

Shawcraft's model monsters began with the Daleks—and no doubt there are more horrors to come. But in more serious vein is the model (right) which helps to show the formation of some viruses.



Where the Daleks were born

VERNON GIBB visits a science-fiction factory and takes a crafty look at the shape of things to come

PHOTOGRAPHED BY EVELYNE KANE

ON Saturday mornings the small boys of Uxbridge, Middlesex, tend to gather at the open gates of what at first appears to be a junk yard on the Slough Road, just out of town. Five-year-olds stand in goggling amazement. Older boys glance surreptitiously left and right about the yard, then dart in to touch—actually touch with their own hands—a monster made familiar by television or cinema.

Even local teenagers, in Carnaby Street gear and accompanied by "birds", pause in their weekend perambulations and glance into the cluttered yard, experienced eyes sorting out sections of Dalek, the antennae of a scrapped Zarbie, the nose cone of a space rocket.

For this yard is the "foyer" of Shawcraft, a firm of model-makers and innovators. This, in fact, is where the BBC Daleks were born.

Here, in apparently inadequate premises, monsters come and go week by week, veiled in tight security until their presence in our midst is dramatically revealed in an episode of *Dr. Who* or some nightmarish adult play or film.

All are manufactured in the cluttered workshops behind the yard. It is here that producers', playwrights' and designers' visions become concrete under the inspired hand of one Bill Roberts, late of Merthyr Tydfil.

It's all happening

Mr. Roberts retains the Welshness of the expatriate Celt. His voice is helped along by a lilt that would do justice to Dylan Thomas. From an office like the bridge of a ship, high over the yard, he directs the complex and often frantic operations called for by directors with a half-visualized dream and a firm and irrevocable deadline.

His staff of 16 craftsmen often work late, sometimes all night, so that a monster, a spaceship, an elaborate working control panel, can be set up in

the studio in time for final rehearsal.

"I don't really know how all this happened," says Bill, sitting at his L-shaped desk, his conversation punctuated by incessant telephone calls. "I started out with two partners making exhibition model aircraft for British European Airways and some other companies, models of all sizes and types. Then we started making other types of purpose-made models, all unique in their way, all commissioned for special jobs, and the thing just grew.

"My partners and I split up some years ago—I found it better to go it alone, less restricting, you know—and through various contacts the range of our products widened.

"We just made what we were asked to make . . . scale model buildings and technical models for export, educational exhibits, even X-ray machinery and medical equipment. It was a challenge all the time and everybody seemed pleased with our work.

"Some of the jobs were very tricky in the beginning. Of course, you learn as you go along and things get easier. One of our early commissions was for a mobiltron, a huge machine designed by Nuclear Engineering, of Greenwich, for the treatment of cancer by cobalt rays. The original weighed about 70 tons, and they wanted a desk-top model for sales promotion overseas.

"We eventually scaled it down, virtually a working model, to a weight of 15 lb. Nowadays—we like to think, in part at least, through our efforts—mobiltrons are used in cancer treatments all over the world.

"That led to other things. The Science Museum in Kensington has many exhibits made by us, including a complete family of viruses, magnified millions of times over.

"There is one downstairs under construction now, a tobacco-virus. It stands 10' high, and to give you some idea of the scale, if a cat was magnified to the same ratio it would stand with its front

paws in Moscow and its hind legs in London!

"We have made models for Rolls-Royce and many other engineering firms, and about once a year the Smithsonian Institute, Washington, USA, one of the world's greatest museums, commissions a new exhibit from us. The first one they asked for was a 1/24th scale model of the famous trans-continental 'Nickel-Plate' locomotive."

The Planemaker

Soon the inevitable happened. Bill Roberts was approached by Pinewood Studios for model aircraft to feature in the air epic of World War II, *Angels 15*, starring John Gregson. Then came the Phyllis Calvert film, *The Net*, and this led to Bill Roberts' biggest job so far: a full-scale "mock-up" of a Vickers Vimy aircraft for the film, *The Long Hop*.

