

**CAITS** CENTRE FOR ALTERNATIVE  
INDUSTRIAL & TECHNOLOGICAL SYSTEMS

**a unique collaboration  
for research and development**

# **An Introduction**

**LUCAS AEROSPACE COMBINE  
SHOP STEWARDS COMMITTEE  
NORTH EAST LONDON POLYTECHNIC**

**CAITS, North East London Polytechnic, Longbridge Road,  
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# WHAT IS CAITS?

## Unique

CAITS, the Centre for Alternative Industrial & Technological Systems is a unique organisation, run jointly by the Lucas Aerospace Combine Shop Stewards Committee and the North East London Polytechnic. The Centre was set up by the Combine Committee to help research and develop their 'Alternative Corporate Plan' strategy which was developed with the majority of the workforce in Lucas Aerospace to put forward production proposals in the face of redundancies and closures. The Centre was set up in January 1978, and is located in the Engineering Faculty of the Polytechnic. The Centre's work on researching and developing proposals to substitute socially useful production for unemployment involves research and educational work in a number of areas, such as: economic strategy, product definition and development, employment implications of technology, work organisation, and the extension of collective bargaining.

The Centre is involved with a number of major research projects, ranging from technical development of a road-rail hybrid vehicle, to the labour process implications of computer-aided design. The Centre publishes its findings in technical reports, articles in the press media, and via educational material. The Centre also runs conferences and short courses on a range of topics associated with the concept of 'socially useful production'.

## Operation

The Centre is not however a conventional research institute or unit, in that it seldom obtains commissions from clients in the usually accepted sense. Wherever possible the Centre's staff work directly with groups from industry and the services to develop Corporate Plan type initiatives. The

Centre thus carries out research and development on the concept of socially useful work primarily through jointly-conducted work with shop steward committees and others. Broader research projects are however engaged in, but are often tailored to the specific requirements of groups of industrial or service workers.

CAITS thus offers the industrial worker and student alike a means whereby practical research can be developed to help solve problems of factory closures, the introduction of new technology etc. The Centre has close links with other Polytechnics faculties and departments and in many instances engages in joint work with members of staff from those departments and faculties. The Centre is able to carry a number of undergraduate and postgraduate students – who generally work directly on projects of direct relevance to specified industrial or service groups.

The Centre therefore carries out both conventional academic research, albeit with direct practical applications, and joint research projects with particular groups from industry or the services. The primary intentions of the Centre are to develop independent bargaining positions relating to alternative corporate policies which take into account economic and social costs not normally computed in conventional management and financial accounting systems. CAITS both responds to demands placed upon it by external and internal agencies, but it also initiates new research areas which have relevance to the problems facing industrial and service workers in the 1980's.

# HOW DID IT START?

## Lucas Aerospace

The Lucas Aerospace Combine Shop Stewards Committee was formed in response to continual factory closures and redundancies in Lucas Aerospace, which is part of a large British-based multinational corporation. Lucas Aerospace is a major European manufacturer of aerospace equipment, and it was formed in its present structure in the late 1960's, with the help of the Industrial Reorganisation Corporation. In 1970 the company employed 18,000, but by 1974 the workforce was dropped to 14,000. During that period the Combine organisation was formed, featuring representatives of the shop steward level from all 17 sites of Lucas Aerospace, and all 13 trade unions. The Combine did not seek to negotiate over wages and conditions, which are subject to normal union negotiating procedures, but developed a Health and Safety Panel, and a Pensions Advisory Board as well as endeavouring to find ways of dealing constructively with the continual factory closures.

