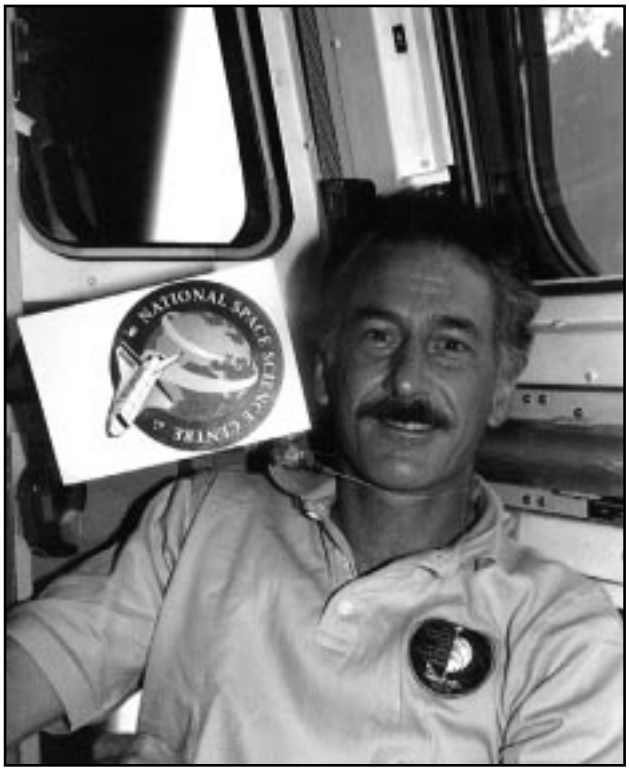
NSSC SPECIAL

Astronauts and Astronomers back Millennium space centre plan

Leicester's Millennium bid has won widespread support across the breadth of industry and from leading scientists as well as other prominent people.

Astronaut Dr Jeff Hoffman, who recently took part in a NASA space flight, Astronomer Royal Sir Martin Rees and astronomer and broadcaster Dr Patrick Moore are among those who voiced their support for the Centre.

"Leicester is at the very forefront of space research and education, and this is exactly the sort of project which the Millennium ought to support," Dr Moore said in a letter to the University. He added that a facility like the space centre would encourage the youngsters of today to become the space researchers of tomorrow.



HIGH-FLIER: *Astronaut Dr Jeff Hoffman took the NSSC logo into orbit aboard the space shuttle Columbia*

The Astronomer Royal, Sir Martin Rees, said: "I enthusiastically support the aims of this proposal. Leicester already has unrivalled credentials among universities as a centre for space science, and this proposal will not only raise that profile further, but meet a real national need."

Dr Jeff Hoffman, who spent three years at Leicester as a researcher, is an honorary adviser to the project. He said: "I would be delighted to assist in any way I can with the Leicester Millennium project."

Dr Hoffman has agreed to donate some personal items he used in space for the Centre and the European Space Agency and the Russian space programme have been approached about donating items.

The Lord Mayor of Leicester wrote a personal letter to Dr Hoffman in which he said: "The advances in the present century, to which you have contributed, have been among the most dramatic in history. They have particular relevance to addressing the environmental concerns which are of such significance to the future of mankind, and to which Leicester, as Britain's first Environment City, wishes to make a particular contribution."

Astronaut Helen Sharman also expressed her enthusiasm for the Centre during her visit to Leicester and praised the University for making science more accessible to the general public.

President of the Challenger Centre Vance Ablott said: "The vision for the National Space Science Centre as detailed in your Challenger Learning Centre application promotes high educational goals and standards, and a commitment to science, maths and technology programmes for youth throughout the UK. We wholeheartedly agree that a Challenger Learning Centre will complement and enhance the plans for your new facility." The Founding Chairman of the Challenger Learning Centre also visited the University. Dr June Scobee-Rodgers, widow of the Captain of the Challenger, Dick Scobee, met representatives of the University and city.

Support for the centre was also forthcoming from the CBI's influential East Midlands Regional Council. Regional Chairman Paul Hodgkinson said: "The Centre is undoubtedly an impressive and exciting project planned for the heart of the region. It is a significant initiative which has national importance and members felt it was appropriate to support an initiative which would be so closely allied to focusing on the process of technological change."

