

# ANNUAL REPORT 1993



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# DEMAND

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Design & Manufacture for Disability



# DEMAND

## Design and Manufacture for Disability

Registered Charity no. 1008128

### Principal Patron

The Earl of Snowdon GCVO RDI

### Patrons

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Brian Greathead

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### The Earl of Snowdon GCVO RDI Principal Patron of DEMAND

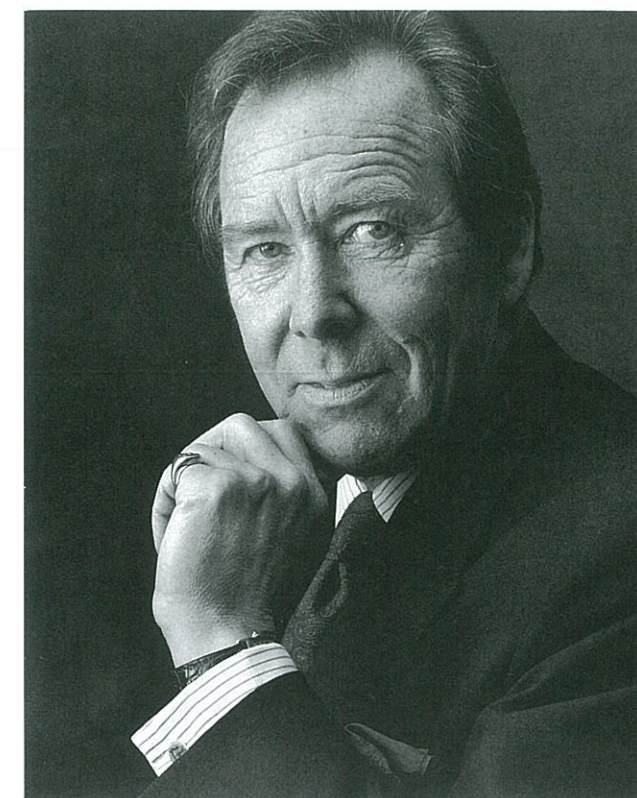
From its beginning in 1980 the charity DEMAND has sought to improve the quality of life for children and adults with severe disabilities. This is achieved through the design and manufacture of unique items of furniture and equipment to meet their special needs, usually when no other solution exists.

The work of DEMAND is wide ranging. The gift of a unique power chair, for example, may enable a disabled person to continue to live independently at home, to work, or return to work, sometimes after a serious accident. As well as making equipment for individual disabled people DEMAND also produces general solutions which have benefited thousands of adults and children since their introduction.

As a Patron of DEMAND since its inception I am pleased to commend to you this Annual Report. I have visited DEMAND's headquarters and well equipped workshops and I am most impressed by the skill and enthusiasm of their designers and craftsmen.

I whole-heartily commend their marvellous work to you for your support.

*Snowdon*





## Chairman's foreword

This Annual Report provides a valuable picture of the work of DEMAND, but can hardly do justice to the energy and enthusiasm of our designers and craftsmen who strive to meet the ever increasing needs of children and adults with a wide range of disabilities.

Since its foundation thirteen years ago DEMAND has become a major charity in the provision of specialised furniture and equipment for people with serious disabling conditions including rheumatoid arthritis, cerebral palsy, muscular dystrophy, autism and severe learning difficulties. DEMAND designs and makes unique equipment for anyone who has need, regardless of their ability to pay, and we try to help all who come to us however serious and disabling their problems.

DEMAND has not of course been immune to the economic constraints of recent years. We have, however, improved our project management and continue to efficiently control our finances. Particularly we carefully control the cost of administration and fundraising to ensure the best possible use of your donations. We have also concentrated on improving our productivity and I am pleased to report a record number of projects completed during the past year.

As always, we extend to you a warm welcome to visit DEMAND to see for yourselves the work we undertake on behalf of disabled people. I ask you to lend your support to DEMAND in whatever way you can.



Michael Warr



## DEMAND Open Day



An Open Day was held on Friday 5 November. It was attended by more than 120 friends and supporters of DEMAND as well as doctors, physiotherapists, occupational therapists and social workers. We were pleased to welcome several people, and their carers, who had received help and special equipment from DEMAND during the year.

We were especially pleased to welcome Esther Rantzen, Patron, as our Guest of Honour. On arrival she was greeted by Lord Renton, Patron, who conducted her on a tour of the workshops and design studio where some of DEMAND's projects

were displayed. Esther was particularly interested in the DEMAND Walk/Sit Frame and a special tandem pushchair designed for both a young girl with cerebral palsy and her baby sister. Work by students attending the Design Research for Disability course at the London Guildhall University was also on display.

The Open Day provided guests with the opportunity to see the wide range of work that DEMAND undertakes on behalf of children and adults with disabilities and who have special needs.





## Chair For Gillian

Gillian, who is twenty five, suffers from extreme spinal deformity and has severe learning difficulties. She is unable to stand or walk unaided. Gillian lives in a Mencap sheltered house in Harpenden which is divided into small flats, each with its own kitchen and other facilities.

Her carers were unable to find Gillian a general purpose chair which enabled her to sit at the dining table for meals and other group activities, as well as give her the correct postural control which she needed. DEMAND were asked to help.

Our designers visited Gillian and assessed her needs. DEMAND designed and built a special chair for her which incorporates customised cushioning for postural support and extra wide padded arms to encourage an upright sitting position. The chair is designed to harmonise with existing furniture in the flat.

Gillian and her carers are delighted with the chair as she is now able to sit at the table for her meals and join in other activities.



## Toilet Aid for Rose

Rose, who is 75 years old, is a widow and lives alone. She has severe arthritis and is confined to a wheelchair, but is able to live a relatively independent life. Although Rose has managed to resolve most of her domestic problems, the limited movement of her arms prevented her from carrying out the normally simple task of flushing her toilet. Consequently her toilet was only flushed when her home help or social worker visited her. The social worker responsible for Rose was deeply concerned at these unhygienic and undignified conditions. She asked DEMAND to help.

Our designers visited Rose at home to assess her needs. Rose's toilet has a support frame fitted around it. DEMAND designed and made a device which enables the toilet to be flushed using a handle positioned by her right hand and fixed to the support frame. The mechanism uses standard bicycle brake components, together with a comfortable handle, to give improved leverage to reduce the force needed to flush the toilet.