## Corporate Plan

In 1974/5 the Combine Committee started to develop the 'Alternative Corporate Plan' proposal, which was basically a set of production proposals to be put to management on the occasion of the next closure or redundancy situation. This plan developed out of responses to a questionnaire sent to the entire Lucas Aerospace workforce, following an unsuccessful attempt to obtain assistance from 180 leading academics in the U.K. and elsewhere. Three academics were in fact able to assist the Combine, one of whom was from the North East London Polytechnic, currently a joint director of the Centre. The questionnaire asked for employees to make an audit of their job skills, of plant and equipment, and to make

suggestions for products which could be made in the event of further redundancies. The response from the workforce enabled the Combine Committee to collate detailed technical specifications and some market information for about 150 product suggestions. This 'Alternative Corporate Plan' was presented to the management and to the media in January 1976.

This plan runs to six, 200 page volumes, each of which specifies a broad product area. The nature of the product suggestions led the Combine Committee to coin the term 'socially useful products', in that almost without exception the products have some beneficial effects in relation to health and safety, energy and resource conservation, or humanisation of the work place. The Combine felt that a number of the product suggestions could be conventionally profitable, but, others might be less so, and it was the Combines intention to enter discussions with the management of the company and 'offer' a profitable product in exchange for production on a so-called 'unprofitable product'.

## Rejection

However, having given the introduction to the Corporate Plan to management in January 1976, the Combine received a negative reply from the Company in March of that year. The Company maintained that their employees' best interests would be served by accepting the Company's own corporate policies, that it was managements' job to manage, and the Combine did not have the authority or the legitimacy to suggest changes in major corporate policy. The management also rejected the proposal that their own products were not 'socially useful'. Lucas was of course at the time engaged in a large-scale restructuring and reorganisation

# CAITS

programme, reducing the number of sites and the numbers of workers in the U.K., and ceasing the production of a number of industrial products.

## The Government

The Combine then approached the British Government for assistance and advice, they maintained that a Company that receives over 70% of its income from public sources (primarily the Ministry of Defence), and which receives major grants and tax deferrals on stock appreciation should have some greater responsibility towards the community. The Combine suggested that a planning agreement procedure might be instituted in respect of their Corporate Plan proposals. However, despite continual lobbying, the government was unable to materially assist the Combine Committee, although government ministers publically announced that the Corporate Plan was an admirable and constructive response to redundancy.

During 1976 and 1977 the Combine's Corporate Plan proposals received a great deal of public acclaim and interest, both in the U.K. and elsewhere. Partly in order to deal with an increasing demand for speaking engagements, publicity materials etc., and partly in relation to the recognition of the need for further research and development, the Combine Committee proposed that a research and support organisation should be formed. Following a year's discussions with a number of educational institutions, the Combine formed CAITS in the North East London Polytechnic in January 1978. The Combine sought to obtain formal educational links because they maintained that public educational bodies should be responsible for the needs of workers and others in the communities, and because it was envisaged that the type of work that would be entailed in such a centre would be of great value and interest to academics and students. CAITS was located in the Engineering Faculty because it was felt that a number of the Corporate Plan products should be developed to a stage where it could be seen that they were 'socially useful', in a practical sense.

## Joint Approach

The Centre works directly with the Combine Committee and individual shop stewards on a number of these issues, and it was felt that the CAITS staff should develop expertise not in working **for** but **with** groups of industrial and service workers. The Centre has a prime responsibility to the Lucas Aerospace Combine Committee, but accepts work with and for other groups.

## Structure

The Centre has two voluntary directors, one in the North East London Polytechnic, and the other from the Lucas Aerospace

Combine Shop Stewards Committee. Institutional responsibility is taken by an assistant director of the Polytechnic. CAITS also has available to it an Advisory Committee of academics and others who meet regularly to review and make suggestions about the work of the Centre.

### **Aims**

The Centre should act as a clearing house for the Lucas Corporate Plan and promote the development and application of socially useful products.

The Centre should accumulate expertise in the field of developing the concept of socially relevant technologies – and make this available to other groups developing their own plans. It should also promote the design, development, prototype manufacture, production and marketing of 'alternative products'.

It should assist in the development of more socially desirable, non-hierarchical organisational forms of industry, and assist in the setting up of small-scale co-operative ventures and community industries.

