GBPPR 'Zine

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"I taught constitutional law for ten years. I take the Constitution very seriously. The biggest problems that we're facing right now have to do with George Bush trying to bring more and more power into the executive branch and not go through Congress at all, and that's what I intend to reverse when I'm president of the United States."

––– March 31, 2008 quote from Barack Hussein Obama at a townhall meeting in Lancaster, Pennsylvania.

Obama has *routinely* bypassed Congress, and the will of the people, on a number of extremely important issues. Two weeks before his 2014 State of the Union address, Obama arrogantly mentioned he'd use "a pen and a phone" to bypass the legislative branch – and the U.S. Constitution.

(youtube.com/watch?v=a3IWq3CXHyc)

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AT&T PRACTICE
Standard

AT&T 231-300-014
Issue 2, April 1988

PROGRAM STORE AND CALL STORE EXPANDED MEMORY

DESCRIPTION

1A *ESS*™ SWITCH

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1. GENERAL INFORMATION

This practice describes the expansion of the memory spectrum or address range of the 1A processor as used in the 1A ESS switch. In addition, the attached processor system is introduced as a new backup medium for program store and translations.

This practice is reissued to include the HDCS (higher duplicated call store) optional feature available with the 1AE10.02 generic program.

2. BACKGROUND

2.1 Terms

Memory Expansion: Memory expansion for the 1AE7 generic program pertains to an expanded address range which approximately doubles the number of addresses in both program store and call store. This expansion does not imply that usable memory space has doubled. Backup capacity with file stores becomes a memory limiting item before the expanded memory spectrum can be fully realized. This memory limiting is eliminated when the attached processor system is used.

Address: The program store address in the 1AE7 generic program moves from its present (1AE6) 21-bit address spectrum or address range in K-codes 20 through 37 to a 22-bit address spectrum designated as program store K-codes 0 through 37. The LUCS (low unduplicated call store) in 1AE7 utilizes a 20-bit address spectrum and the HUCS (high unduplicated call store) utilizes a 21-bit spectrum (Fig. 1).

HUCS: The HUCS area utilizes a 21-bit spectrum and ranges from K-code 37 down to K-code 20. Translators designated as HUCS type reside in the HUCS area. Refer to Fig. 2 for a layout of the HUCS call store spectrum.

LUCS: The LUCS area utilizes a 20-bit address spectrum and ranges from K-code 17 down to K-code 4. All LUCS translators are restricted to the LUCS area, but HUCS translators may also reside in the LUCS area. Refer to Fig. 2 for a layout of the LUCS call store spectrum.

K-Code: Information is stored in program store and call store in 65,536-word address ranges called K-codes. One K-code equals one 64K memory unit or one-fourth 256K memory unit.

2.2 Address Ranges

With the expanded memory spectrum in the 1AE7 generic program, there are 30 K-codes for program store and 32 K-codes for call store. All program store memory is moved from its present 21-bit address spectrum (4,000,000 through 7,377,777) to a 22-bit address spectrum (10,000,000 through 17,377,777). The first 16 call store K-codes (0, 1, 2, ..., 16, 17) have a 20-bit address spectrum (0 through 3,777,777); the second 16 K-codes (20, 21, ..., 36, 37) have a new 21-bit address spectrum (4,000,000 through 7,777,777). Refer to Fig. 3 for 1AE6 memory address ranges and to Figs. 4 and 5 for 1AE7 program store and call store address ranges.

2.3 Stores

64K Semiconductor Store: A 64K call store/program store is a high-speed (1400 nanosecond) semiconductor store. Each call store unit and each program store unit provides a storage capacity of 65,536 26-bit words (24 data bits and 2 parity bits) and is assigned as one K-code.

256K Semiconductor Store: A 256K call store/program store is a high-speed semiconductor store available with 1AE5 and later generic programs. There are two versions of the 256K store unit; the 28A memory unit, which runs at a 1400-nanosecond cycle time, and the 28B memory unit, which can run at a 1400-nanosecond cycle time or, in the **fast** mode, at a 700-nanosecond cycle time. Each 256K call store unit and each 256K program store unit provides a storage capacity of 262,144 26-bit words (24 data bits and 2 parity bits) and contains four K-codes.

3. MEMORY SPECTRUM (1AE6)

3.1 Program Store

In a 1A ESS switch office, the program store is used solely for storage of the generic program. The generic program contains the basic instructions used by central control to implement its day-to-day call processing, network connections, maintenance routines, etc.

The program store community may be equipped with 64K semiconductor stores or 256K semiconductor stores. The words in program store are grouped into ranges of memory made up of 65,536 words each. A particular range is accessed by a portion of the processor address referred to as the K-code. The total address spectrum for a program store community is 16 K-codes; 2 K-codes cover addresses used by internal processor registers, and the remaining 14 K-codes are available for storage of generic program words in physical program stores (Fig. 6).

All data stored in program store is duplicated on disk in the file store community, thus eliminating the need for duplicate program store units. However, in order to maintain continuous reliable operation, two additional units, called rover stores, are provided to replace any unit that might malfunction.

3.2 Duplicated Call Store

The duplicated call store community may be equipped with 64K semiconductor stores or 256K semiconductor stores. The words in duplicated call store are grouped into ranges of memory made up of 65,536 words each. A particular range is accessed by a portion of the processor address referred to as the K-code. The call store community (duplicated and unduplicated) can use up to a maximum of 16 K-codes for storing the **primary copies** of duplicated and UCS (unduplicated call store) data (Fig. 7).

The words in duplicated call store are organized into groups of predetermined size call blocks. Varying quantities of blocks make up tables depending on table type, i.e., fixed or variable.