Rose can now flush the toilet herself and this has given her much improved independence and dignity.



## Chair for Hero

Hero, who is six years old, suffers from an unknown neurological disorder. She cannot speak and has poor muscle control which prevents her from walking, standing or sitting unaided. She also expresses chorea type involuntary movements which are progressively worsening. Despite her problems she is a happy, attractive and very intelligent child.

Hero communicates by sitting on her mother's lap and uses a pencil to form large letters on a pad. The letters are written one on top of the other and the words formed are read by her mother. Hero is capable of sustained activity but is now too big to sit on her mother's lap for prolonged periods.

Our designers visited Hero at home and discussed her needs with her physiotherapist, teacher and parents. DEMAND designed and built a unique chair for Hero that is fully adjustable and contoured for postural support and comfort. The chair is cantilevered from a height adjustable column which allows her to be positioned over her mother's lap. The chair also provides leg and foot support.

The provision by DEMAND of this custom made equipment has helped Hero to improve her communication skills enormously, which she so desperately wanted to do.



## The "Greenfield" Standing Frame

The design and manufacture of the first "Greenfield" standing frame was in 1986 to meet the needs of a particular individual. Subsequently, DEMAND developed the design and produced a number of frames to help a greater number of people.

As a consequence of recent feedback from physiotherapists and users, DEMAND has now further improved the design of the frame. It is now directly accessible from a wheelchair; the feet location adjustment has been simplified; the height adjusters improved and the tray has been completely redesigned. The knee adjustment and the body support have also been improved.

These new improvements will ensure that the standing frame will benefit a far greater number of people.



## Therapy Chair for Maureen

Maureen, who is 22, has extreme learning difficulties. She has cerebral palsy and severe postural control problems. She cannot walk or stand unaided. Maureen lives at home with her parents and attends the Rosa Morrison Day Centre in Barnet.

When not in her wheelchair she uses a "controller chair" which gives her good support. Unfortunately the chair does not allow Maureen to develop her own ability to support and balance herself, nor does it allow her to sit at tables where most activities are carried out. Her physiotherapist asked DEMAND to help.

DEMAND designed and built for Maureen a special chair which enables her to develop her ability to support and balance herself while sitting in it. The chair has special arms and backrest which can be folded away to give varying combinations of support during her postural therapy. It is fitted with castors and a slide-away footrest for mobility about the Centre.

Not only is the chair used for Maureen's postural therapy but she can now join her friends at tables for activity periods and meals.



## Steven's Bed

Steven, who is 4 years old, has severe athetoid cerebral palsy. He attends Waverley School, Enfield, for children with severe learning difficulties. Previously DEMAND designed and made for him special equipment for his chair to help control spasms and to improve his lower body control. His physiotherapist then asked DEMAND for help with problems relating to his bed.

Our designers visited Steven at home to assess his needs. DEMAND enlarged his existing bed to accommodate a special contoured mattress which did not previously fit the bed. The bed base was also adjusted to a height which allows his mother to lift Steven in and out. It can also be raised at one end to maintain a good posture whilst he sleeps. A safety bed rail was also fitted.

The provision of this bed has greatly improved Steven's comfort. His mother is delighted with the result.



## The "Wingwalker"

DEMAND was asked by physiotherapists at the Child Development Centre, St Albans Hospital, to design and build an aid to help with the treatment of young children with cerebral palsy. The centre uses the Bobath Method of treatment which for some exercises requires the child to stand between two poles with arms outstretched.

The result was the creation of the DEMAND "Wingwalker", aptly named because of the colourful aeroplane shape of the apparatus.

It is used to encourage children to develop good standing posture. It can be used for other activities and in conjunction with other equipment such as cushions, wedges and seats. The apparatus is adjustable for use by young children of all ages.

The "Wingwalker" has proved to be a great success at the Centre. It is popular with the children as it is colourful and exciting to use. The "Wingwalker" is now available through Nottingham Rehab.



## DEMAND Walk/Sit Frame

The DEMAND Walk/Sit Frame was developed from an original design for Jenny, a young woman with multiple sclerosis. She was too weak to walk unaided and was reluctant to use a conventional walking frame as she was afraid of becoming fatigued and falling.

Trials in hospitals confirm that there is a need by some patients for the security provided by the Walk/Sit Frame, which has a swivel seat to allow the user to sit and rest when necessary. The seat engages automatically when a sitting position is adopted and disengages when the user stands up. It is unnecessary to let go, or turn around, to adopt a sitting position, so making it safer. It is height adjustable and has swivel castors on the front legs for mobility.

The Walk/Sit Frame helps patients in physiotherapy to adopt an upright posture when learning to walk again, rather than a stooped posture sometimes associated with other walking frames. It helps patients in occupational therapy to move from one location to another to carry out tasks where they need to sit down, for example, in the kitchen.

The Walk/Sit Frame gives the user a sense of security as they can sit down immediately with confidence and safety if they suddenly feel fatigued.

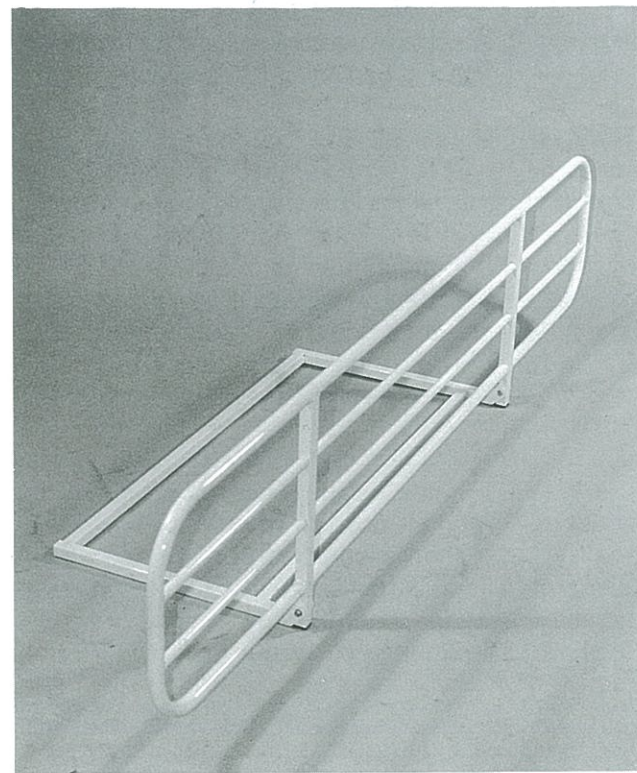


### Footrest for Dianne

Dianne, who is 19 years old, is physically handicapped and has extreme learning difficulties. She lives in sheltered accommodation in Slough with a number of other young adults and their carers. Dianne cannot walk without assistance. She uses a wheelchair but likes to use alternative seating whenever possible. Unfortunately Dianne is not able to use a conventional chair at the table for meals and other activities, as she needs a special support for her feet to maintain her balance and posture. Dianne's physiotherapist asked DEMAND to help.

