



“ABLE CALLING

THE ANNOUNCEMENT that the Company has secured a contract from the Buckinghamshire Water Board for a VHF mobile radio system is the sequel to a story.

In the competitive world we live in, orders do not, as a rule, roll in out of the blue. A county water board, or for that matter any other organisation, is interested only in getting first-class equipment at a reasonable cost, and the contract for supplying it must be sought and won in the face of competition. In this case the seeking was done by A. Coningsby and I. W. Smith, Communications Division sales engineers, who maintained “on the spot” personal contact with the Bucks Water Board and fed back information to Communications at Basildon. The details were passed to Ron Denman, who with VHF Development Group planned a scheme for an H16F main station at Quainton Reservoir, about eight miles from Aylesbury, to operate to six Water Board vans and lorries fitted with HP.110 sets. Post Office lines were needed to remotely control the station from Aylesbury and Wendover. These lines were already available but were carrying water level recorder signals from the reservoir and the radio system

had to be such that these recordings would be interrupted only during actual transmissions.

Following this preliminary planning a VHF demonstration team from the Company went down to Aylesbury. The engineers who develop and modify these schemes for special purposes are the men of VHF Development Group, led by G. A. Samson, and with the demonstration team went Pat Freeman of the Group. Here is his story of the few hectic days of a demonstration which are just a part of the year in, year out business of getting orders.

THE VILLAGE of Quainton, not far from Aylesbury, may not live up to the first part of its name in the brighter months of the year, but it certainly did when I visited it in winter. A nearby hill, 650 feet above sea level and the highest point for miles around, had been selected as a site on which to establish a headquarters VHF radio station for the demonstration to the Bucks Water Board. I had been loaned for this operation by Mr. Samson because I had specialised knowledge of the “selective calling” units which were part of the equipment.

Selective calling may briefly be des-

*Sales and Development
Engineers win a con-
tract to supply our
VHF mobile radio to
the Buckinghamshire
Water Board*

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cribed in this way. By pressing certain buttons on a unit at the HQ station the operator can call any individual mobile station in the network, up to a hundred vehicles. The call is indicated to the selected mobile, and to him only, by a bell ringing. He can then carry on a normal radio telephone conversation with his HQ. An operator can work a considerable distance from his vehicle, in which the radio equipment is installed, and not be constantly interrupted by



*Four photos by C. P. Freeman
C. P. Freeman of VHF Development, who
tells our story. Below, Ken Crispin, Bob
Tracey and Jack Martin of the demonstration
team, struggling in a gale on the top of the
reservoir to stop the tent, with all the head-
quarters station equipment installed in it,
from blowing away*

calls which may turn out to be for other mobiles in the network. He has only to listen for his bell ringing to know when he is wanted.

I was met at Aylesbury station by Bob Tracey, who was in charge of the demonstration team. He took me to Quainton and there I met the other two members of the team, Ken Crispin, who drives the big demonstration van, and Jack Martin, then stationed in Middlesbrough. They had arrived the day before to install the equipment, only to find it impossible to get the lorry up the very steep hill. They had, therefore, hired a jeep from a local farmer and by the time I arrived the tent had been pitched and a 50-foot aerial mast erected. I had not been there long when the wind started to blow, increasing to gale force and threatening to carry the tent and its contents into the next county. As the tent was pitched on the top of Quainton Reservoir the earth in which the pegs



Good morning to the farmer on his rounds. He helped the team in every way he could, and Bob, Jack and Ken were intrigued to find him on horseback after previously seeing him droving his sheep on a motor-cycle

had been driven was not deep and was very soft. All hands were put to making the tent fast, ropes were lashed to the guys and pole and fastened to concrete stanchions nearby. As if the elements were not enough, man decided to take a hand. Every now and then colossal explosions took place in the valley below, to be followed after a second or two by a terrific air blast which would set the tent flapping and groaning in protest.

Having done everything humanly possible to secure the tent, we crossed our fingers and hoped it would stay up. Then we descended the hill to return to Aylesbury for dinner. At the bottom we saw a strange sight. The farmer whose jeep we had hired was shepherding his sheep on—of all things—a motor-bike. By judicious swerving and hooting he was driving the sheep before him at a rate guaranteed to break the union rules of all self-respecting shepherds. The following day, incidentally, he upset our impression of him as a completely mechanised unit, by appearing on his

farm rounds riding a rough pony with only a hemp halter and no saddle.

