

ELEVEN months ago *The Listener* interviewed a young Scot with an odd job who had just arrived in New Zealand. Robert S. Morrow, engineering draughtsman turned film cartoonist, formerly of Glasgow, Moor Hall and Gaumont-British Animation, and now with the National Film Unit at Miramar, has gone a long way towards realising his dream of turning out New Zealand-made cartoon films since that day. Although it will be another six months at least before the public see any concrete results of his work in this country, for Morrow the battle is already more than half over. An animation unit has been set up, equipment has been designed and constructed, and staff recruited. Their first job is to produce a series of cartoon films for the Health Department, picture stories that will amuse as well as instruct—the latest variation on the theme of strength through joy.

But it was tough going during those 11 months. First, official consent had to be given to the formation of the animation section—as an extension of the Film Unit's normal work in news, documentary, and general film production. Then Morrow's big task was to get local artists to train in the new medium. He wanted men who were young, fresh, and enthusiastic, with a style flexible enough to be easily adaptable to the specialised business of film animation. So he did what any other person looking for new talent would do—went to an exhibition of work by art students of the Wellington Technical College. In all the paintings and drawings he looked at, the work of only one student seemed to approach the sort of thing he wanted. The signature was Bruce Bryant, and after a long series of enquiries Morrow tracked his man down to a house in Miramar where he was living with his parents.

Young and Keen

The boy was only 18 and was working for his brother as a commercial artist. Was he interested in the idea of making film cartoons? Well, a certain amount of talking was required, but in the end

Morrow's keenness caught on, and Bruce became the first new member of the animation staff. That was four months ago. Bruce, however, had some friends who might also be interested in the project—John Dear, aged 16, and still a student at the Technical College, and Rodger Harrison, another 18-year-old. John's parents had hopes of their son becoming a school teacher, but there was no resisting the eagerness of the two animators, and a month later he joined the staff. Rodger, the third recruit, didn't come until two months after that, for it took a little longer to get him released from the National Publicity studios where he had been working.

In the meantime Robert Morrow had been given an old store room, 19 feet by 12, to use as a studio, and he set about converting it to his needs. He wasn't dismayed at having to start from scratch, for didn't Disney start off in a disused garage? The walls were distempered, the ceiling renovated and linoleum laid on the floor. In one corner a camera rostrum was erected—a cupboard-sized room into the roof of which they fitted a special camera in a frame

of startling massiveness and rigidity, for in the exacting process of colour photography the slightest shifting or vibration can mean disaster. Curtains of white muslin were stretched across the windows—not to give a homelike touch, but to keep out smuts when the windows were open. (For the same reason the animators wear cotton gloves when producing their final drawings—flickering thumb marks on the corners of the cartoon frames can have a distracting effect on an audience.)

Special Drawing Desks

The drawing desks, attractively built in rimu, were specially designed with the object of speeding the task as much as possible—when 1,440 pictures have to be drawn for each minute of film running time, and as often as not redrawn once or twice before they are satisfactory, cartoon animation is likely to become a tiresome business. In one corner of the studio is a specially constructed temperature cabinet, with electric heaters in the sides and drawers full of the acetate sheets on to which the cartoon pictures are finally traced. They have to be kept at an even

temperature of 65 degrees to prevent them from warping or cracking.

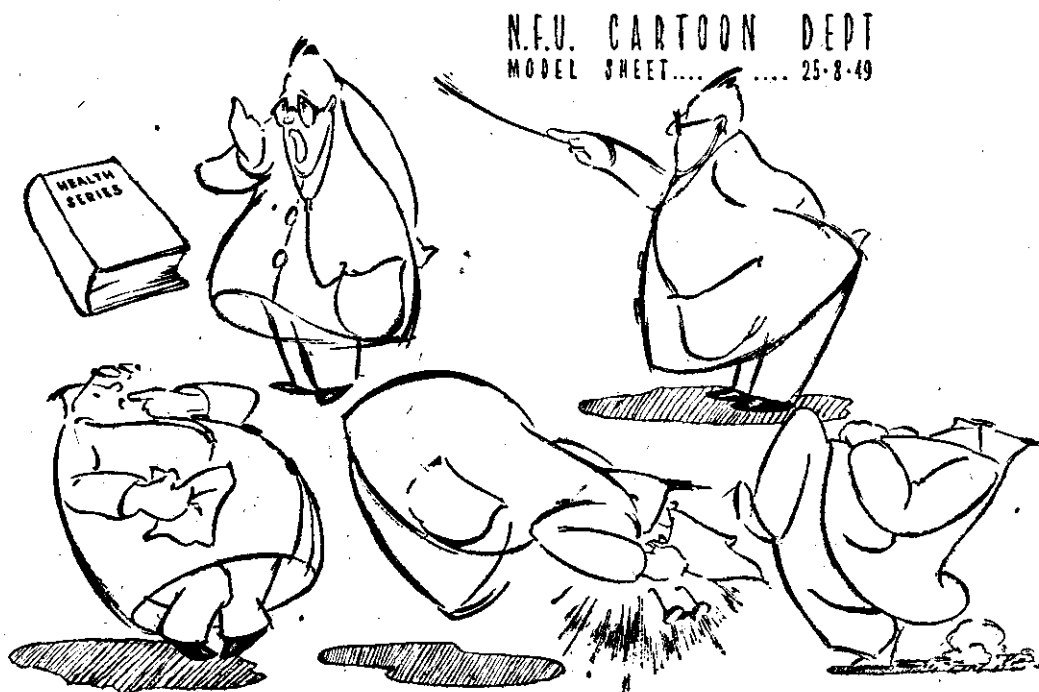
On a table is a tape recorder for making experiments with voices for the sound track. In another corner is a movie acmiola, through which test runs of a projected cartoon can be viewed and criticised. And almost covering one wall is the story board. On this, preliminary sketches of the high points of each new film's action are prominently displayed in their correct sequence.

Last week Robert Morrow explained to *The Listener* how he had set about training his small staff. His own artistic ability had once won him a ten-year contract with David Hand, animation director of *Snow White*, *Bambi*, and *Victory Through Air Power*, but the first thing he told his "boys," as he calls them, was to forget all about their drawing and concentrate on timing. "Timing is the basic principle of animation work," he said. "I got them to draw a series of small circles the size of sixpence, one drawing to each page, at differently spaced intervals, so that when all the pages are flipped through rapidly the circle seems to move across the page, fast or slow, according to the space between each two successive drawings. I also gave them notes on the technical terms we use which they had to memorise.

"Next we got on to 'effects animation'—that is, drawing the inanimate objects (as opposed to the live characters) in a cartoon film. I had the hardest job at first in getting the boys to sketch freely, to loosen up and get the stiffness out of their drawing. However, once they had got the idea of the rhythm and freedom of movement required, I had each of them draw a short but complete sequence which we could take through the first stages of production. One did a series of drawings showing a tree trying to walk, another showed a drop of water falling from a tap into a bucket of water, and the ripples spreading out from where it hits the surface, and the third did a flour bag sliding down a long chute and flying through the air before it hit the ground with a thump.

Life Classes

"Finally we got on to character work. Here we use two methods of training. The boys



PRELIMINARY drawings of a cartoon character to be used in a health instructional film. Model sheets of this kind fix the physical appearance of the characters and act as a guide to the artists