Our designers visited Dianne and assessed her needs. DEMAND subsequently designed and made a special footrest for her. The footrest is fitted to the front legs of the dining chairs used in the home and can be removed easily. The footrest is adjustable for height and angle to ensure that she sits comfortably. It is covered with a non slip surface for safety.

The provision of this special footrest enables Dianne to join the other residents at the table for meals and other activities and to maintain her balance and good posture.



### Bed Safety Rail for Michelle

Michelle is 6 years old. She is physically disabled and attends Waverley School, Enfield, for children with extreme learning difficulties. Michelle sleeps in a normal bed but has a tendency to severe restlessness and frequently falls out. A safety rail was fitted to her bed but this became ineffective as she grew older. Her mother and her school occupational therapist were unable to find a suitable solution and asked DEMAND for help.

DEMAND designed and built a bed safety rail for Michelle which extends to the full length of her bed and is high enough to prevent her from falling out. The safety rail is secured through a "deep foot" laid and secured under the mattress. The safety rail is hinged to allow it to drop down enabling Michelle to get in and out of bed and also allows her mother to make the bed easily.

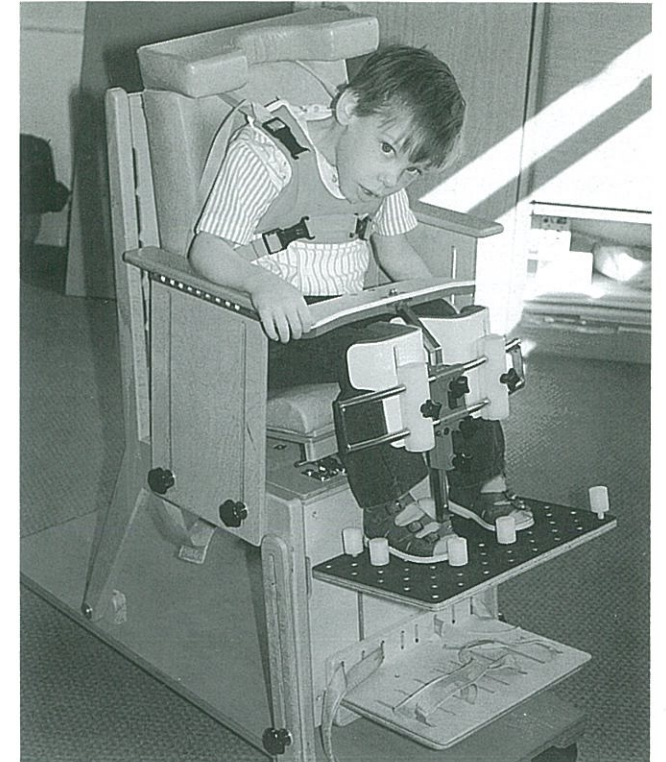
Michelle can now go to bed without the fear of falling out and her family are able to have undisturbed sleep.

### Chair Improvements for Steven

Steven, who is 4 years old, has severe athetoid cerebral palsy. He attends Waverley School Enfield, for children with severe learning difficulties. He was using a commercially manufactured "controller chair" but it did not meet his needs as it failed to control his spasms and did not give him correct lower body control. Steven's physiotherapist asked DEMAND for help.

Our designers visited Steven and evaluated his needs. DEMAND designed and fitted padded knee supports which are adjustable both horizontally and vertically. A further padded support was added above his thighs to control his excessive spasms. The chair seat was redesigned to reduce the angle to the backrest to improve postural support. An adjustable footrest was also fitted.

The provision of this equipment has greatly improved Steven's lower body control and his general posture. His mother said ".....for the first time in Steven's life a problem has actually been resolved."



### Motorised Chair for Violet.

Violet, who is 79, is a widow and lives with her daughter. She has severe arthritis and osteoporosis with a pronounced spinal curvature causing a hump in her upper back. Her hip was badly broken as the result of a fall, causing her right leg to be shorter than her left. She walks with extreme difficulty with the aid of a walking frame.

Violet was using an ordinary armchair which she could not get in or out of unaided. Cushions were used to give her additional support. Her social worker was unable to provide a special chair which would give her the support and comfort she urgently needed. Violet's social worker asked DEMAND to help.

Our designers visited Violet and assessed her specific needs. DEMAND designed and built for her a motorised reclining and tilting chair which enables her to get in and out unaided. The chair cushioning shape and density is customised to give her maximum support and comfort.

The provision of this motorised chair has greatly improved the quality of Violet's life by providing a degree of independence and comfort she had not enjoyed for some time.



### Protective Video Recorder Cabinet for Gerard

Gerard, who is 33 years old, is autistic and has a mental age of three. In 1991 he had a depressive breakdown and was admitted to a psychiatric hospital. Now recovering, he is allowed to be at home with his family for progressively longer periods. Gerard loves watching television and videos but unfortunately he has serious behavioural problems, which cause him to get involved in some programmes, resulting in his attacking and breaking the equipment.

In 1992 DEMAND designed and built a special tamper proof cabinet to protect the television. This

cabinet was successful and Gerard's parents subsequently asked us to design a similar protective cabinet for the video recorder. The tamper proof cabinet has an unbreakable transparent window to protect the display. It incorporates two doors which can be locked when not in use and controls which cannot be abused. All the cabling is fully protected for security and safety. The video recorder cabinet harmonises with the television cabinet.

Gerard's parents hope that the provision of the television cabinet and now the video recorder cabinet will bring Gerard's permanent homecoming a little nearer.

### Bath Aids

The Brain Injury Unit at Napsbury Hospital relocated to new premises. The baths in the new premises are much larger and wider than normal and the existing bathing seats, essential for the bathing care of brain injury patients, were too narrow to span the width of the baths. As there were no suitable bathing seats available the occupational therapists asked DEMAND to help.