### **Products**

Whilst the product suggestions are too numerous to enumerate fully, they included a number of production and research proposals for: medical equipment, including types of medical technology suitable for developing countries; renewable sources for energy generation, and lower energy uses in transport etc.; proposals for more human-centred robotics development; braking systems; transport systems.

The range and depth of these product suggestions clearly illustrate the wealth of creative innovation available in a workforce such as that in Lucas Aerospace, and the Combine maintain that other workforces also contain a wealth of unrealised innovations.

### **Alternative Economics**

A new approach to marketing and product policy decision making is clearly raised in the corporate plan proposals, and the notions of 'effective demand' was conditioned, in the Combine's view by the dis-economies of having large numbers unemployed, and having unused and under-used plant – whilst any number of unmet social needs were to be found in the community, both in Britain and in developing countries. This led the Combine, and CAITS to beginning an analysis of economics which does not take as its basic tenet the need to create and maintain a specific return on capital employed within one enterprise. CAITS has started examining the national economy in relation to the problems associated with matching needs to available resources.

### **New Technologies**

A further line of development was furnished by the Corporate Plan's approach to robotics. This is best characterised by the assertion that human skills and experience **can** usefully interact with automated and robotic equipment, without the necessity to assume that robotics displace, de-humanise or de-skill the worker.

### **Organisation**

The experiences of the Combine with the reactions of other organisations, such as company management, government institutions and trade unions have led them and CAITS to examine new forms of organisation, both in relation to the work environment, and in relation to the trade union movement.

# WHAT DOES IT DO?

CAITS carries out research projects in a number of areas, with long term research aims related to issues of new technology, product design etc., some of this research is carried out by and with research students. The Centre also operates a counselling service on workers' plans for and with specified industrial and service groups. The Centre publishes research findings, negotiating documents, press articles etc., and prepares educational material for trade union and other purposes. The Centre holds short courses and conferences, and prepares publicity material, including audio-visual presentations.

## Corporate Plans

- \* The Centre is involved in the technical development of a number of Lucas Aerospace Corporate Plan product proposals, including the road-rail vehicle, and a hybrid power pack.
- \* Continuous research investigation occurs in relation to a number of areas of Lucas Aerospace's operations, both in respect of product innovation and development, and in relation to overall investment and production proposals.
- \* The Centre is involved with a number of other industrial and service groups in drawing up workers' plans, on a medium-term basis.

## New Technology

- \* A range of research is undertaken on the issue of new technologies and their employment and product implications. The principal concerns are office automation, computer-aided design, and computer applications in machine tools. Some of this work is undertaken directly with, and for, the Combine Committee at Lucas Aerospace, other areas of work are specific to other

groups, and the broad implications of the investigations are more generally available.

## Information disclosure and bargaining

- \* CAITS is undertaking research in association with other bodies, on the relationships between information disclosure and collective bargaining. This work occurs both directly in relation to specific groups, and on a more general level.

## Medical Technology

- \* CAITS, in association with other bodies is researching the relationship between medical technology, health care and unemployment. The research area is intended to clarify the concept of 'socially useful medical technology', in relation to the needs of health service workers, patients and workers in industries involved in the production of medical technology.

## Market Appraisals

- \* The Centre carries out market and business appraisals in a number of major product areas, both in relation to the needs of the Lucas Aerospace Combine Committee and to other groups.

## Worker Co-operatives

- \* Research is carried into the factors which assist in the development of small-scale producer co-operatives. The work involves examinations of the possibilities of socialising markets; the use of local trade union expertise and organisations in the setting up of co-operatives; and an examination of training and education requirements of co-operators, in relation to the role of Polytechnics and Colleges.

# HOW IS CAITS FUNDED?

## Publications

\* The Centre regularly publishes technical reports, abstracts and discussion papers. Most of these are publically available except where there is an agreement with a specific group, or where their papers represent 'work in progress'. The Centre also produces a range of audio-visual material, and provides speakers.

