATE COMPANY LIMITED BY SHARES

MEMORANDUM OF ASSOCIATION OF

SPECTRA PARK SCIENTIFIC (UK) LIMITED

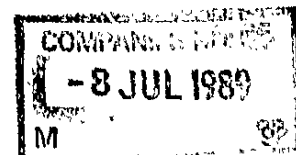
CERTIFICATION

WE HEREBY CERTIFY that this print incorporates all alterations made to this company's Articles of Association by filed resolutions and is lodged in compliance with the requirements of section 18 of the Companies Act 1985.

1. The Company's name is "SPECTRA PARK SCIENTIFIC (UK) LIMITED".
2. The Company's registered office is to be situated in England and Wales.
3. The Company's objects are:-

(a) To carry on all or any of the businesses of a scientific, technical and advisory consultancy service for the purpose of research, development, numerical and theoretical analysis and quality control of any products, materials or processes of all kinds, to provide facilities for the carrying out of research and all manner of tests and studies; and to employ qualified and trained personnel of every description, production planners, and engineering technicians, to design, draw and supervise the making of, and to act as consultants and specialists in planning and preparing drawings, designs, specifications and quotations for use in connection with the electronics, electrical and engineering industries, industrial designers and consultants, specialists in prototype and production development and work study, detail drawing and tracing, to create, establish and maintain an organisation for the provision of a drawing office service to electronic, electrical and other engineers and contractors or for any other persons, firms or companies; electronic, electrical, general and precision engineers and toolmakers, manufacturers, designers, importers, exporters, repairers, installers, maintainers, merchants, shippers and distributors of, agents for the sale of, and dealers in and letters on hire of electronic, electrical and general engineering equipment, plant, machinery, components and accessories, tools, jigs, dies and fixtures of all kinds, haulage and transport contractors, railway, forwarding, passenger and freight agents, insurance and general commission agents and general merchants; and to buy, sell, manufacture, repair, alter, manipulate and otherwise deal in vehicles, plant, machinery, fittings, furnishings and implements, tools, materials, products, articles and things capable of being used for the purpose of the foregoing businesses or any of them, or likely to be required by customers of, or persons having dealings with the Company.

OB212



(b) To carry on any other trade or business whatever which can in the opinion of the Board of Directors be advantageously carried on in connection with or ancillary to any of the businesses of the Company.

(c) To purchase or by any other means acquire and take options over any property whatever, and any rights or privileges of any kind over or in respect of any property.

(d) To apply for, register, purchase, or by other means acquire and protect, prolong and renew, whether in the United Kingdom or elsewhere any patents, patent rights, brevets d'invention, licences, secret processes, trade marks, designs, protections and concessions and to disclaim, alter, modify, use and turn to account and to manufacture under or grant licences or privileges in respect of the same, and to expend money in experimenting upon, testing and improving any patents, inventions or rights which the Company may acquire or propose to acquire.

(e) To acquire or undertake the whole or any part of the business, goodwill, and assets of any person, firm, or company carrying on or proposing to carry on any of the businesses which the Company is authorised to carry on and as part of the consideration for such acquisition to undertake all or any of the liabilities of such person, firm or company, or to acquire an interest in, amalgamate with, or enter into partnership or into any arrangement for sharing profits, or for co-operation, or for mutual assistance with any such person, firm or company, or for subsidising or otherwise assisting any such person, firm or company, and to give or accept, by way of consideration for any of the acts or things aforesaid or property acquired, any shares, debentures, debenture stock or securities that may be agreed upon, and to hold and retain, or sell, mortgage and deal with any shares, debentures, debenture stock or securities so received.

(f) To improve, manage, construct, repair, develop, exchange, let on lease or otherwise, mortgage, charge, sell, dispose of, turn to account, grant licences, options, rights and privileges in respect of, or otherwise deal with all or any part of the property and rights of the Company.

(g) To invest and deal with the moneys of the Company not immediately required in such manner as may from time to time be determined and to hold or otherwise deal with any investments made.

(h) To lend and advance money or give credit on any terms and with or without security to any person, firm or company (including without prejudice to the generality of the foregoing any holding company, subsidiary or fellow subsidiary of, or any other company associated in any way with, the Company), to enter into guarantees, contracts of indemnity and suretyships of all kinds, to receive money on deposit or loan upon any terms, and to secure or guarantee in any manner and upon any terms the payment of any sum of money or the performance of any obligation by any person, firm or company (including without prejudice to the generality of the foregoing any such holding company, subsidiary, fellow subsidiary or associated company as aforesaid).