DEMAND designed and made a range of bathing seats which fit the new baths. They are made from mahogany for strength and rigidity and covered with a tough moulded plastic seat for comfort and hygiene.



### Bed For Robert

Robert is 52 years old. He has a dietary problem which causes uncontrollable weight gain. Robert now weighs 35 stones. He has severe breathing difficulties and is unable to walk without the aid of a walking frame. Robert never leaves his flat and spends much of his time lying on his bed, which was in a very poor state of repair. He had extreme difficulty in getting in and out of his bed and suffered from insomnia due to great discomfort. Social Services were unable to obtain a bed strong enough to cope with his weight. DEMAND were asked to help.

Our designers visited Robert at his flat to assess his needs. DEMAND then designed and built for him a rigid steel framed bed strong enough to accommodate his weight. The bed has a high padded headboard to enable him to sit up in bed.

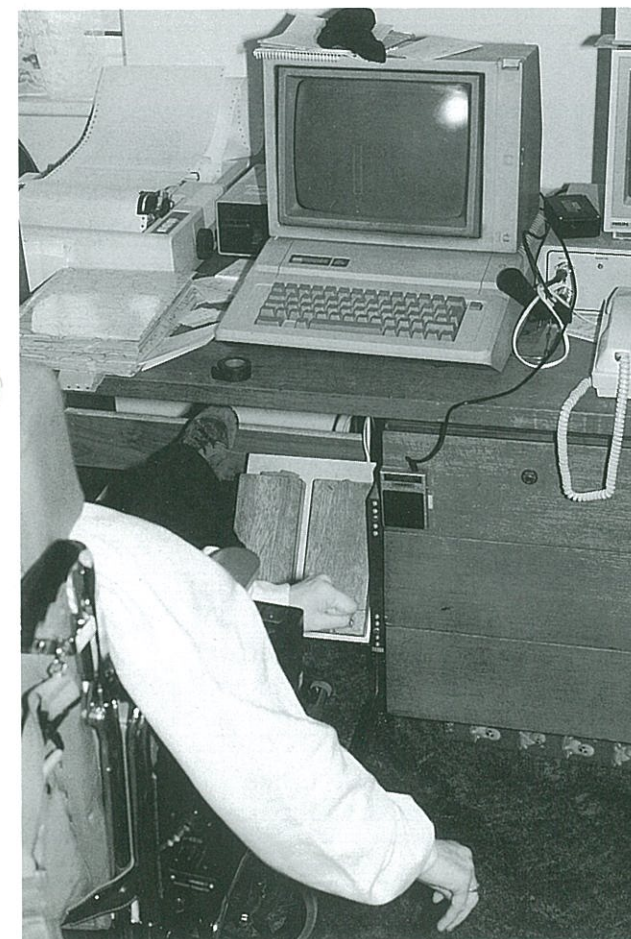
Since receiving his bed Robert is now able to sleep more comfortably.

### Motorised Chair for Grace

Grace has severe rheumatoid arthritis. She is very small and is unable to get in and out of armchairs without assistance. Grace was not comfortable in any of the chairs available to her and her physiotherapist tried for some time to find a suitable commercially available chair, without success. Her physiotherapist felt that a reclining motorised chair, with a tilting facility to enable her to get in and out unaided, would be very beneficial. Grace's physiotherapist asked DEMAND to help.

Our designers visited Grace and discussed her needs with her and her physiotherapist. DEMAND designed and built a small customised motorised reclining chair with a tilting facility to get in and out unaided. The shape and density of the cushions are designed to give her correct postural support and maximum comfort. The material harmonises with existing furniture.

Grace is delighted with her chair, which she can operate herself with ease. She says that the chair gives her great comfort and has improved her independence.



### Computer Switch Holder for Nicky

Nicky is 29 years old. She has cerebral palsy and is severely physically handicapped in that she cannot use her upper limbs and cannot speak. Nicky uses either an electric wheelchair, which she controls with a foot switch, or a manual wheelchair which has to be pushed by a carer. She has recently moved into her own flat where she is able to live alone with the support of visiting carers and an occupational therapist. Nicky is now studying for 'A' levels with the help of a tutor.

Nicky communicates through a computer which she operates with her foot via an improvised switching unit. Unfortunately she encountered problems with the switches because of their positioning and mounting. Nicky's social worker asked DEMAND to help. Our designers visited Nicky and assessed her needs. DEMAND designed and made for her a special switch holder and an adjustable mounting which is located under her workstation. The switch holder is positioned to suit her limited movements, and is easily adjustable to cater for whichever chair she uses.

The provision of this special equipment enables Nicky to communicate efficiently and independently through her computer and also helps her enormously with her studies.



### Pushchair for Lorna

Lorna is 5 years old and lives at home with her mother, father and baby sister. She has athetoid cerebral palsy which causes her to twist and turn uncontrollably and she cannot walk or support herself when sitting. Lorna's mother needs to take her and her baby sister out but she was unable to obtain a suitable twin pushchair. Lorna's physiotherapist asked DEMAND to help.

DEMAND adapted a tandem pushchair by removing the existing front seat and replacing it with a customised seat shaped and padded to give Lorna firm, comfortable support. The seat is adjustable to allow for her growth. It is easily removed from the frame which can be folded flat to fit into the boot of a car.

Lorna's mother is delighted with the customised pushchair as she is now able to take both children out without additional help.



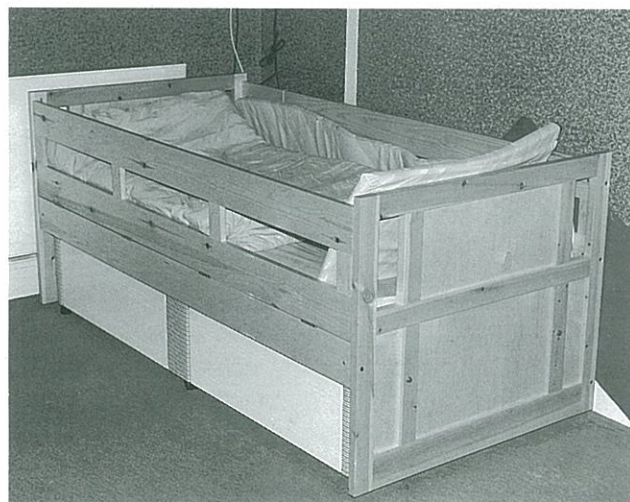
### Safety Bed for Edward

Edward who is 18, has cerebral palsy. He is a resident in the United Response Trust sheltered accommodation for young adults in St. Albans. He sleeps in a normal bed but has a tendency to extreme restlessness and spasms which cause him to fall out of bed.

