



Sauchiehall Street, the famous main thoroughfare of Glasgow

Putting the go in Glasgow

Glasgow, third city of the United Kingdom, commercial centre of Scotland and with a population of over one million, is the stage upon which the scene has been set for a complex and exciting experiment in traffic control.

The scheme, set up by the Ministry of Transport's Road Research Laboratory, has at its heart a Marconi Myriad digital computer. It is housed in a control centre on the edge of the Clyde, together with the other equipment of the Company to be used in the scheme.

The computer will be used to link eighty traffic

signals controlling a square mile in the centre of Glasgow, and will measure the benefits of various systems of co-ordinated control. The systems will range from simple fixed-time progressions to 'minimum delay' computations based on short-term traffic predictions.

Myriad is the fastest process control computer available in the world, and although only one source or output can be dealt with at a time, Myriad can deal with many thousands in a single second. It is the first to be delivered for an area road-traffic control scheme in Britain.

Myriad ordered

It was only last summer that the Road Research Laboratory selected and ordered the Myriad; Marconi's designed for use, produced, tested, installed, tested again on site and had the system accepted by the customer the week before Easter, beating the end of March deadline by one week. 'Everything went extremely well, right from beginning to end,' says Mike Steeds, the man who headed the Marconi maintenance and installation team in Glasgow; his engineers included two Scotsmen, D. Urquhart, the deputy engineer, and A. W. Macdonald; technicians B. W. Fisher and D. Monk completed the team.

The Glasgow Myriad was commissioned at Kensal House, and the State Units at Beehive Lane. Senior Development Engineer on the project



Mr. J. A. Hillier, right, who is in charge of the Glasgow experiment, discussing the system with J. Mullins of the Marconi Automation Division. Mr. Hillier is Head of the Traffic Management and Control Section at the Ministry of Transport Road Research Laboratory at Crowthorne, Berkshire. Mr. Mullins was Senior Development Engineer on the Glasgow Traffic Control Computer Project

The Control Centre at Glasgow, showing the Marconi Myriad in operation



was Jack Mullins of Automation Division; working with him were Ian Spence, engineer, Simon Bird, magnetic drum store specialist, and Bob Matthews, Marketing.

With Glasgow behind him, so to speak, Jack Mullins is now hard at work on a police car direction-finding system.

By now the Glasgow experiment will be well under way. The Computer Centre, which is located at Broomielaw in the centre of the city, will be absorbing the information coming in from the crowded business and shopping district, and the four bridges spanning the Clyde which the experimental area embraces. The main criterion by which the traffic schemes will be assessed is the effect on average journey times for a standard pattern of movements. The journey times are being measured by conventional 'floating car' methods in the initial stages, but more automatic methods will follow.

First in Britain

Glasgow was chosen for a number of reasons: the City Corporation was among the first in Britain to express an interest in area-traffic control, the Scottish branch of the Road Research Laboratory is situated within a few miles of the experimental area, and the city centre is compact and contains sufficient signals to justify the use of central co-ordination.

Being in a city centre, the Laboratory's experiment is complementary to the West London Area Traffic Experiment which is being conducted by the Traffic Control Development Division of the Ministry of Transport. The two projects are similar in several ways, being supplementary to, rather than a duplication of, each other; the Glasgow experiment being concerned with wholly automatic systems.

Throughout the Glasgow experiment, which is being carried out in collaboration with the City Engineer, the City Police will retain normal responsibility for traffic.

For over twenty years Marconi's have been heavily involved with civil and military air-traffic control. Now, in addition to road-traffic control, the Company has become concerned with computer projects in many other fields.

The Marconi Myriad electronic computer is a general-purpose real time machine and, therefore, ideally suited to road-traffic control schemes, where its extremely high speed and reliability are vital. In the two years from 1963 to 1965, the latest so far recorded, the number of vehicles on the roads of Britain rose by almost one and a half million to 12,939,800; since then the figure has certainly risen even higher. The technical expertise of The Marconi Company could not be turned upon a more crucial aspect of our life today and in the years ahead.

Heavy traffic in Glasgow's busy Buchanan Street, a main shopping centre of the City. Both this and Sauchiehall Street are within the square mile of the traffic-control experiment