In the afternoon we staged a trial demonstration to see if everything would work all right in the prevailing conditions. I went along with Bob in one mobile, Jack went off on his own in the other and Ken operated the HQ station.

As we were going through Bicester we saw a pedestrian in front gesticulating violently to us. Bob braked sharply, imagining he must have knocked someone over. On looking round we saw a man panting up the road towards us, and who should it be but Bob's brother-in-law! He is a travelling salesman and had just happened to stop in Bicester for an hour when he saw a Marconi van and recognised Bob driving.

The trial run showed that one or two slight modifications would have to be made, so after tea we all drove out to Quainton, arriving about seven o'clock. The changes would, we thought, take us about an hour. By 3.30 a.m. we had revised our estimate! We worked all night in a really biting wind, and it was borne in on me most forcibly that one of the essential qualities of a "dem" team member is a sense of humour. Ken helped matters considerably by raising numerous cups of "char" with the aid of a paraffin oil stove.

When everything was finally exactly as we wanted it, we drove back to Aylesbury. As we drew up outside the hotel two policemen emerged from the shadows to enquire what two vans, a lorry and four dishevelled occupants were doing outside a hotel at four o'clock in the morning. Once we had satisfied them that we were not in the mail van robbery business they allowed us to park our vehicles and enter the hotel, where it didn't take us long to fall into bed. Three hours later—it seemed that number of minutes—we were up again. The demonstration was scheduled for nine o'clock sharp.

Ken and I drove out to Quainton to

operate the HQ station. Bob took with him the member of the Water Board who was to watch and take notes of the demonstration, and Jack went off on his own again. They would cover different areas, Bob going north through Bicester, Brackley and Towcester, and Jack going over the Chilterns.

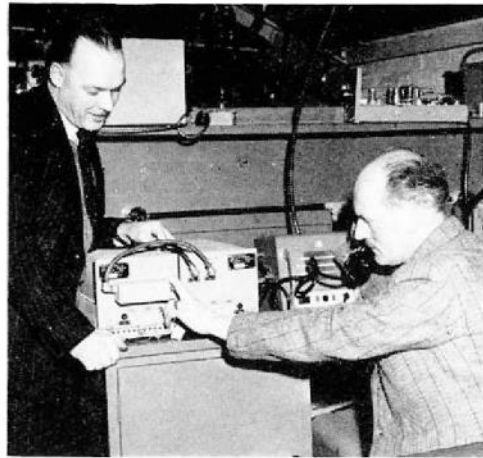
While I operated the H.16 transmitter/receiver Ken busied himself with the various jobs which always crop up on these occasions. Between these he miraculously managed to produce a hot dinner, with the aid of a tin-opener and his sworn ally, the paraffin stove.

The demonstration continued according to plan, with incoming and outgoing calls every few minutes. I was plotting the respective positions of the mobiles on a map and at one time Jack's position was the same for twenty minutes. Then he came through saying that he had decided to take a short cut through a narrow lane and had come up behind a herd of cows. So much for short cuts! The exercise finished at about five o'clock and we all met for a well-earned meal and then a much-needed sleep.

Next morning we went to Quainton to dismantle everything. The jeep was fetched again from the farm, and after a journey to the hilltop which reminded Jack of his favourite pastime, car hill climbing, we piled everything on to it and made an equally perilous return journey. The weather was really filthy. Rain, mist, wind and visibility were such that from half-way up the hill we could see neither the bottom nor the top. The equipment was transferred from the jeep to the vans and lorry and it was not long before we were on our various ways. I was pleased to have had the opportunity of seeing in actual use the equipment I had helped to develop, and I had also enjoyed seeing a most resourceful "dem" team at work.

The story has the right ending, because, as you know, we got the contract.

C. P. FREEMAN



At New Street, G. A. Samson, Chief of VHF Development, right, discusses with F. C. Turner detailed performance points of an H.16 equipment which is being specially modified to meet a customer's requirements



P. R. Keller, standing, leader of Established Designs Section, VHF Development, with C. P. Freeman, who is his assistant, tuning a mobile VHF set in the boot of a car outside their laboratory. This equipment is fitted with a selective calling unit