The policy of the Trust is to create as normal a domestic atmosphere as possible and so they were reluctant for Edward to have a hospital-type high sided metal bed. The Trust asked DEMAND for help.

DEMAND designed and made for Edward a wooden surround that enclosed the existing divan bed on all sides to keep him secure when sleeping. The surround is self-contained and bolts onto the bed base. The bed can be moved with ease on its castors. One side folds down to allow access to the bed. It can be securely latched in the closed position and can be quickly unlatched. Access to the existing under-bed drawers is maintained. The surround is made of pine to look like a normal bed and to harmonise with the decor of Edward's room.

This customised bed enables Edward to sleep safely. His carers are delighted as he now needs much less overnight attention.



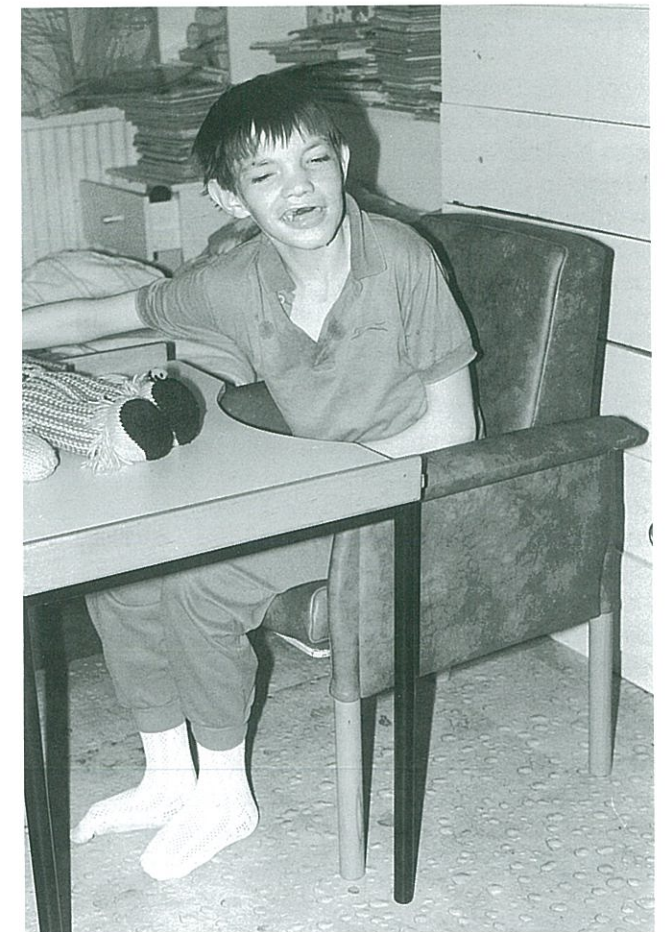
### Chair and Table for Daniel

Daniel is 22 years old and has cerebral palsy. He has extreme learning difficulties and is physically handicapped. Daniel has the looks and stature of a 10 year old. He cannot speak but is able to communicate with his parents by means of hand signs.

When not in his wheelchair Daniel was using a child's chair which had deteriorated to a point where it was unusable. The shape of the chair and its dimensions did not encourage good posture or provide a suitable seating position for meals or activities at a table. Daniel's occupational therapist asked DEMAND to help.

Our designers visited Daniel and assessed his needs. DEMAND designed and built a chair which he now uses for relaxing and activities. It has a wooden frame and the cushioning is customised to give him the support and comfort he needs. It is upholstered in an attractive red vinyl. DEMAND also made a table for Daniel which he can use with the chair for activities and meals.

The provision of the table and chair enables Daniel to spend more time out of his wheelchair and devote more time to other activities.



### Exercise Apparatus for James

James is 15 years old and has cerebral palsy. Despite his serious disability he tries to lead a normal and full life. He carries out a regular programme of exercises at home to maintain and improve the mobility of his legs and arms. One exercise involves sitting on a flat surface at a prescribed height and propelling himself around with a sideways stepping action. No suitable equipment was available for this exercise and DEMAND was asked to help by his physiotherapist.

Our designers visited James at home to discuss with him and his physiotherapist his specific needs. DEMAND designed and built for James a strong, height adjustable apparatus with a broad base for stability and bevelled corners for safety. The apparatus top is smooth and highly polished to aid his exercising and is finished in bright colours.

The provision of this apparatus enables James to carry out his therapy programme regularly at home and this has benefited him greatly.



## Therapy Benches

The Child Development Centre, St Albans, uses the Bobath Method of therapy for children with cerebral palsy. This includes the child sitting at a specified height to carry out a range of exercises, involving stretching, lying, balancing and bending. The physiotherapist needs to assist the child from behind. An assortment of stools, boxes and blocks, which were not entirely satisfactory, were being used. The Centre asked DEMAND for help.

Our designers visited the Centre, and in conjunction with the physiotherapists, drew up a specification for a special therapy bench. DEMAND then designed and manufactured two therapy benches which are height adjustable and are suitable for children of all ages. The adjustments are made through a handwheel, positioned under the bench, which can be operated when both the therapist and child are sitting on the bench.

The bench frames are made from brightly coloured steel tube and fitted with attractive slatted wooden seats. An additional set of seat tops, one plain and one padded, which can be fitted over the existing seats, was also provided.

The Therapy Benches have proved a huge success and are very popular with the children and their physiotherapists.



## Worktable for Holly

Holly, who is 12 years old, lives at home with her mother, father and younger brother. She has arthritis which affects her back, neck, arms and hands. Holly attends a local school in Hemel Hempstead. At home she uses a normal desk with a horizontal work surface to do her homework. Unfortunately this was putting excessive strain on her neck and back and so limiting the time she could spend at her homework. Holly's physiotherapist asked DEMAND for help.

DEMAND designed and made for Holly an adjustable sloping worktable which is fitted to her existing desk and can be easily angled between 15 and 60 degrees to facilitate a range of activities. It incorporates a padded elbow support and a device for holding papers on the sloping surface.

