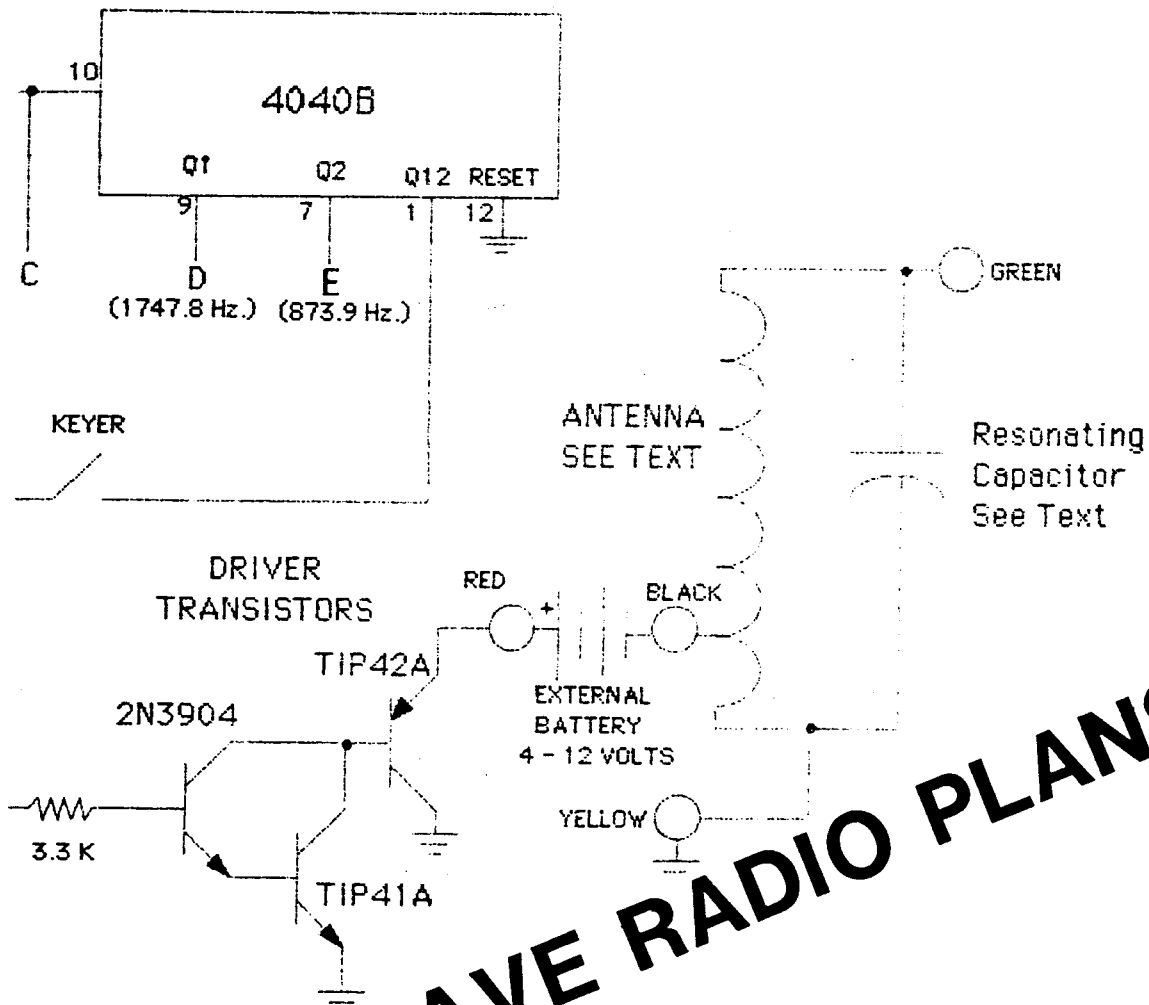
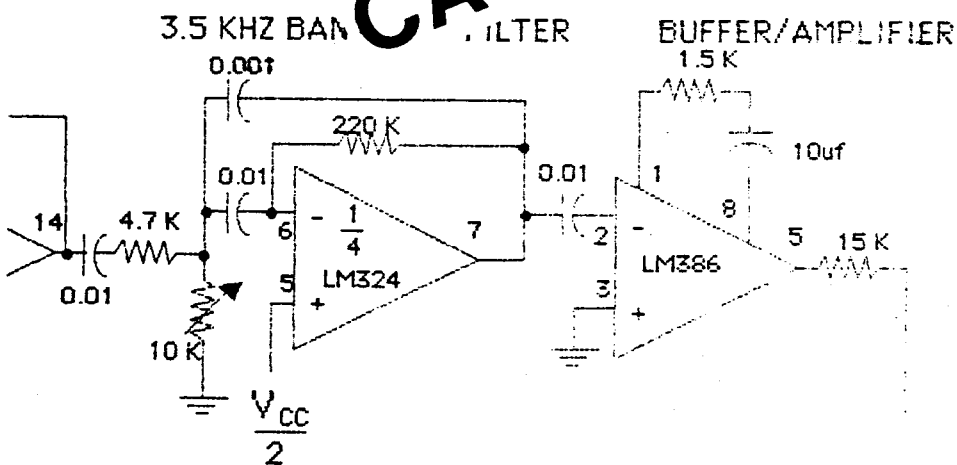


speleonics 3

FALL
1985



CAVE RADIO PLANS!



