

# *NTMS Projects*

- Radio Shack Rotator Modification
- 24 GHz Transverter

# N5PGH Direction Sensor for Radio Shack Rotators



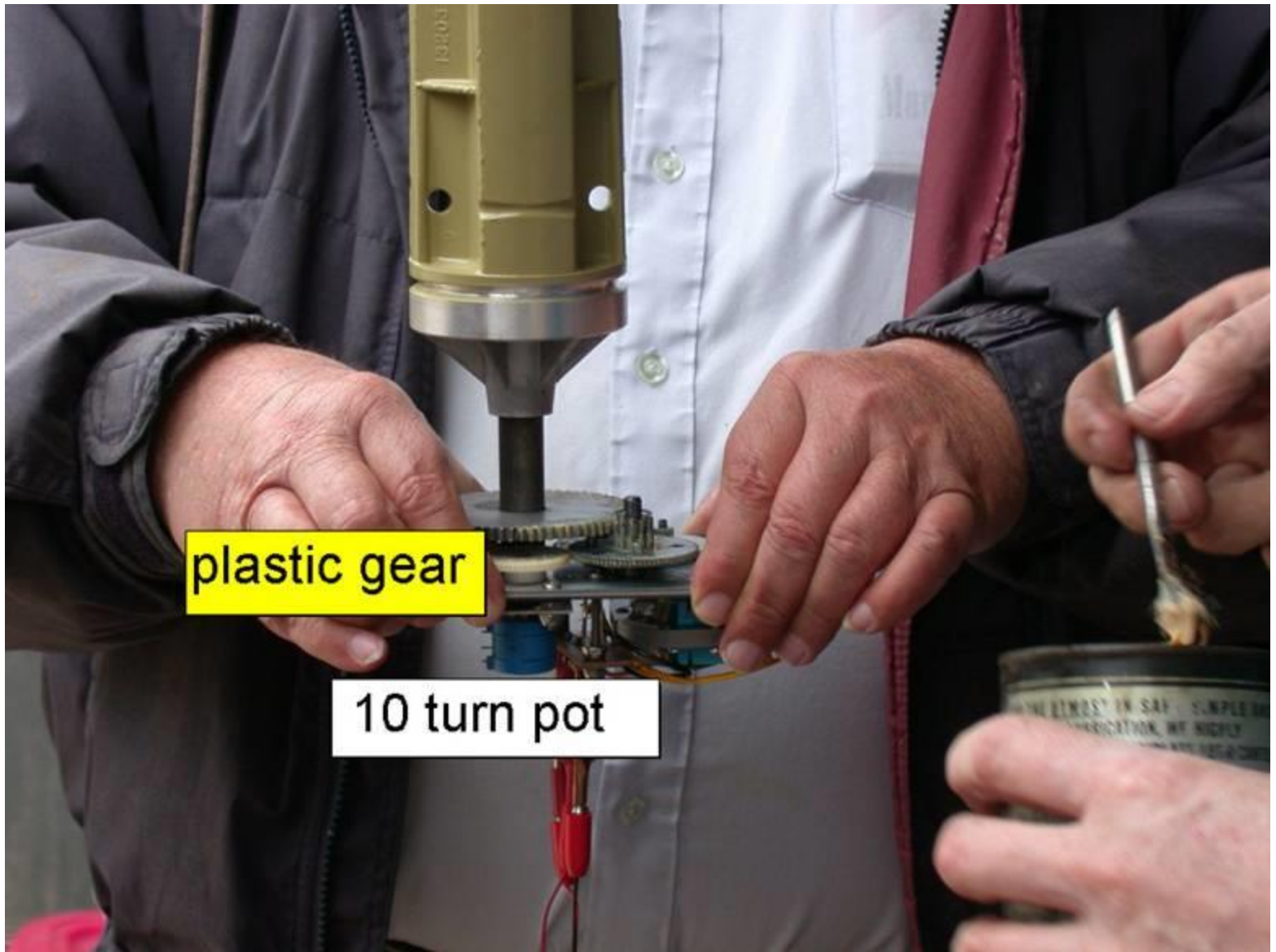
Roger N5PGH and Terry W5ETG work on the patient...