The provision of this worktable enables Holly to spend more time at her studies with less discomfort than she was previously experiencing.



## Student Placements

Over the past years DEMAND has been able to give Industrial Placements to a number of students as part of their degree course in design. This has given them practical experience in design and manufacture, and helped them gain first hand knowledge of the requirements of people with disabilities and special needs. Steven Lynch, from Trent University, completed his placement in March. He designed and manufactured a special ironing board, fitted with a gas strut, which enables the user to raise and lower it with the minimum of effort. He also designed and built a chair for a young lady with special seating requirements.

Sophie Shah, who joined us from Trent University in October, is designing and manufacturing a special writing/drawing board for Jenny, a young girl with cerebral palsy. The photograph shows Sophie with her project. Also, a number of students from the Design for Disability course at the London Guildhall



University, have been able to bring their ideas and designs to fruition through the use of DEMAND's workshops.

## Other Projects

In 1993 DEMAND helped many more people than we are able to highlight in this report. Among the other projects were modifications to clients' equipment previously supplied by DEMAND and also modifications to equipment which had been purchased commercially. Other work undertaken was the refurbishment of chairs and equipment.

A special toilet support for Eassey Hospital, Kent, for use by patients who are physically disabled.

A special therapy chair for the Rosa Morrison Day Centre used by young people with severe physical and learning disabilities. The chair is used to encourage independent sitting and good postural control.

A mobile chair for Claire who has cerebral palsy and is mentally and physically handicapped. The chair was designed for use at home and to complement one

which DEMAND had designed and built some years ago for Claire to use at school.

DEMAND designed, made and fitted in her home a safe play room for Alison, a young girl who has general development delay problems and bouts of severe self injury.

Roy, an 11 year old boy, has Duchenne muscular dystrophy. Although he needed to use a standing frame, he became distressed when lifted into one. DEMAND designed a motorised lifting/standing frame for him.

DEMAND also helped many other disabled people to locate the special equipment they needed. Advice was sometimes given in reply to a telephone enquiry but more frequently resulted from our visiting the client at home and assessing their needs. We advised over a hundred clients in this way.

## Staff Associates:

Ron Currell, Operations Manager  
Alan Stokes, Finance & Fundraising Manager  
Beryl Cresswell, Administration  
Brian McGirr, Designer  
Graham Dawkins, Designer & Craftsman

Frank Flanagan, Craftsman  
Kelvin Scott, Craftsman  
Paul Malloy, Craftsman  
Derek Bone, Craftsman  
Sophie Shah, Student



## Design Research for Disability at the London Guildhall University

The academic year 1992/93 has been a time of change for the Design Research for Disability course at the London Guildhall University.

Brian Boothby, the Course Organiser and a founder member of DEMAND took early retirement, and the course itself has been re-written in modular form to conform to other postgraduate courses within the University.

It is an interesting period and we look forward to continuing support from DEMAND in terms of scholarships, workshop and technical support.

The student cohort of 92/93 comprised five paramedic students and seven designers, of which three were supported by DEMAND in terms of either bursary or technical workshop assistance. On completion of the academic year three final year students were awarded an MA, one with distinction, seven first year students were awarded Postgraduate Diplomas, and two part-time students will continue and complete next academic year.

**John Miller**, a three-dimensional designer, researched the bed and bedroom requirements of elderly people living at home or in residential accommodation. He designed a height adjustable bedstead with a range of accessories which would aid comfort and movement into and out of bed.

The workshop and technical facilities at DEMAND enabled him to produce a full-size working prototype. This is now being developed by John with a view to batch production.

DEMAND invited John Miller and the University to put on a small display of his work on their stand at NAIDEX.

**Lucy Poole**, a furniture designer, identified the food preparation needs of people who have a disabling condition.

Her project called the "Accessible kitchen" centred around a seated user and provided selected appliances arranged according to the food preparation sequence. The system also incorporated specialised storage components.

She was able to build with technical assistance a full-size mock-up at the DEMAND workshop, which was later used for testing.

**Kai Wharton**, a designer and first year student supported by a DEMAND Bursary, is developing a project to make music more accessible to disabled schoolchildren. The equipment he is developing is based on the need for children to become physically involved in pumping a bellows which in turn will transmit air to a series of pipes and wind instruments.

Other projects undertaken by students on the course range from specialised therapy and play systems; hard and soft environments for disabled people; a project associated with lifting and handling patients in intensive care and a transportation system for babies with wheelchair bound parents.

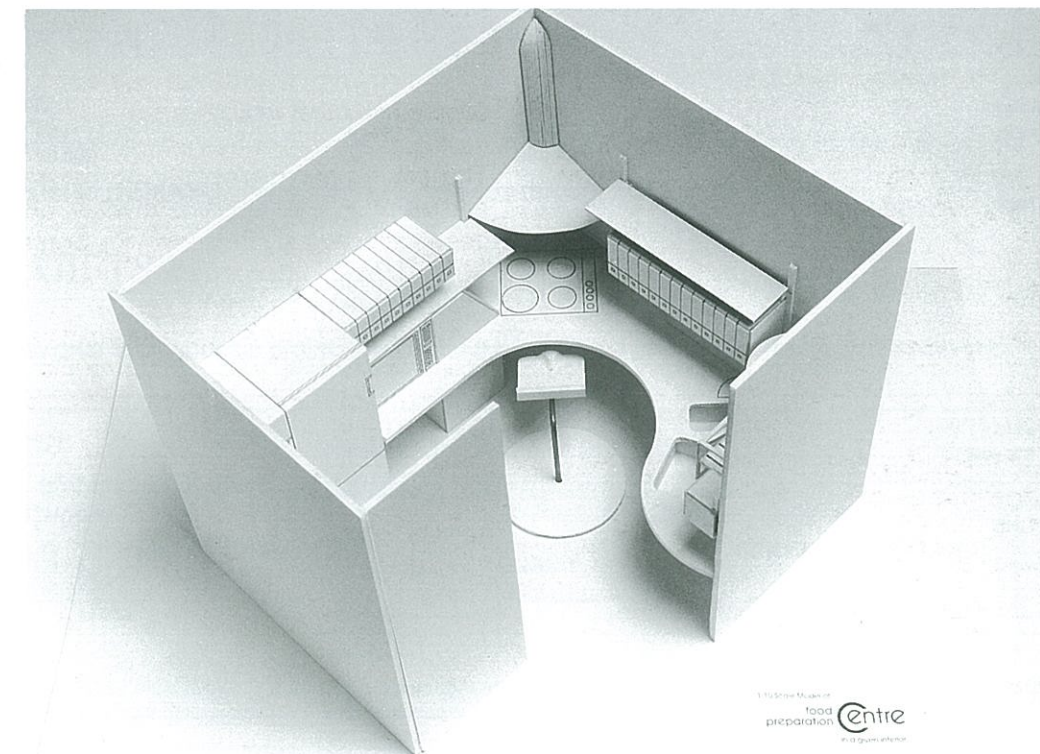
To conclude, the students' work continues to be of a high standard, and it is hoped that our new modular programme will offer a greater degree of flexibility, possibility and formalised interaction between our course and other institutions.