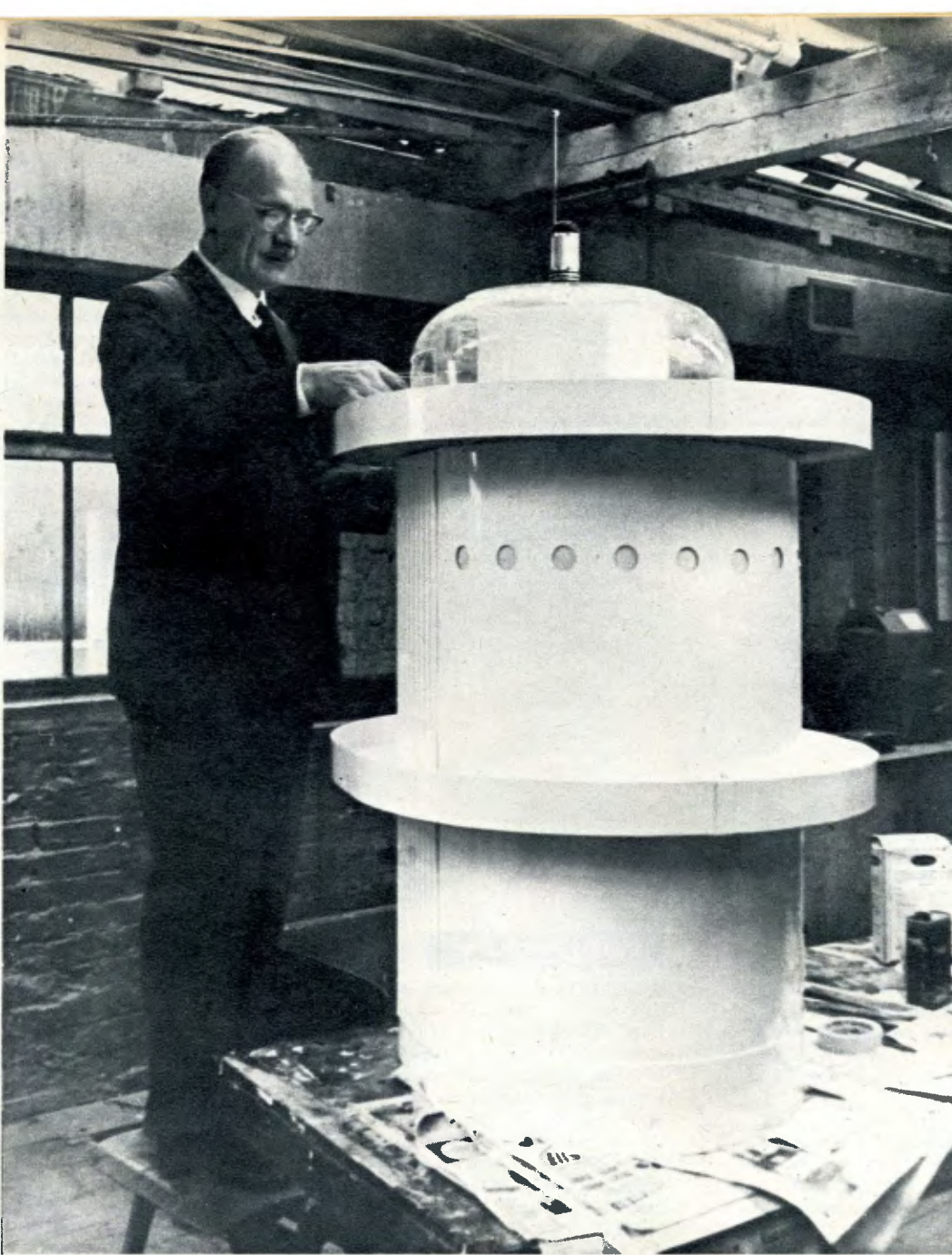
"It had a 67' wingspan," says Bill, "and stood taller than a double-decker bus. We installed two engines which allowed it to taxi realistically at 20 miles an hour. That was quite a job, we only had a shack at Iver, Bucks, at that time—we moved here much later—and it was too small to house even the parts successfully.