SPELEONICS is the quarterly newsletter of the Electronics and Communications Section of the National Speleological Society. Primary interests include cave radio, underground communications and instrumentation, and cave-related applications of amateur radio. Membership is unrestricted (NSS membership not required). Membership, which includes four issues of SPELEONICS, is \$4.00 in USA/Canada, \$6.00 elsewhere. Send subscriptions to section treasurer Joe Giddens at the address below.

Complimentary copies of SPELEONICS are mailed to NSS offices and sections, the U.S. Bureau of Mines, U.S. Geological Survey, and the Longwave Club of America.

Chairman:
 Ian Drummond
 5619 Dalwood Way NW
 Calgary, Alberta, T3A 1S6
 Canada

Treasurer (and editor of the next issue):
 Joe Giddens, KA5LFG
 PO Box 170274
 Arlington, Texas, 76003

Secretary (and editor of this issue):
 Frank Reid, W9MKV
 PO Box 5283
 Bloomington, IN 47402

Publisher:
 Diana George, N9DEJ
 1869 Trevilian Way
 Louisville, Kentucky, 40205

CONTENTS

Cave Radio Ethics: Artificial Entrances (editorial)
 Frank Reid.....1

Slug Tuned Coil (cartoon)
 Elea Mideke (reprint).....1

Organ Cave Radio
 Ray Cole.....2

Organ Cave Trip Report
 Ray Cole.....3

Cave Rescue Communications: Linked Systems
 Part I: Tom Whitehurst, Ted Handel, Bob Skaggs..6
 Part II: Frank Reid.....7

Magnetic Moments #3
 Ian Drummond.....9

Ricky Resistor (cartoon)
 Frank Reid.....10

Editorial:

Cave Radio Ethics: Artificial Entrances

Cave radio has located vital water wells for Texas ranchers, aided antipollution projects and cave rescues, surveyed property boundaries, and increased the accuracy of countless cave maps.

Cave radio is the ideal way to locate artificial entrances to known caves. Like dynamite and other powerful tools, its misuse can damage caves and owner relations.

Cavers like to dig! Entrances which conveniently bypass nasty passage and unfriendly landowners are easily rationalized from safety arguments. Purists aside, there are valid objections to cave modification for the sake of convenience. A new entrance can upset cave ecology by modifying airflow and introducing harmful agents (including excessive numbers of cavers). The distinction between convenience and necessity is arguable, to say the least.

New entrances for potential rescue needn't actually be dug; they could be located for future reference, to be excavated by heavy machinery in case of emergency. But who can resist the temptation to dig with success guaranteed?

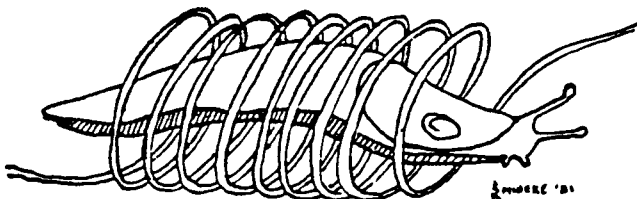
Cave and owner-relation damage are obviously to be avoided. Individual circumstances will vary; bypassing an unfriendly landowner might cause him no loss, and might even be a favor to him.

Consequences aren't always obvious. I take righteous pride in having refused a request to use cave radio to circumvent a commercial cave operator. The same year, however, I naively made a radiolocation which resulted in an entrance being dug without the landowner's permission. The easier access resulted in significant damage to a small but beautiful cave.

How would one resolve the dilemma of being offered money to do cave radio work for probably-harmful purposes but breaking no laws, and knowing that if he refuses, the job will be done by someone else? Is arming "cave war" combatants morally equivalent to participating directly?

On this 25th anniversary of American cave radio, it is ready to become standard caving equipment instead of the domain of a few specialists. Now is the time to ponder the consequences of irresponsible use of cave radio, lest this valuable tool fall into the same disfavor as the once-popular practice of publishing state cave books.

F.R.



SLUG TUNED COIL

Cartoon by Elea Mideke originally appeared in The Lowdown, vol. 8, no. 7, July 1981. Reprinted by artist's permission.

