it but to sub-contract the whole of the memory side to Sperry who eventually produced two systems which worked well. Albeit at great cost and with a host of cabinets. It was curious then to find out how much one could do with what were really very slender operational facilities. The contract included punched-tape storage of programmes, typewriter print-out and so forth.

For Thorn this – 1965 – was the summer of the first Q-File. As far as one can tell from a distance, reliable from the word go. It worked! Here I must say that in spite of assertions like "we were able to make a first principles assessment of the operational requirements". I have always suspected that "single lever channel control with push button channel selection" which was its basis, arose much more from the fact that it suited the electronics which could be deployed quickly into the service of a memory system than from user desire. Users do not as a rule approve of revoluntionary changes. What they like are improvements in the systems with which they are already familiar.

Having said that, if I take another close look at the quotation just above from Mr Jones' paper then there is a remarkable similarity to my own Light Console patent of 1936. Substitute a row of stopkeys as selectors in place of "push button channel selection" and a double-touch manual key for a "single lever channel control" and there you are or near enough. Well not quite, because the Q-File and later channel control pressed its buttons were used to modern lighting controls – they had been brought up on some very good ones during the preceding ten years.

Early in January 1966 in desperation I dreamt up another idea to make things "easier" for our engineers. Why not a single set of the splendid luminous dimmer levers we already had and treat the memories as hidden presets to be called up on either of two playbacks? When in manual mode each lever would light in red. When inoperative and its channel was fed from a memory then it would light up in white, but we could read its level on a master dial by depressing the scale to operate the integral micro-switch. This System IDM would remove the electronics associated with rockers and substitute normal dimmer potentiometers. It would, thought I erroneously, simplify things.

A new wave of enthusiasm swept through Strand, a 120-channel prototype desk was produced in record time (Fig. 7) and in May a sixteen page A4 brochure in two colours showed exactly how it worked – except that it didn't in fact! Theatre people, and even some television people who ought to have known better, fell for System IDM. Before long we had orders for over twenty installations while on the prototype, still under twenty of the dimmers could be made to work and then only with some display of temperament. This is the period when "Never say it *will* until it has" became the first principle in any demonstration. One becomes with practice (and we at just about the same time - 1973 - when Thorn thought it necessary to introduce their first lever system - Q-Master! Earlier, in 1971, Rank Strand had begun to demonstrate the system based on numerical call-up with a fader wheel as master. Known as MMS it became the best seller of all time in this market. For myself at the same time in another part of the Brentford wood I was enjoying my first encounter with a minicomputer and birth had been given to System DDM. Installed to control the new 240-way lighting layout well in time for the 1972 season at Stratford-upon-Avon, here I was able at last to show what I really wanted to do with rocker dimmer controls. This was WHZ/RSC so to say. There was no nonsense about not being able to add memories together or having to bring in one memory at a time and raise it before taking the existing one out. Proper crossfades from one combination of memories to another, transfers from master to master whatever their physical position all became possible.

In these days of everything with chips, all electronic problems are either licked or about to be. Thanks to what Bob Anderson calls "The Memory Explosion"\* any major firm's system of but two or three years old is already out-moded in facilities and in the compactness of the technology to achieve them. Which I hasten to add is not the same thing as saying that it is of no further use. For example, I was full of praise for the Compact 120 in Spring 1976 † but this Spring only two



Fig. 7. Erroneously thought it would simplify things.



Fig. 8. It took more than lunches and bottles to put things right.

of that type has been associated with numerical call-up. You "dial" a number for your light.

Personally I cannot see why at the time a numerical call-up for channels need have been used from the ergonomic point of view: especially as it meant that there had to be a seperate mimic to display what you had called up. The principle of using the mimic itself to select was a feature of rocker control and this could have been done with a single luminous push button per channel. In the event the real flexibility of a digital keyboard had to await MMS with its additional buttons for "at", "-", "+", "M" and the like. Be that as it may if you wanted a dimmer memory system that worked in those days, you opted very sensibly for Q-File. For television, and it was designed for that market, it represented a different method of lighting control. It started a new fashion, but the people who

had plenty of that) very adept at this sleight of hand and voice. People just do not notice. The other technique is never to use clearly recognisable lighting effects!

As our faith in IDM sank so Strand's reputation for hospitality rose. The Blue Room at 29 King Street was founded and our catering and cellar became a legend (Fig. 8). Customers well aperitifed beforehand would be admitted to the presence of the IDM and at the slightest sign of temperament on its part my colleague "B" Bear would appear to say he had lunch on the table. It took more than lunches and bottles to put things right and Strand back on the map – it took a takeover! But that is another story.

As Rank Strand, the IDMs were got to rights eventually and an improved version known as MSR was produced but our interest in dimmer lever systems languished. Curiously years later I had 'my' praise stops freshly drawn for a paean in honour of DUET and now at IBA 78 I got my first glimpse of OCTET.

We have reached the point where the ability of any memory system to carry out the basic requirements of lighting rehearsal and performance quickly and effectively can be taken for granted. Greater sophistication then follows but if one is not careful this can be equated with provision to do anything which *may be* required instead of concentrating on what *will be*. Thus the will-be-used controls can get confused by an overgrowth of might-be ones. Worse still are those push buttons and knobs which are there solely

\*SIGHTLINE Vol. 12 No. 2 1978 pub. ABTT 9 Fitzroy Square W1P 6AE. †SIGHTLINE Vol. 10 No. 1 1976.