## News and Features Service

\* The Centre operates a news and feature service for trade union journals and a few other publications, based on the main theme of its work.

## Conferences

\* The Centre organises a number of conferences and short courses each year, both for the general public and for specific groups.

## Other Educational Work.

\* The Centre is involved in course development work in the Polytechnic and the Centre's staff are called upon to give lectures on a number of Polytechnic courses. The Centre hosts undergraduate and postgraduate students from the North East London Polytechnic and elsewhere. The staff also regularly give lectures on a number of trade union education courses.

## Information System

\* The Centre has an open access information system, which will shortly be available for use by visiting academics, students and others.

## CAITS Developments

\* The Centre assists other industrial and service groups to set up similar centres in educational establishments elsewhere in the U.K.

CAITS was formed in January 1978 with a £7,000 grant from the Joseph Rowntree Charitable Trust. This pump-priming award was intended to help the Centre to get established. The Polytechnic provides office accommodation, postal, telephone and similar services, and access to workshop, computing and other facilities.

CAITS currently has two members of staff funded by the Polytechnic in respect of CAITS' broad educational work in the Polytechnic and elsewhere. Other members of staff are funded by external foundations including the Joseph Rowntree Charitable Trust, the Calouste Gulbenkian Foundation, the Division of Social Responsibility of the Methodist Church.

The Centre's financial viability is ensured until July 1982, and before that time decisions will be made in respect of future financing and the form that the Centre may take beyond that time.

The Centre seeks further grants, from the Science Research Council the SRC/SSRC, and from other outside funding bodies including the trade unions.

The Centre also generates funds through the sale of publications, hiring of audio-visual materials, and through income derived from courses and conferences.

## WHO IS CAITS?

The Centre is run by an executive comprising of two voluntary directors, one from the Polytechnic (Richard Fletcher), the other from the Combine Committee (Mike Cooley), and the coordinator of the Centre (Mike George). An Assistant Director of the Polytechnic takes institutional responsibility.

The full-time members of staff are as follows:-

Mike George – Coordinator of CAITS. Involved in research projects with industrial workers, primarily relating to economics, information disclosure and collective bargaining, and product/market appraisals.

Jane Barker – CAITS worker specialising in research in the areas of medical technology, computer-aided design, computer applications in machine tools. She is also involved in course development work in the Polytechnic in the area of social and economic implications of robotics development.

Tammy Walker – Information/publicity officer, responsible for preparing most of CAITS publications, audio-visual presentations, etc. Is also responsible for information gathering, sorting and determination.

Valerie Wise – Administrative Assistant, undertakes secretarial work, and also organisation of the information system.

Bill Evans – Research worker on the road-rail vehicle project etc.

David Pelly – Co-operative development worker.

One or two further additions to the staff are expected. CAITS also has available an Advisory Committee, featuring academics, Lucas Aerospace Shop Stewards and others who are available

to the Centre for advice and assistance. The current composition of the committee is as follows:-

E Batstone	Warwick University
S Bodington	Architectural Assoc
M Cooney	Lucas Combine Committee
	Open University
Dr D Elliott	
Dr Ruth Elliott	NELP
Dr G Hayward	Loughborough University
Prof G Higgin	Joseph Rowntree Charitable Trust
W Johnson	NELP
	Sussex University
R Jones	NELP
Dr Mary Kaldor	NELP
C Latimer	Man. Bus. School
J Morris	NELP
Dr Enid Mumford	NELP
J E Proctor	NELP
T Reeves	Barking
J Richardson MP	
Prof H Rosenbrock	UMIST
FRS	NELP
M Rustin	Lucas Combine Committee
B Salisbury	Lucas Combine Committee
E Scarbrow	ASTMS
B Sherman	Newham South
N Spearing MP	TGWU
Ron Todd	Open University
Hilary Wainwright	

Through Advisory Committee members and others, CAITS works inter-dependently with a number of Polytechnic departments and faculties, and has associations with other academic institutions and outside bodies.



# Other Information

## Selected Bibliography

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