

Therefore, at Dartford, it was natural to consider what used to be called "bleacher" seating but is now more appropriately known as retractable seating. Rank Strand Seating was an early choice, not only for economic considerations but because the seat styles and mechanical devices marketed by that firm seemed most appropriate to the needs of this particular project and - most particularly because the management and staff at Lowton and Brentford was known to be receptive to proposals for modification, and fully prepared to treat each project as a "one off". Geoff Molyneux take a bow!
Atter a lot of discussion, drawing time, mock-ups and modification to suit the nit picking Theatre Consultant - to say nothing of the Architect and Interior Designer the final design was agreed. A single ten row unit, with 27 seats and 2 gangways per row, was installed complete with electrically operated retraction. It can be opened or closed in less than two minutes. The compromise in this instance was the decision to fold and unfold the seats manually, whilst effecting traction and retraction by electric drives. However, the manual part of the operation was speeded up with the aid of a simple modification suggested by one of the Design Team, so that even an ageing caretaker can perform it without risk to his hernia! The entire process - in either direction - can be completed by one person in under nine minutes. Compare that with the manual removal and stacking of 270 fixed, but self tipping, theatre seats!
It had been intended to extend this mechanisation with a second unit for the first six rows of seats immediately in front of the stage.

## OOD FOR NOTHING?

process of turning an outline Architect's Brief into a detailed one. Sufficient to say that our first edition for Dartford was costed out at about E1m more than the Borough Treasurer's target figure of $£ 4 \mathrm{~m}$, so that, inevitably, it had to be pruned. The range of hoped for activities was rationalised and the emerging picture showed that more than $60 \%$ of the proposed happenings required a raked or tiered auditorium, whilst about $40 \%$ very definitely required a flat floor. The most difficult task of all was establishing the maximum number of seats in relation to the anticipated tiered seating pattern of use. Early hopes for a 1200 seater were pruned when the capital costs proved excessive, and the maximum auditorium size, for which funds were available, was recalculated at 900 . The stage area was adjusted to be generally acceptable to those types of companies or productions willing to perform to a maximum of 900 .

Whilst, doubtless, administrator Colin Bissett would like a 1200 seating capacity on occasions, the front of house back-up facilities, bars, foyers, toilets, etc would have required an increase in space of about $33 \%$. In the end, the Council was persuaded that an auditorium seating as many persons as the Lyttleton Theatre in the National Theatre complex, was probably about right for one which must necessarily compromise the ideal statistics and acoustics for opera, ballet, music and drama.

Aesthetically speaking the result has been to produce an ambience more intimate than the Lyttleton, with a compromise but variable acoustic, generally acceptable to all users. But more of that later.
Having established the optimum seating capacity, the most desirable floor formats and the more obvious uses, the Design Team embarked on a study to ensure that the changes of form could be effected quickly and economically. The ever
increasing surge towards mechanisation has landed more than one theatre in economic difficulty, to the certain knowledge of this writer. Modern technology is fine, in the context of increased efficiency, when there is a regular pattern of use involving routine sweat, toil or drudgery! The warning bells start to sound, however, when one considers the introduction of too much high-tech into totally volatile and flexible situations; and multipurpose halls or theatres are precisely that! Thus, some degree of compromise seemed prudent and, at The Orchard, has proved justifiable. Our solution was to mechanise the drudgery - as far as possible - but mechanically assist, without complete mechanisation, where flexibility is required.

If the auditorium in a multipurpose building is to become financially viable, it must be possible to change quickly from a flat floor format to tiered seating in a matter of minutes, not hours.

However, the solution for this particular problem was not quite so straightforward. In order to produce the maximum flat floored area for events which were not theatrical in style, it was decided that the main body of the hall, beneath the retractable seating, should be at the same level as the stage surface itself. This is not a particularly new "trick", but by putting the first six rows onto an elevator it is possible to raise (or lower) the elevator in order to remove the seats, and then to raise the elevator to stage level. Thus, a flat floor area can be produced, including the whole of the stalls seating area together with the stage and orchestra pit, totalling 670 sq. metres.

Unfortunately, one of the problems on that particular site is a high water table and it was established at an early date that the cost of arranging bleacher storage beneath the stalls area would be too

Continued overleaf

