





# The ARRL UHF/Microwave Projects Manual

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#### **Foreword**

Radio amateurs have been experimenting with UHF and microwave frequencies almost as long as the amateur service has existed. That enough projects exist to fill a book (in fact, several books) of this size is testimony to the frontier spirit that still exists in Amateur Radio, leading adventurous experimenters to explore the upper end of the radio spectrum.

In preparing this book of projects, the editors tried to select designs that would remain usable for years to come. Some of the designs are already seasoned, having appeared in conference proceedings and *QST* several years ago. UHF/microwave experimenters are always seeking a little better performance. The fact that no one has improved on these designs in the ensuing years is proof enough of their ability to get the job done.

At present, it may appear that the state-of-the-art transverter design is stagnant, but you don't have to look back very many years to see how far we've come. Anyone who, not that many years ago, fiddled with frequency multiplier chains to generate a few milliwatts at 2304 MHz, or listened to the roaring IF stage of a Gunn-diode transceiver, will agree. It may be that we have all the technology we need, at least for the bands through 10 GHz. As HF technology stabilized some 60 years ago, the ranks swelled with more and more operators, and the experimenters moved to higher frequencies. As access to easily constructed and operated microwave equipment fills the bands with more operators, the authors represented here will surely look for new frontiers. Perhaps the next collection of microwave projects produced by the ARRL will *start* where this one leaves off: at 24 GHz.

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