The gears de-greased and laid out on the workbench



N5PGH taps a hole in the gear drive base



plastic gear

10 turn pot

Smoke Test: Running the motor from stop to stop and greasing the gears

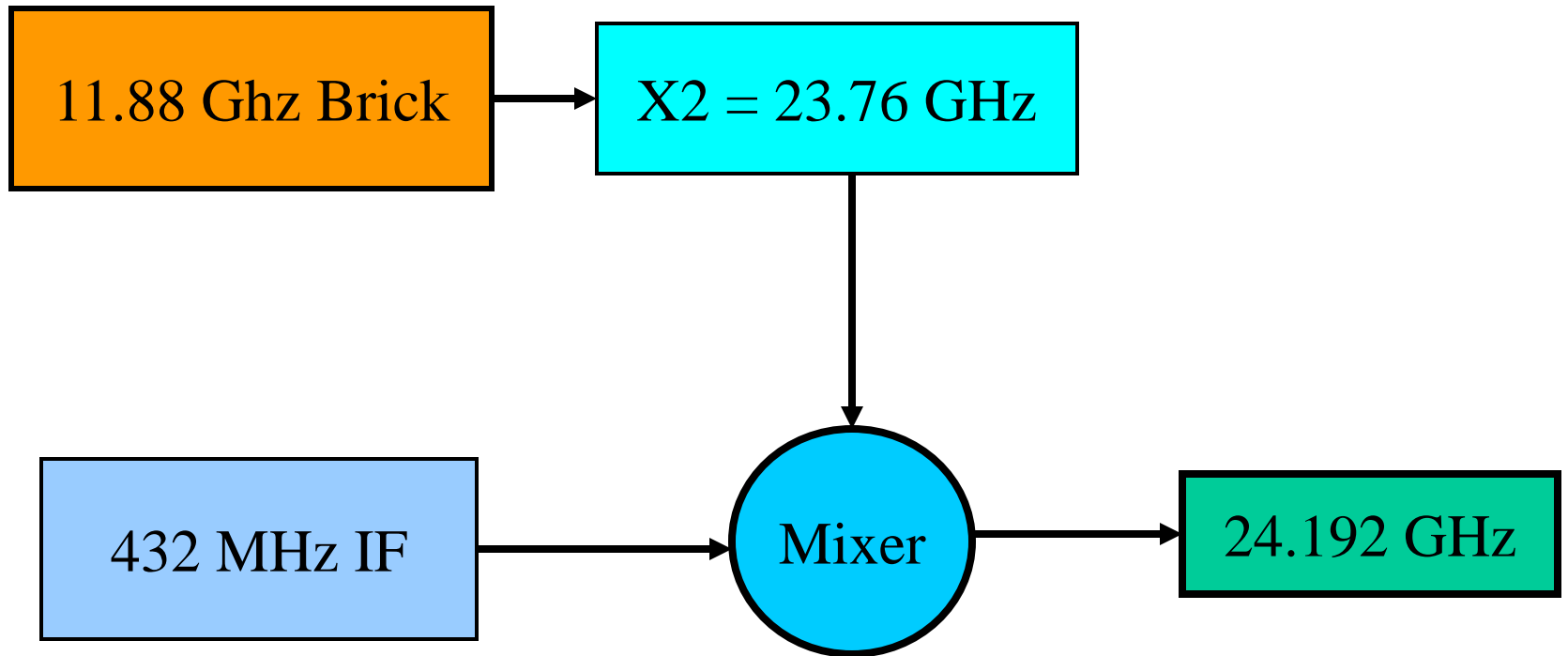


Roger greases the gears while Vaden looks on

