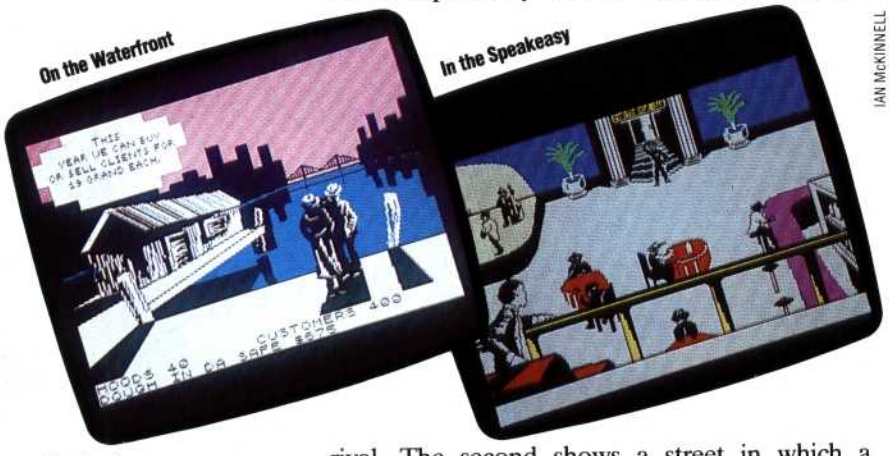
MUG'S GAME

Mugsy is a strategy game from Melbourne House, the company responsible for the successful graphic adventure game The Hobbit (see page 540). In this unusual game the player takes the part of Mugsy, a gang leader running a protection racket in the American gangster era of the 1930s.

Mugsy's role is to take various decisions on how many of the gang's 'clients' should be leaned on, how much should be spent on ammunition for the gang, and the amount that should be paid out in bribes to the police. If insufficient money is spent on weapons, the gang will be wiped out. Furthermore, if the police do not receive enough money they raid the gangster's safe and take it all.

The chief character on the screen is Louey, Mugsy's right-hand man. At the beginning of the game Louey appears with a brief outline of the rules. The player makes his strategy decisions in response to prompts from Louey and then waits for the results, during which time one of two animated screens is displayed. The first screen shows a speakeasy in which a gangster fires at a rival. The second shows a street in which a gangster leans out of a car window firing a burst of machine gun bullets.



Gangland
These are two of the scenes from Mugsy. The first shows part of the question and answer phase of the game, where Louey is informing Mugsy of the current price of 'clients'. The second scene is from one of the animated sequences. Note the white outline around the 'hood' on the stairs. This is an example of attribute masking of character cells

After the break Louey reappears with the results of the previous year's decisions. Provided that adequate funds have been set aside for all of the various payments that have to be made, then the year should end in a profit. The next round then begins, with a repeat of the question and answer routine.

The player's score is given at the end of the game as a percentage. The score depends on how much 'dough' and how many clients have been accumulated as well as the length of time that Mugsy has managed to survive.

Apart from the instruction screens that have a small window at the bottom showing the current number of 'hoods' and 'dough in da safe', etc, the screens consist entirely of graphics pictures. These are drawn on a Spectrum using Melbourne House's graphics package, Melbourne Draw. As a Spectrum high resolution screen will occupy over six Kbytes of memory, there obviously has to be some kind of data compression technique used to cram the code into the free memory available.

An examination of the Mugsy graphics reveals that the programmers have resorted to numerous space-saving techniques. In most cases, pictures are composed from a series of straight lines, and colour is placed very carefully. Using Melbourne Draw commands like FILL and DRAW enables pictures to be built up with the minimum of code — DRAW, for example, requires only two co-ordinates to store a straight line, while bit mapping would need a whole series of points to be plotted to achieve the same effect. The way in which the Spectrum stores information about colour dictates some of the methods that are used — in the animated street scene, a problem arises as a car moves along a road while a face watches from a window. As the Spectrum will not allow more than two colours to be displayed in the same character square, a 'mask' has to be devised to allow colours to be changed very rapidly — otherwise the face will change colour to match the car. Colour attributes (FLASH, BRIGHT, INK and PAPER) are held in a single byte. To produce a foreground mask, the INK attribute, held as the byte's three least significant bits, must be changed. The byte is first ANDed with 248 to set the INK colour to zero, and is then ANDed again with the new INK colour to produce a new mask. The face in fact changes colour to match the car, but then changes back again — but it happens so quickly that the eye is fooled and the face does not appear to change colour at all.

Mugsy's graphics are certainly very impressive, but the game itself palls rapidly. The action is repetitive, and the player soon learns how to juggle the various factors that are needed to stay in business. However, Mugsy does provide aspiring programmers with a good example of how to cram high resolution graphics into a limited space.

Mugsy: For the 48K Spectrum, £6.95
Publishers: Melbourne House, Church Yard, Tring, Herts
Authors: Phillip Mitchell, Greg Cull, Clive Barrett, Russell Comte
Joysticks: Not required
Format: Cassette