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INFORMATION RELATING TO
THE LICENSING OF LOW POWER VHF
REPEATERS IN ISOLATED AREAS

TELECOMMUNICATION REGULATORY SERVICE

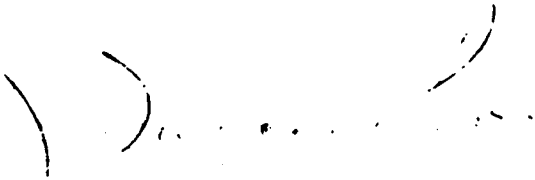
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LICENSING OF LOW POWER VHF REPEATERS IN ISOLATED AREAS

1. This relates to the recent development of low-power transistorized VHF transmitters - receivers, specifically designed to operate as automatic repeaters on mountain tops, remote from access roads and electric power. These units, with battery packs capable of operating for at least a year can be readily transported by helicopter. The dependability of these units makes them attractive for radio systems requiring wide coverage, such as forestry, hydro and highway services, particularly in British Columbia. The design is such that they can be readily linked together to provide point-to-point circuits, in addition to the normal base/mobile use.
2. The equipment involved cannot meet the type-approval requirements of Radio Standards Specification 126. Moreover, since it is not designed for mobile use it cannot be type-approved under Radio Standards Specification 121, even though it might comply with those minimum performance standards. An alternative, with regard to the acceptability of this equipment, would be to evaluate it under Radio Standards Procedure 103 and, if acceptable using Radio Standards Specification 121 as a guide, listing it in Part B of the Radio Equipment List. However, considering the technical limitations of these units, we are not prepared to consider type approval or type acceptance for land station use because such action (and appropriate listing in the Radio Equipment List) would allow its use at fixed locations in congested as well as isolated areas.
3. It is considered, however, that there is a valid but limited requirement for this type of land station in isolated areas, where the technical deficiencies are not liable to cause interference problems. Therefore, it has been decided that applications for licensing of these repeaters in non frequency congested areas shall be considered on a case-by-case basis, even though the equipment involved is not listed in the Radio Equipment List for land station use.
4. Each application proposing to employ low power transistorized equipment as described above shall be accompanied by supporting technical details. The proposal will be evaluated in terms of the radio environment and if considered acceptable, using Radio Standards Specification 121 as a guide, it will be given special case consideration. No land station listing will be made in the Radio Equipment List for the reasons stated above. In addition, mobile equipment type approved under Radio Standards Specification 121 (and listed in Part A of the Radio Equipment List) may also be considered on a special case basis for licensing as mountain-top repeaters.

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- Applications involving the use of these units for single or multiple hop radio links (tandem operation) should be submitted in accordance with Radio Standards Procedure 101. Systems employing such equipment shall be operated on a non-interference basis and shall not be protected from interference to the same extent as higher grade systems.


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