(i) To borrow and raise money in any manner and to secure the repayment of any money borrowed, raised or owing by mortgage, charge, standard security, lien or other security upon the whole or any part of the Company's property or assets (whether present or future), including its uncalled capital, and also by a similar mortgage, charge, standard security, lien or

security to secure and guarantee the performance by the Company of any obligation or liability it may undertake or which may become binding on it.

(j) To draw, make, accept, endorse, discount, negotiate, execute and issue cheques, bills of exchange, promissory notes, bills of lading, warrants, debentures, and other negotiable or transferable instruments.

(k) To apply for, promote, and obtain any Act of Parliament, order, or licence of the Department of Trade or other authority for enabling the Company to carry any of its objects into effect, or for effecting any modification of the Company's constitution, or for any other purpose which may seem calculated directly or indirectly to promote the Company's interests, and to oppose any proceedings or applications which may seem calculated directly or indirectly to prejudice the Company's interests.

(l) To enter into any arrangements with any government or authority (supreme, municipal, local, or otherwise) that may seem conducive to the attainment of the Company's objects or any of them, and to obtain from any such government or authority any charters, decrees, rights, privileges or concessions which the Company may think desirable and to carry out, exercise, and comply with any such charters, decrees, rights, privileges, and concessions.

(m) To subscribe for, take, purchase, or otherwise acquire, hold, sell, deal with and dispose of, place and underwrite shares, stocks, debentures, debenture stocks, bonds, obligations or securities issued or guaranteed by any other company constituted or carrying on business in any part of the world, and debentures, debenture stocks, bonds, obligations or securities issued or guaranteed by any government or authority, municipal, local or otherwise, in any part of the world.

(n) To control, manage, finance, subsidise, co-ordinate or otherwise assist any company or companies in which the Company has a direct or indirect financial interest, to provide secretarial, administrative, technical, commercial and other services and facilities of all kinds for any such company or companies and to make payments by way of subvention or otherwise and any other arrangements which may seem desirable with respect to any business or operations of or generally with respect to any such company or companies.

(o) To promote any other company for the purpose of acquiring the whole or any part of the business or property or undertaking or any of the liabilities of the Company, or of undertaking any business or operations which may appear likely to assist or benefit the Company or to enhance the value of any property or business of the Company, and to place or guarantee the placing of, underwrite, subscribe for, or otherwise acquire all or any part of the shares or securities of any such company as aforesaid.

(p) To sell or otherwise dispose of the whole or any part of the business or property of the Company, either together or in portions, for such consideration as the Company may think fit, and in particular for shares, debentures, or securities of any company purchasing the same.

(q) To act as agents or brokers and as trustees for any person, firm or company, and to undertake and perform sub-contracts.

(r) To remunerate any person, firm or company rendering services to the Company either by cash payment or by the allotment to him or them of

shares or other securities of the Company credited as paid up in full or in part or otherwise as may be thought expedient.

(s) To pay all or any expenses incurred in connection with the promotion, formation and incorporation of the Company, or to contract with any person, firm or company to pay the same, and to pay commissions to brokers and others for underwriting, placing, selling, or guaranteeing the subscription of any shares or other securities of the Company.

(t) To support and subscribe to any charitable or public object and to support and subscribe to any institution, society, or club which may be for the benefit of the Company or its Directors or employees, or may be connected with any town or place where the Company carries on business; to give or award pensions, annuities, gratuities, and superannuation or other allowances or benefits or charitable aid and generally to provide advantages, facilities and services for any persons who are or have been Directors of, or who are or have been employed by, or who are serving or have served the Company, or any company which is a subsidiary of the Company or the holding company of the Company or a fellow subsidiary of the Company or the predecessors in business of the Company or of any such subsidiary, holding or fellow subsidiary company and to the wives, widows, children and other relatives and dependants of such persons; to make payments towards insurance; and to set up, establish, support and maintain superannuation and other funds or schemes (whether contributory or non-contributory) for the benefit of any of such persons and of their wives, widows, children and other relatives and dependants; and to set up, establish, support and maintain profit sharing or share purchase schemes for the benefit of any of the employees of the Company or of any such subsidiary, holding or fellow subsidiary company and to lend money to any such employees or to trustees on their behalf to enable any such purchase schemes to be established or maintained.

