



N.P.S. photograph

ROYAL TOUR

Men Behind the Broadcasts

IF you'd telephoned any member of the NZBS Royal Tour team lately you could wager they'd be—well, if not in conference ("not to be disturbed") then probably at Kaikohe or Gebbie's Pass, or just "due back at the end of next week." However, even the end of next week comes some time or other, and so does the Monday morning after, and for Norman Johnston, engineering liaison officer for the tour, it must have seemed Monday morning indeed when *The Listener* rang and asked if he could tell us something about the technical background to the broadcast cover of the tour. No, it certainly wasn't the day he'd have chosen to talk to us, but, oh, well, better get it over. . . So here, with all the interruptions from people and telephones left out, is what he told us.

Perhaps, said Mr. Johnston, he could tell the story best by taking an actual Royal Tour event—the civic reception at Whangarei, which would be very much like the receptions in about 10 other places from Hamilton to Invercargill. "In Whangarei, we'll establish about six outside broadcasting points which will cover not only the ceremonial drive to and from the reception, but the reception itself," he said. "At each point there'll be at least one commentator and one technician, and a set of outside broadcasting equipment. The commentators, by the way, will all be wearing a microphone attached to harness instead of using microphone stands. There'll also be microphones at each point to pick up as much of the crowd enthusiasm as possible. We'll be trying, you see, to bring the occasion to listeners as it's actually happening, without relying only on the commentator's words. At the reception itself, where both the Queen and the Mayor will speak, we'll duplicate both staff and equipment—there'll be two microphones in front of the Queen and two in front of the

Mayor, each fed on separate telephone lines to the studios."

Stations were not normally equipped to handle so many outside broadcasting points, Mr. Johnston said, so special outside broadcast switching consoles had been built and would be installed at all stations. All the necessary lines from relay points—three from each point on the ceremonial route and four from the relay point at the reception itself—came in on Post Office cable to terminate on this switching console, which would be manned by a producer and his assistant.

"Through the use of the console the producer may talk to any one or all of the commentators, who will be wearing headphones through which the producer's voice will come. We don't expect the producer will have to talk to a commentator while he's actually broadcasting, though he can if necessary. But the producer will keep his team at ease during the long wait and tidy up any loose ends, and if the Queen should be late or if anything untoward happens he must see to it that the broadcast doesn't drag. The producer has the final say on what actually goes on the air. The output from the special switching console is fed into the normal control room at the station."

Mr. Johnston said that this simple-sounding arrangement had called for the installation by the Post Office of a very large number of special lines, the construction of stands for observers, technicians and equipment, inspection by the Ministry of Works of roofs and other vantage points (which in some cases have had to be strengthened), and negotiations with property owners (including the Railways and other Government Departments), police and transport officials so that they would be completely familiar with the positions NZBS staff were going to occupy.

"There have been months of negotiations, and rehearsals have been going on from the relay points selected so that commentators will know roughly what

LEFT: "Switching console" which will be used by NZBS production teams during the Queen's visit. This model has 16 relay channels and will be used in the main centres. Eight-channel models will be used elsewhere. This equipment was designed and built by NZBS engineers

the scene will look like on the day of the broadcast," Mr. Johnston said. "We've also had to find out where decorations will be put and wherever possible have safeguarded our positions—we don't want to find a string of flags across the street completely obscuring our view when the time comes. In every case, we've had wholehearted co-operation from local authorities. In some cases where our relay point will be in the middle of a dense crowd the police are providing a constable to protect us—at a time when they will be very pressed for men."

On the day of the Whangarei civic reception the broadcast will start, say, five minutes before the Queen leaves her hotel. An observer outside the hotel will set the scene and describe the departure. As soon as he loses sight of the car the broadcast will pass on a pre-arranged cue to the next observer, who has perhaps been told to comment on the children gathered near his point. In each case as the broadcast passes from one point to another the cue will be given by the commentator, not by the producer.

"In places like Whangarei where we have an unattended transmitter, one of our most experienced technicians will be sitting out in the transmitter hut in case there's a failure there," said Mr. Johnston. "He'll be one man who'll see nothing of the big occasion—and we hope very much that he'll have no work to do. In the studios the whole broad-

cast will be recorded, and at the same time it will be fed by landline to a recording centre in Wellington, where the sole job of the staff will be to man three complete tape-recording channels—they will not undertake any production or editing work. As soon as the tapes come off a machine they'll be catalogued and at once become available to the Head Office Talks Section team, who will compile the Royal Tour bulletins for national broadcast, the BBC and the ABC. Production suites in which the original tape recordings can be edited and made into shorter programmes have been established in both the Waring Taylor Street and Wellington Production Studios, one of them being set aside for the BBC."

Mr. Johnston said that as only NZBS microphones would be in front of the Queen when she spoke, the Service had to feed also public address systems and the National Film Unit sound cameras. This was done at each relay point through an outside broadcast termination unit, which linked not only the public address systems and the Film Unit cameras, but everyone concerned with the broadcast. Each of these units—"a little box covered with terminals, plugs and sockets and with headphone volume controls"—made it possible for everybody—technicians and commentators at relay points, the producer and his assistant, the man at the transmitter and finally the listener in his home—to hear exactly the same thing. A commentator, for instance, couldn't speak of the enthusiasm of the crowd till he heard it through his headphones in exactly the same way as it reached the listener. Seventy of these outside broadcast termination units have been built by the NZBS Engineering Section, which also designed them.

"This is only part of a considerable amount of new equipment which has been brought into service for the tour," said Mr. Johnston, "and most of this was built by our own Engineering Section in record time. This has now been issued to stations which are carrying out full dress rehearsals with it. Chief credit for the design of the switching console goes to the Auckland technical staff, under the district engineer, J. H. Gault. A large number of portable tape recorders designed by the NZBS and assembled by a Wellington firm will be in use for the tour, and small battery-powered recorders which can be used by non-technical staff will also be used for the first time on a large scale. As you can imagine, technical preparations for the tour have placed a heavy burden on our purchasing and stores staff, and local manufacturers' representatives and manufacturers have been very helpful in rushing jobs through."

Mr. Johnston said the NZBS had had excellent co-operation from the Armed Services, the Civil Aviation branch and the Ministry of Works, and was specially indebted to the Post Office, which would provide all the transport. "The Post Office," he said, "has also, of course, provided all our lines, including, in quite a number of places, new multipair cables from the nearest exchange point to our studios. To date they haven't turned down a single request for either lines or transport. Even to such

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NORMAN JOHNSTON

Every man on the technical staff will be used