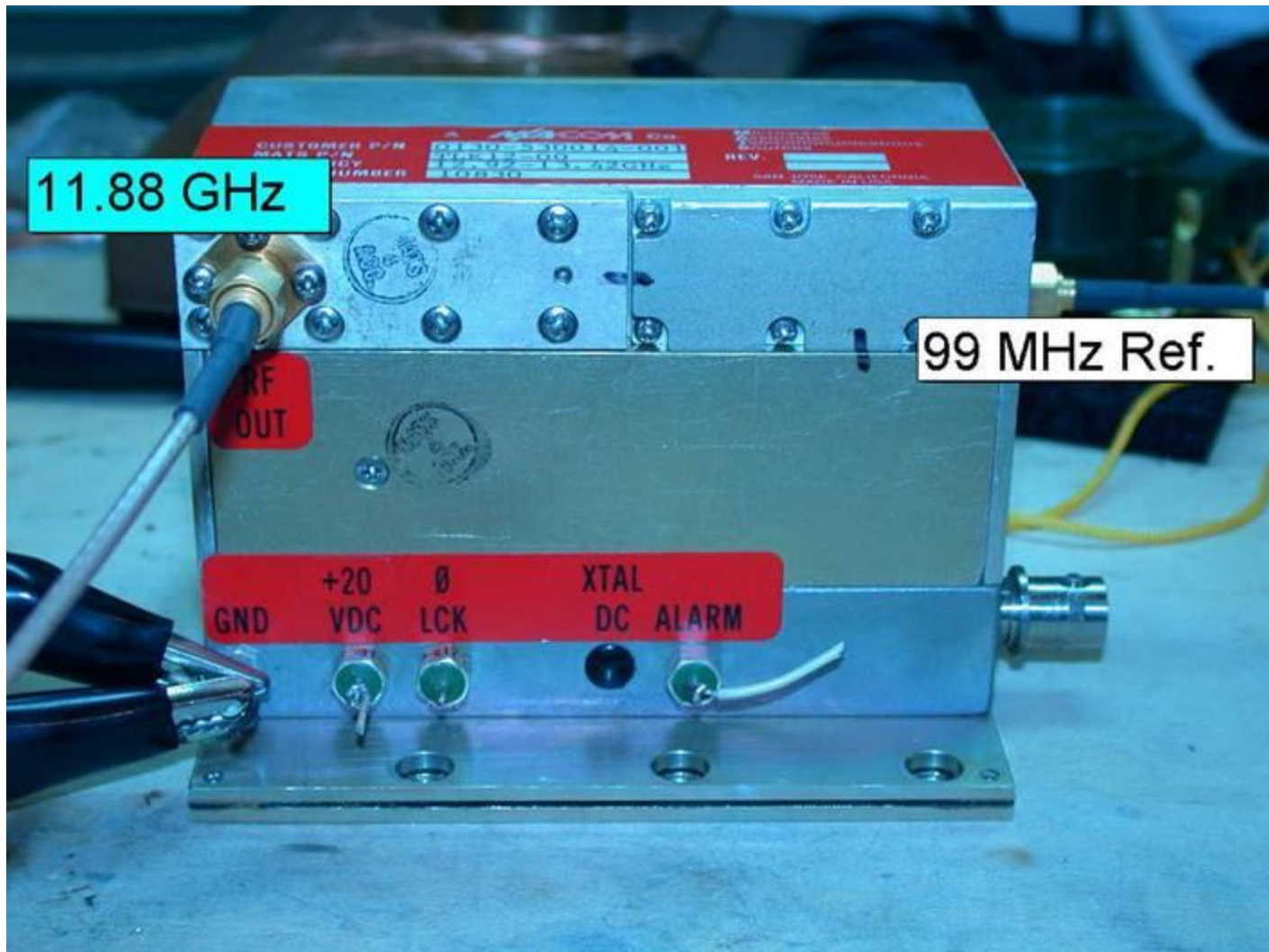
# Starting With a 12 GHz Source



# The Little Picture



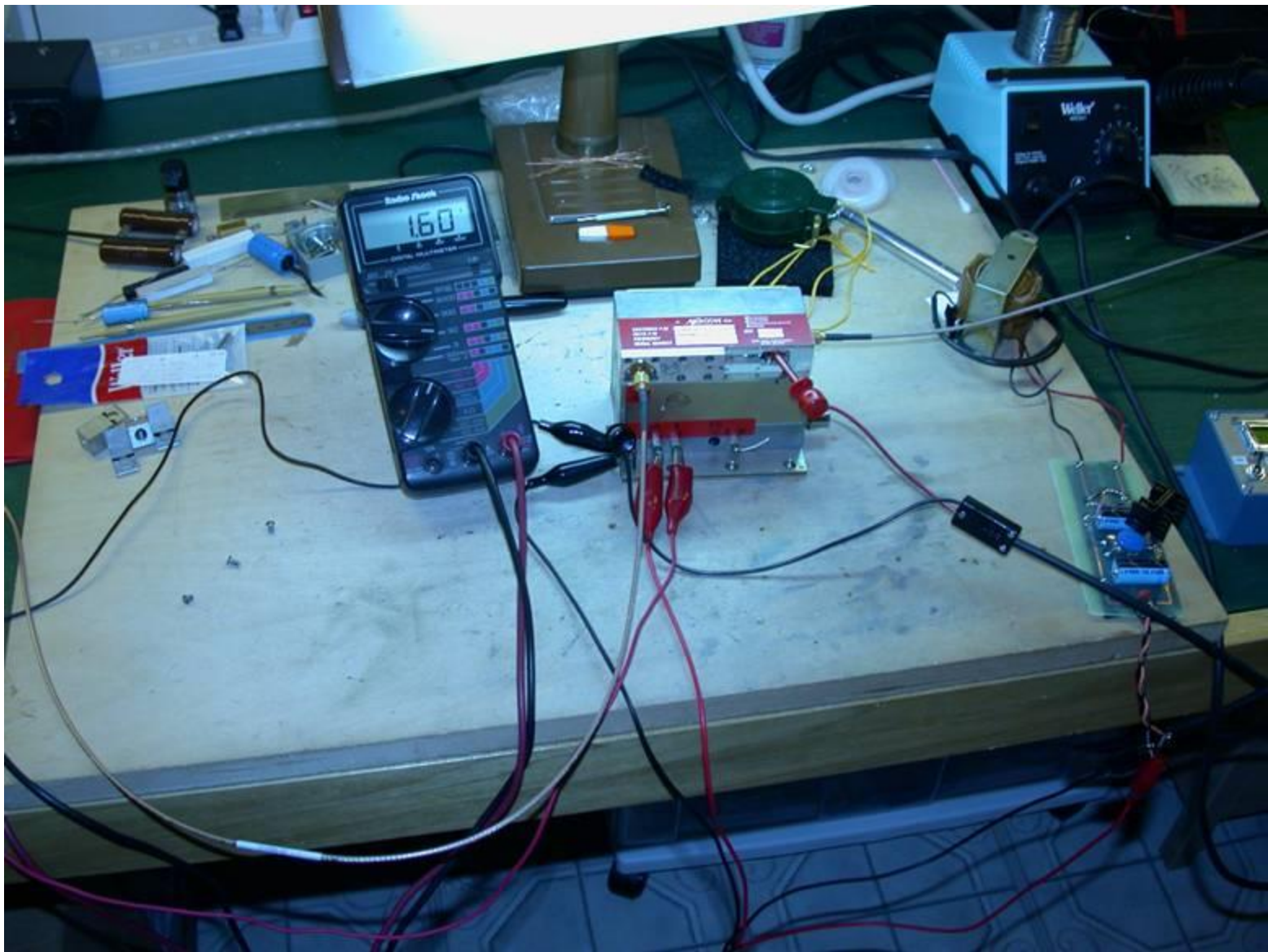




This brick should produce 11.88 GHz output with a 99 MHz reference input. Cavity frequency is 1.485 MHz



Cavity tuning adjustment: turning screw CCW lowers frequency



Measuring the cavity resonant frequency

Reference oscillator

099,004

Cavity frequency

1.485.001.000GHz

ON

FAST

UHF

HF

UHF

SLOW

HF

A spiral notebook binding is visible on the left side of the page, consisting of a series of black rings connected by a blue cord.

*To be continued*