Sponsors and supporters of the NSSC include: Central Council for the Laboratories of the Research Councils; Edge and Ellison; European Space Agency; IGG Component Technology; Kirby and West; KPMG; Leicester Centre Properties; Leicester City Council; Leicester Mercury; Leicestershire Training and Enterprise Council; Matra Marconi Space; Midland Fox; Midland Mainline; NASA; Next; Pick Everard; Science Museum; Severn Trent Water; Smithsonian Institute; SPS Technologies and many more.

Leicester University

Credits:

This special edition of Bulletin was edited by Ather Mirza in Press and Alumni Relations and designed by Mark Davies, Graphic Design Studio. Images by Ideas, Interpretive Design Consultants. Printed by Central Reprographic Unit.

BULLETIN

http://www.le.ac.uk/

THE QUEEN'S ANNIVERSARY PRIZES 1994

Leicester University

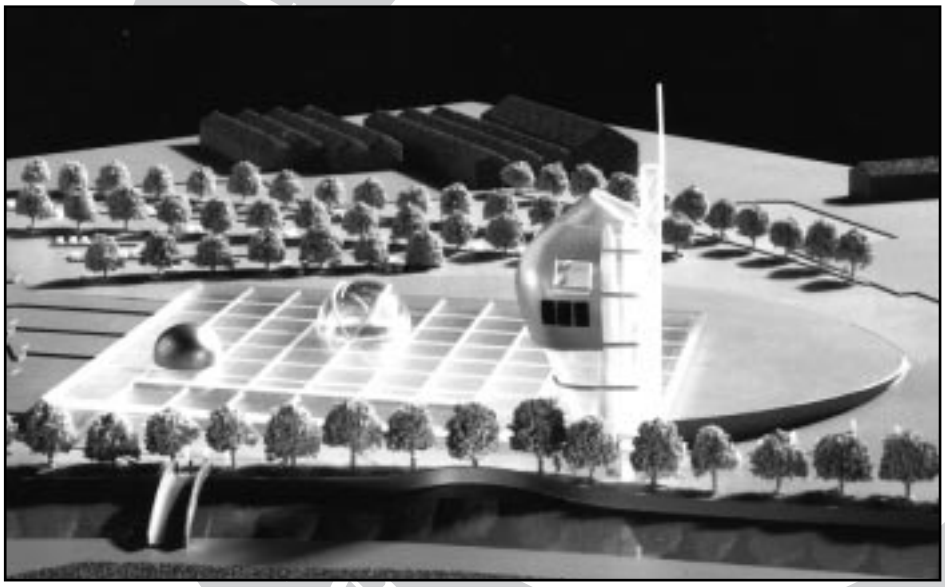
NEWS EXTRA JUNE/JULY 1997

WE HAVE LIFT-OFF!

Millennium Commission announces go-ahead for Leicester's £46 million National Space Science Centre

An historic decision announcing the go-ahead for a National Space Science Centre in Leicester was made by the Millennium Commission.

The unique centre, spearheaded by a consortium including the University and the City Council as principal partners, means that the unique facility will be built in the city and linked to the campus.



REAL VISION: *Model of the National Space Science Centre which won approval to be built in Leicester*

40 Jubilee Year 75 Leicester University

NSSC SPECIAL

THE Millennium Commission announced the launch of Leicester's National Space Science Centre at a conference in the City on Tuesday June 17.

The Commission said that they would support the East Midlands flagship project if the steering committee behind the bid can raise 50 per cent of the cost. Partners locally have already raised two thirds of this necessary capital.

The project will not only regenerate an obsolete and decaying sewage treatment works but also create a unique visitor centre envisaged to attract up to 300,000 people a year across the UK and create at least 100 new jobs.

John Eggleston, Steering Committee Chairman and Senior Partner, KPMG, said: "It's a great honour for Leicester to be asked to develop the National Space Science Centre for Britain - truly a project of international significance."

Peter Soulsby, Leicester City Council Leader, said: "This project shows Leicester's national status. Leicester is open for business and determined to attract developments which regenerate the city."

SUPPORT: *Astronaut Helen Sharman with Dr Edwards and Space Research Centre Director Mr Alan Wells. Right, Chief Executive and Chairman of the Challenger Learning Centre Vance Ablott.*

Leicester University Vice-Chancellor Dr Kenneth Edwards added: "The National Space Science Centre will underline Leicester University's place as the leading space research centre in Europe. The Space Science Centre will be an opportunity to showcase that expertise."

John Eggleston added: "Detailed plans to attract the remaining private sector investment to this national resource and East Midlands flagship project are well advanced. In addition to pledges of financial support there are pledges of major space artefacts including objects from the European Space Agency and NASA moon rock. The Millennium Commission support will now help us convert promises from corporations into solid cash."

