

the disaster. For nearly three weeks volunteer field teams camped under makeshift arrangements and operated communications equipment on a near round-the-clock schedule using only battery power. Morvi was linked with the cities of Rajkot, Ahmedabad, Baroda and Bombay as mobile units accompanied the Home Guards into the worst affect areas. Amateur radio in India came of age because of a major disaster. After Morvi there was no longer a need to convince anyone that a specialised technical hobby was a national asset like the Red Cross or the Home Guards.

A more recent demonstration of the benefits of amateur radio came in late 1980 when volunteers set up a communication network across 6000km of rugged countryside in northern India. The situation was not an emergency but the internationally publicised Himalayan Car Rally once again proved the usefulness of amateur radio in providing front line communication. The Himalayan rally is now an annual event and it provides a much needed coordinated rehearsal for dealing with acute emergency communication needs in the immense country.

With such press publicity and seemingly increased public knowledge about amateur radio activities and benefits, it would seem that a ham ticket would at least be relatively easy to obtain in India. Such is not the case as adverse amateur legislation has demonstrated.

### Red tape

The Amateur Service Rules 1978, brought into effect on January 1, 1979, have tended to restrict the growth of amateur activities rather than encourage them. Besides being poorly drafted, the rules have made the obtaining of a licence more difficult by making licensing procedures cumbersome and examinations more strict. (Apparently amateurs were not consulted in any of the new legislation).

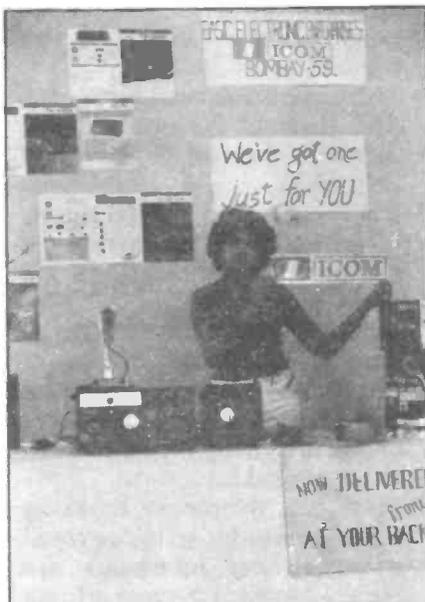
The rules incorporate four grades of license: advanced amateur, Grade 1, Grade 2 and SWL Licence.

Allocations are 3500-3540 and 3890-3900kHz, 7000-7100kHz, 14000-14350kHz, 21000-21450kHz 28000-29700kHz and 144-146MHz.

The 10, 18 and 24MHz bands are not yet allotted in India.

### Advanced licence

To obtain this licence a candidate is required to pass a severe written test with 60 per cent or better marks and to have a morse speed of 12 wpm. Additionally, the rules also state that in order to obtain this licence an amateur must have either possessed a Grade 1 licence for two years or a Grade 2 licence for three years.



Commercially built amateur radio equipment is now available to Indian operators under a special 'Open General Licence', although only about 10 per cent of the hams in India can afford such luxuries.

### Grade 1 licence

A Grade 1 licensee must pass a theory test with a 50 per cent or better score and have a morse speed of 12 wpm. The operator cannot operate the satellites or use SSTV (except on the 2 metre band). Power is limited to 150 watts input except for the 2 metre band where the limit is 10 watts.

### Grade 2 licence

The 1979 rules affect these novice-like licence holders the most. Currently they are only allowed morse operation on 80 and 40 metres with a maximum input of 25 watts. Former telephony privileges on those

two bands have been revoked. However, the licensee can operate telephony on the 2 metre band, with a restricted Grade 2 voice only licence, even if the five wpm morse test is failed. Power allowed on the 2 metre band is five watts but at least this regulation may create interest in VHF operation. (Some clubs have designed VHF kits.)

The only positive change made in the 1979 rules is that a Grade 2 licence has been made permanent. Formally the Grade 2 licence holder had to either pass the Grade 1 test after three years or surrender the licence.

### SWL licence

This seemingly unenforceable licence must be obtained in order to possess a communications receiver. After obtaining the Short Wave Listeners' Amateur Licence the holder is permitted to listen to all bands allocated to the amateur service.

### Mobile Licence

In the past, mobile endorsement was unrestricted. This important facet of amateur radio activity has now been highly restricted with the introduction of mobile endorsements valid for only three months and issued only after paying an extra fee. As endorsements are only for specific experiments, and reports of the experiments conducted are required, it appears that licensing authorities have forgotten that natural disasters and the the need for emergency mobile communications do not wait for paper-pushing bureaucrats!

While the bureaucrats push excess paper, intending amateurs find there is a scarcity of indigenously printed study material. The Federation of Amateur Radio Societies of India (FARSI) has produced a publication *Guide to Amateur Radio in India* while a Government booklet *International Regulations and Indian Amateur Radio Service Rules* is intended to guide candidates past some uniquely-Indian rules and regulations. These two publications are used in radio classes and additionally many instructors make use of the ARRL publications: *Radio Amateur's Handbook* and *Understanding Amateur Radio*. RSGB publications are not well known in India.