(u) Subject to and in accordance with a due compliance with the provisions of Sections 155 to 158 (inclusive) of the Act (if and so far as such provisions shall be applicable), to give, whether directly or indirectly, any kind of financial assistance (as defined in Section 152(1)(a) of the Act) for any such purpose as is specified in Section 151(1) and/or Section 151(2) of the Act.

(v) To distribute among the Members of the Company in kind any property of the Company of whatever nature.

(w) To procure the Company to be registered or recognised in any part of the world.

(x) To do all or any of the things or matters aforesaid in any part of the world and either as principals, agents, contractors or otherwise, and by or through agents, brokers, sub-contractors or otherwise and either alone or in conjunction with others.

(y) To do all such other things as may be deemed incidental or conducive to the attainment of the Company's objects or any of them.

AND so that:-

(1) None of the objects set forth in any sub-clause of this Clause shall be restrictively construed but the widest interpretation shall be given to each such object, and none of such objects shall, except where the context expressly so requires, be in any way limited or restricted by reference to or inference from any other object or objects set forth in such sub-clause, or by

reference to or inference from the terms of any other sub-clause of this Clause, or by reference to or inference from the name of the Company.

(2) None of the sub-clauses of this Clause and none of the objects therein specified shall be deemed subsidiary or ancillary to any of the objects specified in any other such sub-clause, and the Company shall have as full a power to exercise each and every one of the objects specified in each sub-clause of this Clause as though each such sub-clause contained the objects of a separate company.

(3) The word "company" in this Clause, except where used in reference to the Company, shall be deemed to include any partnership or other body of persons, whether incorporated or unincorporated and whether domiciled in the United Kingdom or elsewhere.

(4) In this Clause the expression "the Act" means the Companies Act 1985, but so that any reference in this Clause to any provision of the Act shall be deemed to include a reference to any statutory modification or re-enactment of that provision for the time being in force.

4. The liability of the Members is limited.

5. The Company's share capital is £1,000 divided into 1,000 shares of £1 each.

WE, the subscribers to this Memorandum of Association, wish to be formed into a Company pursuant to this Memorandum; and we agree to take the number of shares shown opposite our respective names.

| Names, and addresses of Subscribers | Number of shares taken by each Subscriber |
|-------------------------------------|--|
|-------------------------------------|--|

1. For and on behalf of
Instant Companies Limited,
2 Baches Street,
London. N1 6UB

- One

2. For and on behalf of
Swift Incorporations Limited,
2 Baches Street,
London. N1 6UB

- One

Total shares taken - Two

Dated this 4th day of January, 1988.

Witness to the above Signatures:-

Terry Jayne,
2 Baches Street,
London. N1 6UB

THE COMPANIES ACT 1985

PRIVATE COMPANY LIMITED BY SHARES

ARTICLES OF ASSOCIATION OF

SPECTRA PARK SCIENTIFIC (UK) LIMITED

CERTIFICATION

WE HEREBY CERTIFY that this print incorporates all alterations made to this company's Memorandum Association by filed resolutions and is lodged in compliance with the requirements of section 18 of the companies Act 1985.

PRELIMINARY

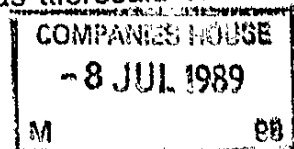
1. (a) The Regulations contained in Table A in the Schedule to the Companies (Tables A to F) Regulations 1985 as amended by the Companies (Tables A to F) (Amendment) Regulations 1985 (such Table being hereinafter called "Table A") shall apply to the Company save in so far as they are excluded or varied hereby and such Regulations (save as so excluded or varied) and the Articles hereinafter contained shall be the regulations of the Company.

(b) In these Articles the expression "the Act" means the Companies Act 1985, but so that any reference in these Articles to any provision of the Act shall be deemed to include a reference to any statutory modification or re-enactment of that provision for the time being in force.

ALLOTMENT OF SHARES

2. (a) Shares which are comprised in the authorised share capital with which the Company is incorporated shall be under the control of the Directors who may (subject to Section 80 of the Act and to paragraph (d) below) allot, grant options over or otherwise dispose of the same, to such persons, on such terms and in such manner as they think fit.