Leicester Promotions Chief Executive Peter Cottingham commented: "This bid has generated an unprecedented level of co-operation between the public and private sector. The National Space Science Centre will form one of the largest tourist attractions within the region providing significant economic benefits for many years."

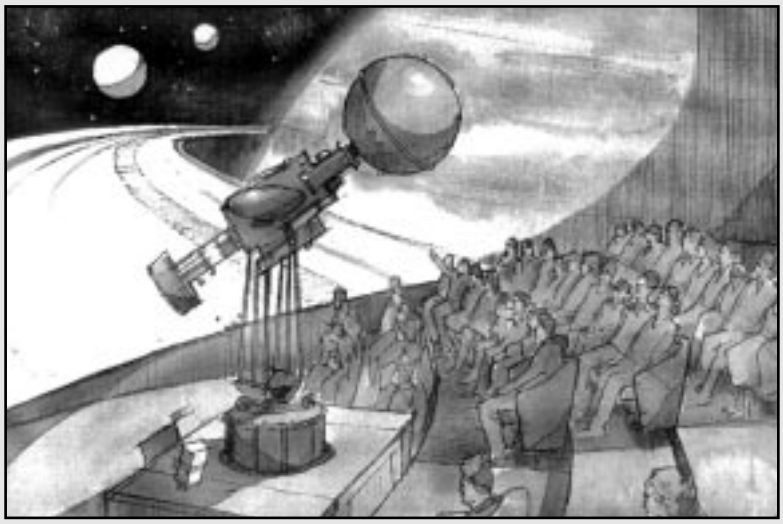
Nigel Siesage of the Registrar's Office, who is the NSSC's Project Manager, added: "The exceptional success of this project, against stiff competition for Millennium Commission funds and after very rigorous appraisal, shows just how much a University can benefit its local community; and the University itself will benefit from the improved prestige of the City. The announcement is a tremendous reward for all those organisations who have backed the project over the last two years."

Architects Nicholas Grimshaw and Partners won an architectural competition last year to design the Centre. Work on preparing the site and improving access is expected to start very soon. Opening of the National Space Science Centre is scheduled for mid 2000.

Opening in time for the new Millennium, the National Space Science Centre will keep education very high on its agenda. Visitors will be able to view space research facilities including satellite assembly and the management of the Centre's own CATSAT satellite, all linked with the University's space research programme.

The centre will also house the only Challenger Learning Centre outside North America, a planetarium and research site. Shops and eating places will also be developed at the site which would be open 12 months a year and be accessible by public and private transport.

Benefits from the Abbey Meadows site include: improved quality of local life; regeneration and economic development; significant educational resource for local and countrywide schools and colleges and environmental enhancement of the riverside.



FUTURISTIC: *The Millennium Dome Planetarium Show*

The NSSC will represent the largest successful Millennium project to be supported in the East Midlands. The futuristic Centre will be built on a site at Abbey Meadows on Corporation Road, jointly owned by Leicester City Council and Severn Trent Water. It will include displays, original materials and hand-on activities celebrating the exciting achievements and potential of space exploration, with the best access to current knowledge of research into space, astronomy and the global environment; plus unique educational facilities and a state-of-the-art planetarium.

Mission

To present the excitement and significance of space and planetary science, astronomy and technology in a way which captures and inspires the public imagination.

Through promoting a wider understanding of the science of space, to demonstrate its relevance to life on earth in the 21st century.

Objectives

To *provide the nation with an educational, scientific and leisure facility which stimulates community interest in space and associated sciences.*