"So we built the aircraft in a field outside. It had to be tied down in sections in case it blew away. We spent what little spare time we had praying for good calm weather."

Then came a 40' model of the ill-fated *Titanic* for the Kenneth More movie, *A Night to Remember*, followed by a commission for 180 model planes varying in size from very small to 5' wingspan for another More film, the Bader story, *Reach for the Sky*.

"That was a tricky one," says Roberts. "We spent three days crashing one model effectively—the aircraft that was supposed to cost Kenny his legs."

One piece of aircraft mechanism has never pre-



A Dalek's Daddy, or perhaps a space-age pillar box? Actually, it's the ultimate in cocktail-bar gimmickry—an automatic drinks dispenser mocked up for a recent TV SF play.



In *One Million Years B.C.* American actress Raquel Welch looks like this. Now if Bill Roberts had had a say . . .

sented any problems to Bill Roberts. Propellers. He worked for some years as a prop-shaper at the famous airscrew factory at Weybridge, Surrey.

Then came the ship period. Roberts made battle-ships and cruisers for films like *Sink the Bismarck*, and models up to 33' in length for *Battle of the River Plate*, in which the star model was the Nazi ship *Graf Spee*.

Following the American trade showing of *Sink the Bismarck*, the American distributors remarked about how the "stockshots"—old newsreels—gave the movie a feeling of authenticity. In fact, of course, there were no "stockshots": they were all Shawcraft models filmed in a tank!

An astute man, Bill Roberts was not content to make models just for the movie industry. He became familiar with the general workings of a studio and quietly produced an automatic film processing machine, some 40' long, capable of dealing with 300 colour films an hour.

The Rank Organization commissioned three such machines which are still in daily use.

Fibreglass and steel tanks of any size for the treatment of metals, for film processing, industrial models of all types, educational aids; Bill Roberts makes them all in his smallish, overcrowded workshops.

Monstrous orders

But it is the show-business side of his production which is the most amazing. No *Dr. Who* programme would be complete without a Shawcraft contribution. Perhaps the most famous of all the *Who* monsters were—and are—the Daleks.

Dreamed up by writer Terry Nation and designed by Raymond Cusick of the BBC Design Team, they were the first "monsters" in the Shawcraft library. They were followed by the Zarbies—ant-like creatures, actually articulated suits worn by actors

—and the more lovable Chumbleys.

"Working" instrument panels for space travel, upon which lights flash and dials register electronically, are just part of Shawcraft's weekly chore.

Rockets of intriguing complexity, launching-pads, a scale model of the city of Troy—you name it, and you will find it in Bill's workshops. Everything from a pterodactyl to a drinks machine and accompanying chair for the BBC play *Out of the Unknown*.

"Actually, there is a man inside the drinks machine," says Bill. "It's cheaper that way. The idea is this mastermind sits in a hydraulically operated chair, which turns to a lounging couch at a touch, and the drinks machine obeys his commands, spilling whisky, gin or vodka into a glass, adding ice and cordial and even using a swizzle stick before passing it."

A series of spouts dispenses the "liquor," there is a chute for ice, and the "swizzle stick" operates on a complicated mechanical arm.

Here, as in everything else, Roberts' keen attention to detail is evident. Detail and finish. The finish on every product is impeccable. Shawcraft models are obviously made to last.

What of the future?

"Well, I seem to have so many irons in the fire, I just cannot predict which way things will go," says Bill. "But one thing is certain. While there is a demand for monsters, whether they be from outer space or under the sea, they will be born at Shawcraft."

And next Saturday and every Saturday after, the small boys and the bigger boys, and even the fathers, will be glancing into the cluttered yard on the busy Slough Road, hoping to get a preview of what their home screen will show them.

But security measures are strict: all the passers-by can see are the familiar monsters of the past . . . the Daleks, the Zarbies, and maybe a Chumbley. ●