(b) All shares which are not comprised in the authorised share capital with which the Company is incorporated and which the Directors propose to issue shall first be offered to the Members in proportion as nearly as may be to the number of the existing shares held by them respectively unless the Company in General Meeting shall by Special Resolution otherwise direct. The offer shall be made by notice specifying the number of shares offered, and limiting a period (not being less than fourteen days) within which the offer, if not accepted, will be deemed to be declined. After the expiration of that period, those shares so deemed to be declined shall be offered in the proportion aforesaid to the persons who have, within the said period, accepted all the shares offered to them; such further offer shall be made in like terms in the same manner and limited by a like period as the original offer. Any shares not accepted pursuant to such offer or further offer as aforesaid or not



capable of being offered as aforesaid except by way of fractions and any shares released from the provisions of this Article by any such Special Resolution as aforesaid shall be under the control of the Directors, who may allot, grant options over or otherwise dispose of the same to such persons, on such terms, and in such manner as they think fit, provided that, in the case of shares not accepted as aforesaid, such shares shall not be disposed of on terms which are more favourable to the subscribers therefor than the terms on which they were offered to the Members. The foregoing provisions of this paragraph (b) shall have effect subject to Section 80 of the Act.

(c) In accordance with Section 91(1) of the Act, Sections 89(1) and 90(1) to (6) (inclusive) of the Act shall not apply to the Company.

(d) The Directors are generally and unconditionally authorised for the purposes of Section 80 of the Act, to exercise any power of the Company to allot and grant rights to subscribe for or convert securities into shares of the Company up to the amount of the authorised share capital with which the Company is incorporated at any time or times during the period of five years from the date of incorporation and the Directors may, after that period, allot any shares or grant any such rights under this authority in pursuance of an offer or agreement so to do made by the Company within that period. The authority hereby given may at any time (subject to the said Section 80) be renewed, revoked or varied by Ordinary Resolution of the Company in General Meeting.

SHARES

3. The lien conferred by Clause 8 in Table A shall attach also to fully paid-up shares, and the Company shall also have a first and paramount lien on all shares, whether fully paid or not, standing registered in the name of any person indebted or under liability to the Company, whether he shall be the sole registered holder thereof or shall be one of two or more joint holders, for all moneys presently payable by him or his estate to the Company. Clause 8 in Table A shall be modified accordingly.

4. The liability of any Member in default in respect of a call shall be increased by the addition at the end of the first sentence of Clause 18 in Table A of the words "and all expenses that may have been incurred by the Company by reason of such non-payment".

GENERAL MEETINGS AND RESOLUTIONS

5. (a) A notice convening a General Meeting shall be required to specify the general nature of the business to be transacted only in the case of special business and Clause 38 in Table A shall be modified accordingly.

All business shall be deemed special that is transacted at an Extraordinary General Meeting, and also all that is transacted at an Annual General Meeting, with the exception of declaring a dividend, the consideration of the accounts, balance sheets, and the reports of the Directors and Auditors, and the appointment of, and the fixing of the remuneration of, the Auditors.

(b) Every notice convening a General Meeting shall comply with the provisions of Section 372(3) of the Act as to giving information to Members in regard to their right to appoint proxies; and notices of and other communications relating to any General Meeting which any Member is entitled to receive shall be sent to the Directors and to the Auditors for the time being of the Company.

6. (a) Clause 40 in Table A shall be read and construed as if the words "at the time when the Meeting proceeds to business" were added at the end of the first sentence.

(b) If a quorum is not present within half an hour from the time appointed for a General Meeting the General Meeting shall stand adjourned to the same day in the next week at the same time and place or to such other day and at such other time and place as the Directors may determine; and if at the adjourned General Meeting a quorum is not present within half an hour from the time appointed therefor such adjourned General Meeting shall be dissolved.

(c) Clause 41 in Table A shall not apply to the Company.

APPOINTMENT OF DIRECTORS

7. (a) Clause 64 in Table A shall not apply to the Company.

(b) The maximum number and minimum number respectively of the Directors may be determined from time to time by Ordinary Resolution in General Meeting of the Company. Subject to and in default of any such determination there shall be no maximum number of Directors and the minimum number of Directors shall be one. Whensoever the minimum number of Directors shall be one, a sole Director shall have authority to exercise all the powers and discretions by Table A and by these Articles expressed to be vested in the Directors generally, and Clause 89 in Table A shall be modified accordingly.