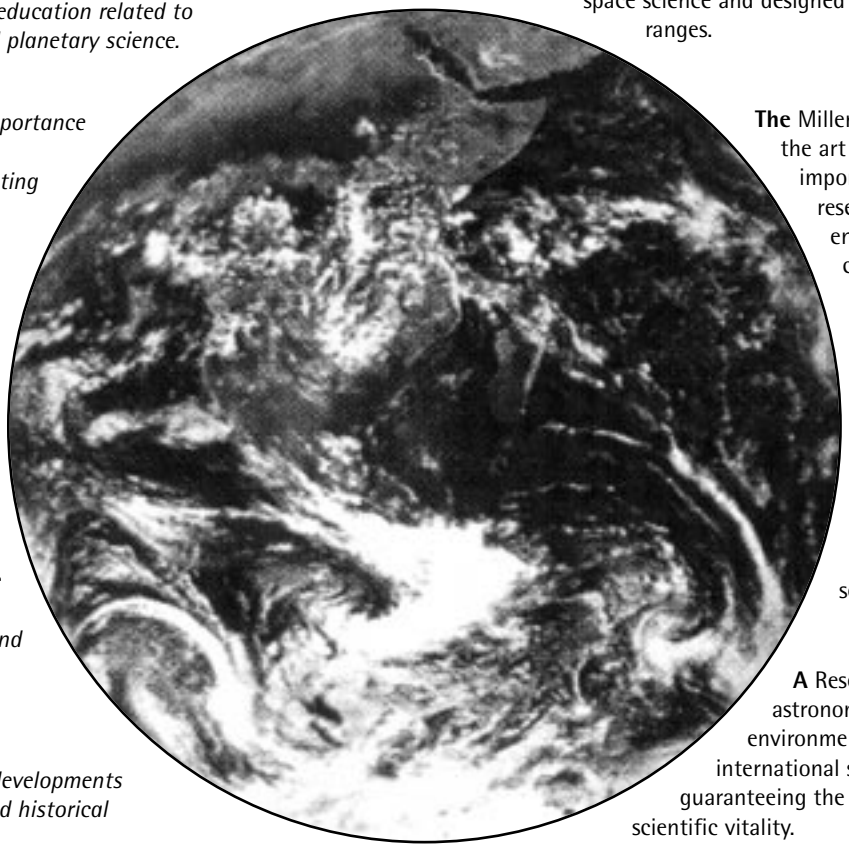
To *build on the exceptional experience of the University of Leicester in research and education related to astronomy and space and planetary science.*

To *project the growing importance of space observation in understanding and protecting the earth and its environment.*

To *inspire all sections of the community to see their own place in the firmament, and the world and its environment in a new light.*

To *motivate young people to pursue their studies in science and technology, and to improve educational standards.*

To *present the scientific developments in their social, cultural and historical contexts.*



A unique facility

Leicester University and Leicester City Council, with a range of partners, are spearheading the National Space Science Centre project. The Centre will be a unique combination of educational, leisure and research facility, addressing some of the most important aspects of human knowledge from the present Millennium, and of increasing significance to the next.

Complementary components

A modern Exhibition Centre with displays of original material and specially developed hands-on activities celebrating the exciting achievements and potential of space exploration and space science and designed to appeal to all age ranges.

The Millennium Dome - a state of the art facility providing an important link between research, education, entertainment and community objectives of the NSSC.

A Challenger Learning Centre, providing exciting educational programmes based on simulating the experience of astronauts and ground control scientists.

A Research Centre in space, astronomy and the global environment, providing links to international space programmes and guaranteeing the Centre's continuing scientific vitality.

The vision f

THE winning design for the proposed National Space Science Centre was provided by architects Nicholas Grimshaw and partners who fought off stiff competition to win the architectural competition.

Five firms of architects submitted plans which were judged by a panel comprising members of the University, City Council, local community and a leading national architect.

Each of the designs showed very different versions of how the centre might look. The winning design was chosen for the statement it makes appropriate to the Millennium and to the purposes of the NSSC project while remaining sympathetic to the site, the surrounding landscape and the environment and maintaining a flexibility appropriate to the functions of the centre.