The course publication "Design for Disability" book and video which includes a mention of DEMAND has been received very favourably by the public at large.

Finally we look forward to a continuing relationship with DEMAND in the next academic year, and further action towards bringing on to the market new ideas and designs for the betterment of all people with disabilities.



A Domestic Bed System for elderly and disabled people  
Designed by John Miller



A model of an accessible kitchen for disabled people  
Designed by Lucy Poole



# DEMAND

## Design and Manufacture for Disability

### Income and Expenditure Account for the year ended 31 December 1993

	£	1993	£	1992	£
<b>INCOME</b>					
Donations		152,637		141,770	
Opera Evening Event		—		21,896	
Untaxed Interest		9,201		16,293	
Royalties		4,651		5,074	
Income Tax recoverable		1,798		319	
Sales		12,946		4,076	
		<u>181,233</u>		<u>189,428</u>	
<b>PADDY RENTON FUND</b>					
Donations and covenants	—		500		
Income Tax recoverable	—		167		
	—		667		
Less: Expenses	(1,356)		(3,355)		
Per Balance Sheet	<u>(1,356)</u>		<u>(2,688)</u>		
<b>EXPENDITURE</b>					
Cost of sales		3,269		8,249	
Opera Production Expenses		—		13,888	
Student support		3,621		1,659	
Staff costs		133,355		125,405	
Professional fees		994		7,392	
Workshop and design expenses		30,664		30,870	
Administration expenses		10,539		9,706	
Depreciation and Amortization		10,931		26,493	
		<u>193,373</u>		<u>223,662</u>	
<b>(DEFICIT)/SURPLUS</b>		<u>(12,140)</u>		<u>(34,234)</u>	

### Balance Sheet as at 31st December 1993

	£	1993	£	1992	£
<b>FIXED ASSETS (net of depreciation)</b>					
Tools and equipment		37,637		45,913	
Motor vehicle		1,561		2,342	
		<u>39,198</u>		<u>48,255</u>	
<b>CURRENT ASSETS</b>					
Debtors and prepayments	9,606		7,180		
Cash and bank balances	<u>175,153</u>		<u>194,897</u>		
	184,759		202,077		
<b>CURRENT LIABILITIES</b>					
Creditors	<u>41,304</u>		<u>54,181</u>		
		<u>143,455</u>		<u>147,896</u>	
		<u>182,653</u>		<u>196,151</u>	
<b>FINANCED BY:</b>					
<b>GENERAL FUND</b>					
Balance brought forward		179,147		213,383	
(Deficit) Surplus for the year		<u>(12,140)</u>		<u>(34,234)</u>	
		<u>167,007</u>		<u>179,149</u>	
<b>PADDY RENTON FUND</b>					
Balance brought forward	17,002		19,690		
(Deficit) for the year	<u>(1,356)</u>		<u>(2,688)</u>		
		<u>15,646</u>		<u>17,002</u>	
		<u>182,653</u>		<u>196,151</u>	

The balance sheet shows the state of affairs of DEMAND as at the 31 December 1993 and the Income and Expenditure account for the year ended on that date. We also show, for comparison only, the balance sheet and income and expenditure of the unincorporated charity for the year ended on the 31 December 1992, whose assets and liabilities were transferred to The Company on 1 January 1993.

Hon Treasurer/Director  
A Cussins

Full Accounts which have been audited by Herbert Pepper and Rudland are available on request from the Company Secretary.

## WAYS OF HELPING DEMAND

There are many opportunities for giving your support to our work in aid of children and adults with disabilities.

### GIFT AID - COMPANIES

For gifts of £600 or more. The company deducts basic rate income tax from the payment and accounts for it to the Inland Revenue. As a registered charity, DEMAND is exempt from income tax and can recover the tax deducted by the donor. The gross amount of the payment is allowed against the company's profits.

### GIFT AID - INDIVIDUALS

An individual may also use this scheme for a gift of £600 or more. This gift is made net of basic rate tax and DEMAND claims repayment of the tax from the Inland Revenue.

### DEEDS OF COVENANT

A promise to pay a specified sum over an agreed period of at least four years. DEMAND can recover tax at the basic rate on your covenant, provided that you are a tax payer. You may wish to make an annual payment, or prefer to spread your contribution on a quarterly or monthly basis. The choice is yours.

### PAYROLL GIVING

If your employers operate a payroll giving scheme, you can arrange with them to deduct a regular gift from your gross pay in favour of DEMAND. This is a tax efficient way of giving.

### LEGACIES

Leaving a bequest to DEMAND. Why not remember us through your will?

### SPECIAL GIFTS

You may wish to give for a specific project. We would be only too pleased to discuss this with you.

to: DEMAND  
Design and Manufacture for Disability  
Three Cedars  
Napsbury Hospital, Shenley Lane  
London Colney  
Herts AL2 1AA

Company Gift Aid form ☐

Individual Gift Aid form ☐

Deed of Covenant ☐

Please send me (tick box as required)

Name.....

Address.....

.....Post code.....