(c) The Directors shall not be required to retire by rotation and Clauses 73 to 80 (inclusive) in Table A shall not apply to the Company.

(d) No person shall be appointed a Director at any General Meeting unless either:-

(i) he is recommended by the Directors; or

(ii) not less than fourteen nor more than thirty-five clear days before the date appointed for the General Meeting, notice executed by a Member qualified to vote at the General Meeting has been given to the Company of the intention to propose that person for appointment, together with notice executed by that person of his willingness to be appointed.

(e) Subject to paragraph (d) above, the Company may by Ordinary Resolution in General Meeting appoint any person who is willing to act to be a Director, either to fill a vacancy or as an additional Director.

(f) The Directors may appoint a person who is willing to act to be a Director, either to fill a vacancy or as an additional Director, provided that the appointment does not cause the number of Directors to exceed any number determined in accordance with paragraph (b) above as the maximum number of Directors and for the time being in force.

BORROWING POWERS

8. The Directors may exercise all the powers of the Company to borrow money without limit as to amount and upon such terms and in such manner as they think fit, and subject (in the case of any security convertible into

shares) to Section 80 of the Act to grant any mortgage, charge or standard security over its undertaking, property and uncalled capital, or any part thereof, and to issue debentures, debenture stock, and other securities whether outright or as security for any debt, liability or obligation of the Company or of any third party.

ALTERNATE DIRECTORS

9. (a) An alternate Director shall not be entitled as such to receive any remuneration from the Company, save that he may be paid by the Company such part (if any) of the remuneration otherwise payable to his appointor as such appointor may by notice in writing to the Company from time to time direct, and the first sentence of Clause 66 in Table A shall be modified accordingly.

(b) A Director, or any such other person as is mentioned in Clause 65 in Table A, may act as an alternate Director to represent more than one Director, and an alternate Director shall be entitled at any meeting of the Directors or of any committee of the Directors to one vote for every Director whom he represents in addition to his own vote (if any) as a Director, but he shall count as only one for the purpose of determining whether a quorum is present.

DISQUALIFICATION OF DIRECTORS

10. The office of a Director shall be vacated if he becomes incapable by reason of illness or injury of managing and administering his property and affairs, and Clause 81 in Table A shall be modified accordingly.

GRATUITIES AND PENSIONS

11. (a) The Directors may exercise the powers of the Company conferred by Clause 3(t) of the Memorandum of Association of the Company and shall be entitled to retain any benefits received by them or any of them by reason of the exercise of any such powers.

(b) Clause 87 in Table A shall not apply to the Company.

PROCEEDINGS OF DIRECTORS

12. (a) A Director may vote, at any meeting of the Directors or of any committee of the Directors, on any resolution, notwithstanding that it in any way concerns or relates to a matter in which he has, directly or indirectly, any kind of interest whatsoever, and if he shall vote on any such resolution as aforesaid his vote shall be counted; and in relation to any such resolution as aforesaid he shall (whether or not he shall vote on the same) be taken into account in calculating the quorum present at the meeting.

(b) Clauses 94 to 97 (inclusive) in Table A shall not apply to the Company.

INDEMNITY

13. (a) Every Director or other officer of the Company shall be indemnified out of the assets of the Company against all losses or liabilities which he may sustain or incur in or about the execution of the duties of his office or otherwise in relation thereto, including any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his

favour or in which he is acquitted or in connection with any application under Section 144 or Section 727 of the Act in which relief is granted to him by the Court, and no Director or other officer shall be liable for any loss, damage or misfortune which may happen to or be incurred by the Company in the execution of the duties of his office or in relation thereto. But this Article shall only have effect in so far as its provisions are not avoided by Section 310 of the Act.

(b) Clause 118 in Table A shall not apply to the Company.

TRANSFER OF SHARES

14. The Directors may, in their absolute discretion and without assigning any reason therefor, decline to register the transfer of a share, whether or not it is a fully paid share, and the first sentence of Clause 24 in Table A shall not apply to the Company.

Names and addresses of Subscribers

1. For and on behalf of
Instant Companies Limited,
2 Baches Street,
London. N1 6UB

2. For and on behalf of
Swift Incorporations Limited,
2 Baches Street,
London. N1 6UB

Dated this 4th day of January, 1988.

Witness to the above Signatures:-

Terry Jayne,
2 Baches Street,
London. N1 6UB