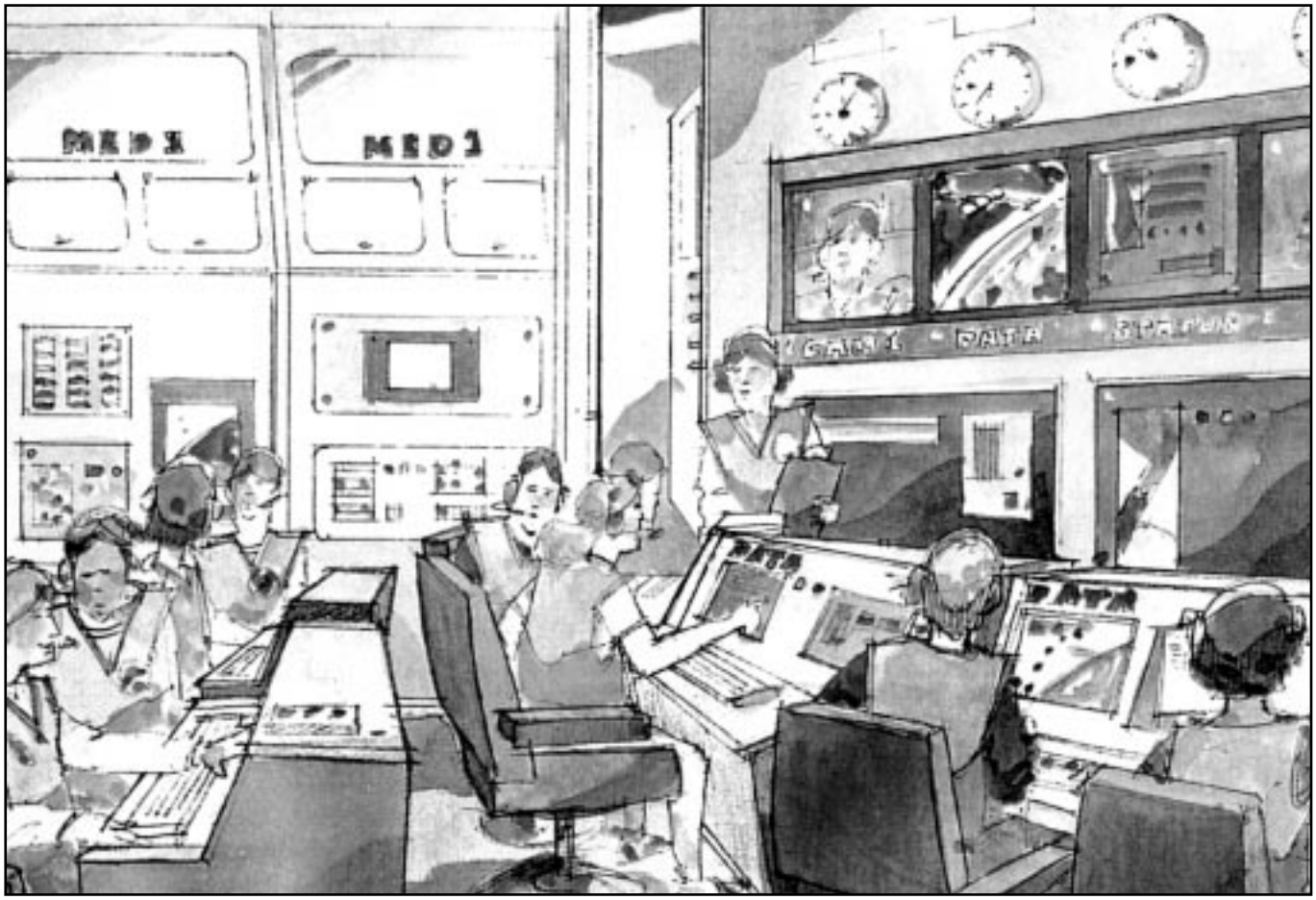
Mr Grimshaw, Chairman of Nicholas Grimshaw and Partners, said: "Space is once again at the forefront of people's minds, now that organic life on other planets seems more than likely. We see the Space Science Centre as complimentary not only to the riverside environment, but to the city of Leicester as a whole."

Magnificent Site

A magnificent 14.5 acre site has been chosen for the Centre - a largely redundant inner city area known as Abbey Meadows. The River Soar and the Grand Union Canal form one boundary. The site will be cleared and improved, and there will be additional environmental benefits, including enhancement of riverside areas with links to other local attractions.