## Donors to DEMAND in 1993

Abbey National Charitable Trust Ltd  
The Airflow Community Ltd  
The Alchemy Foundation  
Alexander Howden Group Ltd  
Anonymous  
Jeffrey Archer Esq  
Argos plc  
Ian Askew Charitable Trust  
The Assheton-Smith Charitable Trust  
C J Baker Esq  
The Bank of England  
Barclays Bank plc  
BC-H 1971 Charitable Trust  
Tom Bendhem Esq  
Benham Charitable Settlement  
Betard Bequest  
Vivienne Bloom  
Henry Boot & Son plc  
Boots Charitable Trust  
EG and MA Bousfield Charitable Trust  
Earl and Countess of Bradford's 1981 Charitable Settlement  
The British Alcan Charitable Trust  
BUPA  
Denis Buxton Trust  
The Edward and Dorothy Cadbury Trust  
Cazenove & Co  
Charities Aid Foundation  
The Charterhouse Charitable Trust  
The Childwick Trust  
Ciba-Geigy plc  
The Clover Trust  
The Joseph Collier Charitable Trust  
Commercial Union plc  
Cooper Charitable Trust  
Cornhill Insurance plc  
The Corp and Members of Lloyds & Lloyds Brokers  
The Courage Charitable Trust  
The Coutts Charitable Trust  
Sir William Coxen Trust Fund  
Manny Cussins Foundation  
D M Charitable Trust  
D'Oyly Carte Charitable Trust  
Miss Valerie Davis  
Lily and Henry Davis Charitable Foundation  
Dawson International plc  
Delta plc  
Dillon Read Ltd  
Domino Printing Sciences plc  
R M Douglas Charitable Trust  
Douglas Heath Eves Charitable Trust  
Drinkwater Sabey Ltd  
Druck Ltd  
The Duke of Northumberland  
Alfred Dunhill Ltd  
Eaton Limited  
The Economist Newspaper Ltd  
The Gilbert and Eileen Edgar Foundation  
Electrolux Limited  
The Norman Evershed Trust  
The John Ellerman Foundation

Express Newspapers plc  
David Fagan Esq  
Fine Art Development plc  
The Fitton Trust  
Robert Fleming Holdings Ltd  
The Gerald Fogel Charitable Trust  
Forte plc  
The Frazer Charities Trust  
Charles S French Charitable Trust  
Mr and Mrs Gladwell  
Glass Glover Group plc  
Penelope Gluckstein Charitable Settlement  
The Glynwed Charitable Trust  
The Godington Charitable Trust  
The Goldsmiths' Company  
Gombards  
The Grut Charitable Trust  
Haberdashers' Company  
Halifax Building Society  
J O Hambro Esq  
Harris and Sheldon Group Ltd  
His Royal Highness The Duke of Cornwall  
The Hobson Charitable Trust  
The Hoover Foundation  
AK and AC Hornsby  
House of Fraser plc  
Iceland Frozen Foods plc  
ICI plc  
The Inman Charity  
The Inverforth Charitable Trust  
Jacques Vert plc  
The Jane Hodge Foundation  
Johnson & Firth Brown plc  
The Ian Karten Charitable Trust  
C M Keyser Charity Trust  
Robert Kiln Charitable Trust  
King Edward's Hospital Fund for London  
Kleinwort Benson Charitable Trust  
Ernest Kleinwort Charitable Trust  
Land Securities plc  
LASMO plc  
Edgar E Lawley Foundation  
Lazard Bros and Co Ltd  
The Leach Fourteenth Trust  
Mrs K Lee  
The Sir Edward Lewis Foundation  
Lilly Industries Limited  
Lloyds Bank  
The London Metal Exchange Ltd  
The Lord Ashdown's Charitable Settlement  
Macallan-Glenlivet plc  
Mrs Macgregor  
ED & F Man Ltd Charitable Trust  
Marks and Spencer plc  
Mars (GB) Ltd  
D W Masters Esq  
Matheson & Co Ltd  
Matthews Wrightson Charity Trust  
The Maxwell Trust  
McMullen & Sons Ltd

MEPC plc  
The Mercers' Company  
Thomas Mercer Ltd  
Midland Bank plc  
The Miller Insurance Group Ltd  
The Ministering Children's League  
The Andrew Mitchell Christian Charitable Trust  
Monometer Holdings Ltd  
Mrs J Moore  
The Jocelyn and Katherine Morton Charitable Trust  
Victor Mould Esq  
Multitone Electronics plc  
The NFC Foundation  
The National Magazine Co Ltd  
The National Power Charitable Trust  
Nationwide Building Society  
BN and BV North  
Norwest Holst Ltd  
Norwich Union Insurance Group  
Oscar Faber plc  
P D C Trust  
PF Charitable Trust  
D C Potter Esq  
PPP Medical Trust  
Price Waterhouse  
The Prince Andrew Charitable Trust  
Princes Ltd  
The Priory Foundation  
Mr and Mrs J A Pye's Charitable Settlement  
The Racal Charitable Trust  
The Rainford Trust  
The Rayne Foundation  
The Really Useful Group Limited  
Christopher H R Reeves Charitable Trust  
The Hon Davina Renton  
Mrs J E Ridgeon  
Rolls Royce plc  
D M G Roper Charitable Trust  
Rothmans International plc  
The J Rothschild Group Charitable Trust  
The Royal Bank of Scotland  
Rugby Football Union Charitable Fund  
Saga Group Ltd  
Saint Sarkis Charity Trust  
The Peter Saunders Foundation  
Scandinavian Bank  
Ada Marjorie Scott  
Self Serve Hygiene Ltd  
The SMB Charitable Trust  
Mrs M A Smith  
W H Smith Ltd  
The N Smith Charitable Settlement  
Freddy Smith Trust  
The Sobell Foundation  
Sphere Drake Underwriting Management Ltd  
The Bernard Sunley Charitable Foundation  
Stella Symons Charitable Trust  
Sulzer (UK) Ltd  
Sun Alliance Group plc  
Tack Training International

Tetra Pak Ltd  
The Thomas Curtis Charitable Trust  
Thompson Clive & Partners Ltd  
Tomkins plc  
Towry Law Charitable Trust  
TWIL Ltd  
Unigate Dairies Ltd  
Unilever PLC  
United Glass Ltd  
United House Ltd  
The Vandervell Foundation  
Wagon Industrial Holdings plc  
The F J Wallis Charitable Trust  
J Walter Thompson Company Ltd  
Waverley School  
The Lois West-Russell Charitable Trust  
Westdeutsche Landesbank Girozentrale  
Samuel Whitbread Charitable Trust  
Ann and Gerry Whitehead  
Michael and Anna Wix Charitable Trust  
The Maurice Wohl Charitable Trust  
The Worshipful Company of Curriers  
The Worshipful Company of Engineers





