Principle and Application Analysis of Direction Finder Systems Used in the HF/VHF/UHF Ranges

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ABSTRACT

The construction theory and the application of the RDFS (Radio Direction Finding System) are investigated in this thesis. Some of the operations of receiver antenna, which is well known as one of the most important role for the RDFS , are also studied here . The related publication of RDFS is sparse , since some of the exist reasons include the necessary of RDFS focus only on the military and the secure unit , and the functions of RDFS aren ’ t generally necessary for the commercial operation . There are also some of the other reasons, such as the very high expensive and the restriction of the nation defense in a country. Hence the investigations in this field of RDFS are most riding in the approaches of theory . Based on the mentioned above , this thesis propose a lot of experiences of the operation in RDFS techniques .The basic theory of RDFS is studied first , then there are some of the operation parameters of RDFS analyzed and investigated , e.g.. the environment , the speed , the frequency bandwidth and the antenna of the direction finding . In the last part of the thesis, for purpose of sharing to the telecommunication person with the experience of the author some of the inaccessible pictures with the data accessed from wide-band RDFS will be shown . I believe that all the information described in this will provide much of the helpful for the person who wish to understand the techniques of RDFS

Keywords : Interferometer、Wave front-Analysis、Doppler Watson-Watt

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