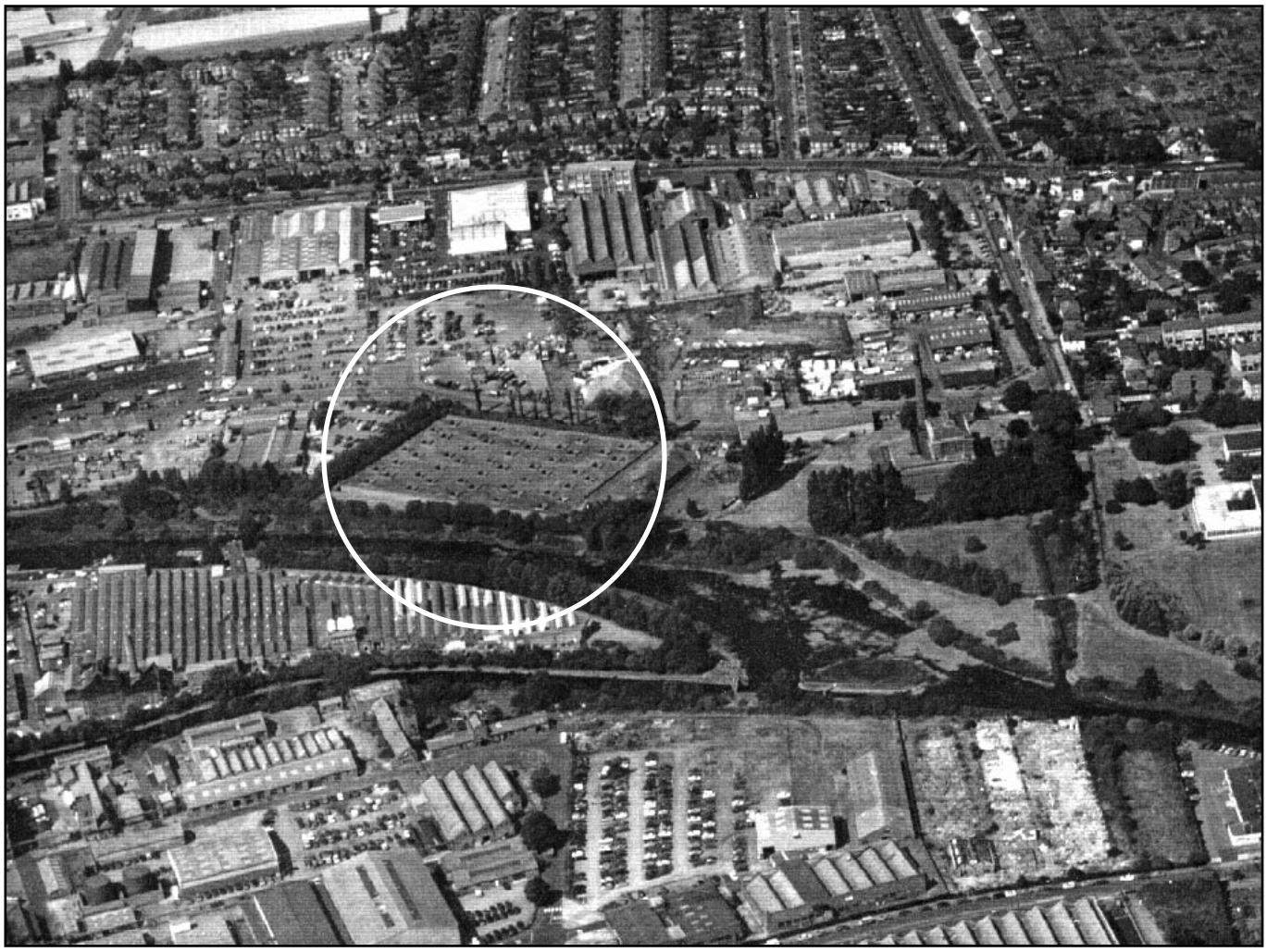
The Centre will be housed in a landmark building, providing a permanent and dramatic commemoration of the Millennium celebrations. The Centre is expected to attract some 300,000 visitors a year, including substantial numbers of tourists from overseas.

Alongside the NSSC is The Victorian Pumping Station, a listed building housing magnificent Victorian steam pumps. The Council will develop this to complement the attractions in the NSSC.



LEARNING: *Challenger Centre, Mission Control*

or the future



MAGNIFICENT SITE: *The location of the National Space Science Centre, Abbey Meadows, Leicester*

The proposed centre would include:

- A 35 metre tower housing large scale exhibits
- A mezzanine floor, 3.5 metres below ground level
- Another exhibition space a further 3.5 metres down
- Exhibition and education pods, including observatory and Challenger Learning Centre at the main basement floor level.

Displays at the centre are intended to sit in darkness. Light is introduced only where necessary for either circulation or exhibition. Where natural light is introduced into the hall, it is diffused through water supported by glass.

The role of the University

THE University of Leicester houses Europe's largest University research group in space, astronomy and the global environment. It has a world-wide reputation for its space research and educational programmes, recognised particularly through the award of a Queen's Anniversary Prize for "world class teaching, research and consultancy programme in astronomy and space and planetary science fields; practical results from advanced thinking".

This research expertise is essential to the vitality of the Millennium project, since it will reinforce the educational programmes and underpin the exhibition and other visitor facilities.

The University is a principal supporter of the NSSC and is contributing to the overall project through a Space Research Centre which has strong links with components within the NSSC.

NSSC Project Manager Mr Nigel Siesage said: "In every year since 1967, there has been an instrument built by the University operating on a satellite in Space. The University's research centre aims to provide the current research background upon which the NSSC is based and to bring the results of current space research to the visitor as quickly as possible by displays and lectures.

"Visitors and schools will be given access to the process of space research and we aim to display the links between Space Science and Industry. The University is currently building phase 1 of the Research Centre, which will be complete by the end of this year. This will house part of the basic research activities of the Centre, particularly the laboratory research, the design and build of space projects and provide accommodation for the growing Earth Observation Science group."

The public will have their easiest access to research facilities at Abbey Meadows but this will only be possible through the work accommodated on the University site.

Displays at the Visitor Centre that relate to the Research

The Research Centre will:

- **house some of its main facilities in the Grimshaw building, where they can be seen by visitors, allowing direct access to ongoing space research**
- **be the NSSC's first link with new discoveries made in the fields of Space, Astronomy and the Earth's environment**
- **communicate interesting and topical discoveries by special presentations in the planetarium theatre and through the Research Centre's contacts attract international speakers and special events to the Centre**
- **provide displays for the Visitor's Centre that reflect the ongoing and active space related research programme of the University and particularly where they impact the general public**
- **present images and data from active satellites and astronomical telescopes in which the University is involved in the Science Now area of the NSSC**
- **provide the necessary expert scientific support for educational projects within the Planetarium, Challenger Learning Centre and the rest of the Visitor Centre, and through the Schools Laboratory and Resource Centre**
- **through research contacts with industry and other institutions, provide links for the provision of new instruments and prototypes, thereby keeping the displays up-to-date.**

ACHIEVEMENT: *Leicester University's expertise in Space Science was recognised through the award of a Queen's Anniversary Prize for "world class teaching, research and consultancy programme in astronomy and space and planetary science fields; practical results from advanced thinking"*

THE QUEEN'S ANNIVERSARY PRIZES 1994

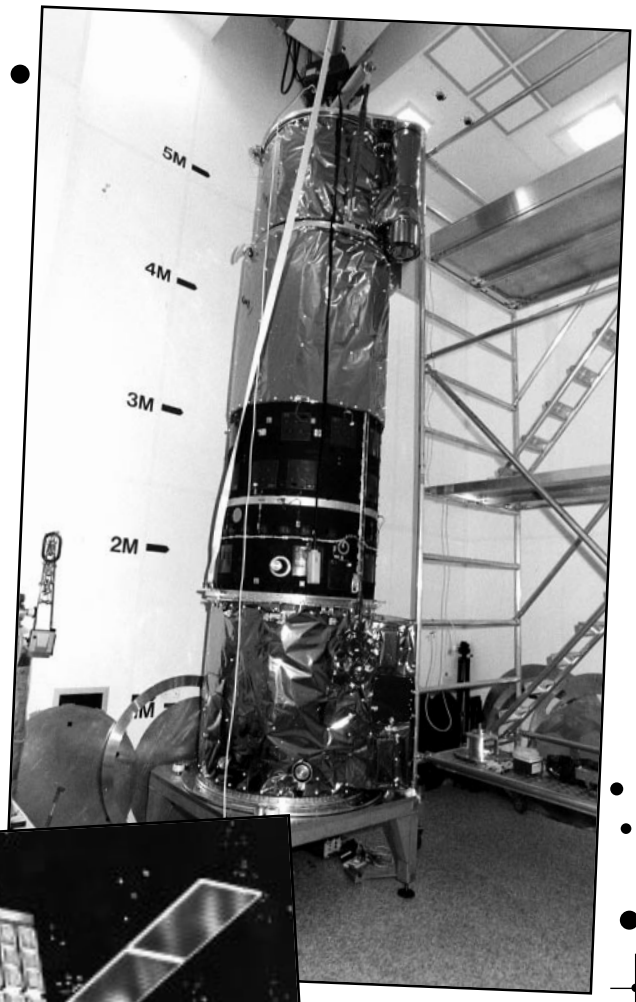
Centre include Space Projects at Leicester; What is a Space Project; Detecting X-rays from Space; Engineering for Space; the impact of Earth Observation Science on the public; Black Holes, Galaxies and Cosmology; Space Weather.

"The facilities in the Abbey Meadows Research Centre are aimed to bring real space research closer the public," said Mr Siesage "All the facilities can be viewed by the public through windows or glass walls."

The facilities at Abbey Meadows are expected to include a resource centre, schools laboratory, satellite control centre, telescopes in education, high bay and associated facilities and a beam line.

The facilities at the University include an Earth Observation Science Experimental area, lab for research into natural surfaces, space project lab, lab to support joint programmes with industry and cleanroom for handling and assembly of space hardware.

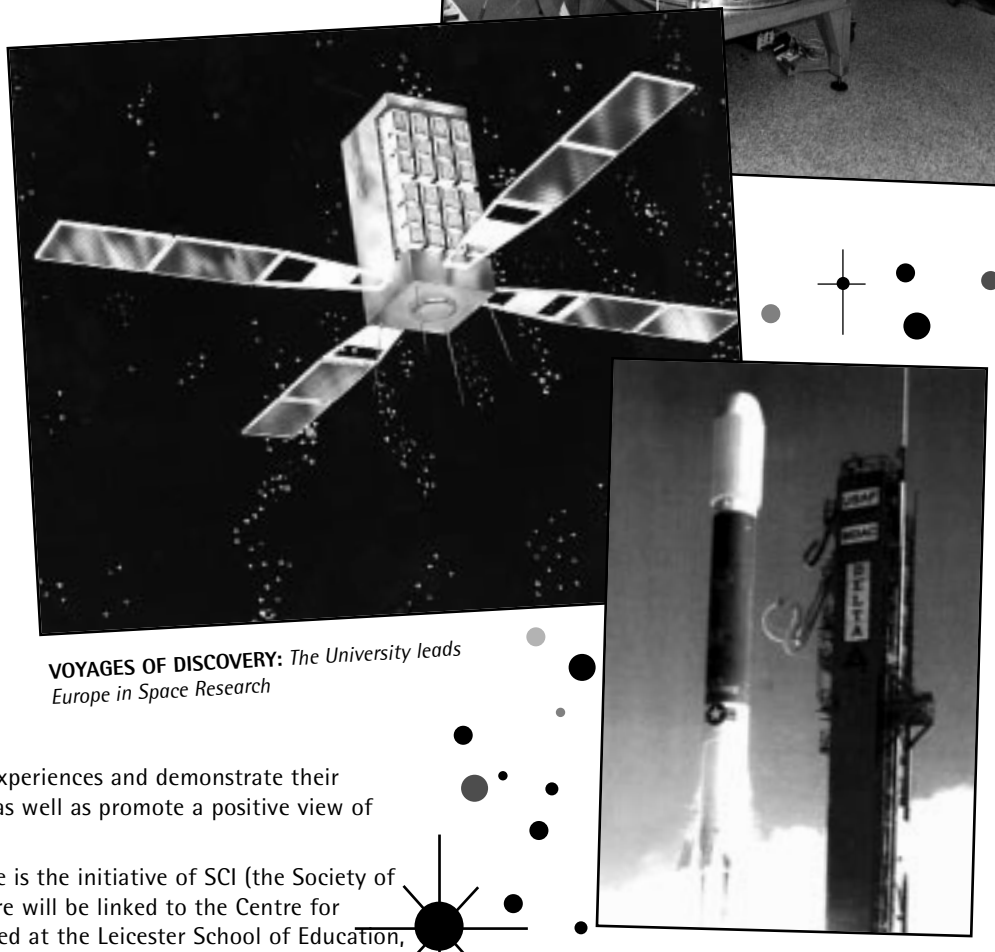
There will be a programme of controlled access to the University site research centre through open days, video links and through the provision of vocational and general interest courses.



The SCI Centre

The University's involvement with the NSSC extends beyond the work of the physical sciences departments. Last year, the School of Education and Homerton College, Cambridge, launched a new science teaching initiative based at Leicester.

The SCIcentre is a national centre for initial teacher training in primary school science, which aims to increase the output of good, newly qualified primary teachers, giving them an accurate understanding of science concepts and skills, as well as enabling them to assess effectively young children's scientific development in order to provide work at a suitable level.



VOYAGES OF DISCOVERY: *The University leads Europe in Space Research*

Teachers will also be trained to provide stimulating and exciting scientific learning experiences and demonstrate their relevance to everyday lives, as well as promote a positive view of science to their pupils.

The foundation of the Centre is the initiative of SCI (the Society of Chemical Industry). SCIcentre will be linked to the Centre for Citizenship which is also based at the Leicester School of Education, and will be allied to the Visitor Centre, Millennium Dome and Research Centre in the National Space Science Centre.