Fixed duplicated call store tables are tables which are allocated a fixed (constant) size and fixed address. The fixed tables are organized contiguously in the lowest address range of duplicated call store. For example, if the first table loaded into duplicated call store requires 1000 words, the 1000 lowest numbered addresses would be used to accommodate this table.

Variable duplicated call store tables are tables where allocation is determined by [illegible] card values (other than those determining the generic program). The size of variable tables is determined from office characteristics and can generally be categorized as equipment dependent, traffic dependent, or translation dependent.

In order to insure that the system is able to continuously process calls in the event of a physical unit failure, an exact duplicate of the information contained in the duplicated call store primary unit (on-line) is kept in a **backup** unit (on standby) in the call store.

3.3 Unduplicated Call Store

The UCS community may be equipped with 64K semiconductor stores or 256K semiconductor stores. The words in UCS are grouped into ranges of memory made up of 65,536 words each. A particular range is accessed by a portion of the processor address referred to as the K-code. The call store community (unduplicated and duplicated) can use up to a maximum of 16 K-codes for storing the primary copies of unduplicated and duplicated call store data (Fig. 7).

The UCS address range is a maximum of 12 K-codes. The highest address ranges are contained in K-code 17. The K-code 17 contains areas loaded with generic and parameter data as well as fixed translation information.

Translation data is stored in the form of tables or lists which are linked according to a hierarchical pattern. Tables high in the hierarchy contain pointers to, or addresses of, the lower tables. The lowest tables in the hierarchy, such as auxiliary blocks, some subtranslators, or subauxiliary blocks, contain the actual translation data.

In order to insure that the system is able to continuously process calls in the event of a physical unit failure, a **backup** copy of the primary (on-line) UCS data is contained in the file store on disk type memory. When a physical unit containing UCS data fails, one of the backup physical units for duplicated call store is cleared of its duplicated call store data, is assigned as a UCS module, and is then loaded by reading from file store the information that was contained in the failed unit.

3.4 Fixed Disk Layout

A file store community of Burroughs disks provides disk space for the 1A processor. This disk space can be used as a **backup** for main memory (program store or call store), as storage for programs paged into main memory is needed, as a data base, or as a utility storage area. The 1AE6 generic program requires four duplicated disk files, capable of holding 26 K-codes of data (Fig. 8).

The disk space in a given office is assigned by generic, parameter, and translation tapes. The equipped disk space must be exactly accounted for by the combination of these three tapes. Currently, the process that generates the tapes is run independently. Each type of data occupies a fixed preassigned disk area regardless of usage. For example, about 11.2 K-codes of disk space are reserved in all 1AE6 offices for translation data, even though only a few offices require more than 8 K-codes. The major reason for such underutilization is that the tools that create each tape are run at different times and at different locations.

4. MEMORY SPECTRUM (1AE7)

4.1 Program Store

Program store memory moves from its present (1AE6) 21-bit address spectrum or address range in K-code 20 through K-code 37 to a 22-bit address spectrum designated as program store K-code 0 through K-code 37 (Fig. 2).

The generic program begins loading at program store K-code 20 and continues through K-code 33. Then the generic program wraps around to program store K-code 0 and continues to the last address in K-code 17 if required (Fig. 9 and 10). This nonconsecutive assignment scheme facilitates data mapping from previous generic programs.

The wrap around from K-code 33 to K-code 0 increases the utilization of equipment in 256K offices because K-codes must be consecutive within a store unit. If K-codes 34 and 35 were loaded, the other half of the unit designated for K-codes 36 and 37 could not be used because addresses in that range are internal to the processor and cannot be assigned generic program storage.

In the 1AE6 generic program, the starting address for K-code 20 was 4 million (octal). With the 1AE7 generic program, the starting address for program store K-code 20 is 14 million (octal). Thus, only the most significant bit is affected. Refer to 3.1 for additional program store information.

4.2 Duplicated Call Store

The duplicated call processing software area of call store is not increased by memory expansion. The first four K-codes remain [illegible] and the maximum number of duplicated call processing software K-codes is limited to [illegible] (Fig. 11 and 12). Previously, the duplicated call processing software limit was [illegible] [illegible] K-codes.

Due to the generic growth in 1AE7, the related compool area also increases. Compool is a computerized dictionary of symbolic references associated with a generic program. Compool is located in the duplicated call processing software area and will require an additional 8,192 words (unduplicated). Because compool resides in the address restricted area of duplicated call store (K-codes 0 through 3), fewer words are available for restricted call processing registers than in previous generic programs. Refer to 3.2 for additional duplicated call store information.

4.3 Higher Duplicated Call Store (1AE10.02)

The HDCS (higher duplicated call store) optional feature is available in the 1AE10.02 generic creating a new duplicated CS area in the high memory spectrum. The HDCS is used to store the LHBs (line history blocks) used by the LASS (Local Area Signaling Services) LH (line history) primitive. One 2-, 3-, or 5-word LHB is built for each LEN in the office and is located in DCS unless the HDCS feature is loaded. Thus in a large office a very large amount of DCS is required to hold all the LHBs and without the HDCS feature the DCS area could be exhausted if the office allocates LHBs in the normal DCS area. The HDCS area is located in the portion of memory now desginated as the HUCS growth area (Fig. 13 and 14) and is primarily used to store the LHBs for the LASS LH primitive. See COEES (Central Office Equipment Engineering Systems) Information Systems engineering document Index 38. By using the HUCS area, the most critical memory spectrum (DCS) is relieved and the most available spectrum (HUCS) is used.

4.4 Unduplicated Call Store

Unduplicated call store (UCS) translation software in the 1AE7 generic program is separated into low unduplicated call store (LUCS) translation software and high unduplicated call store (HUCS) translation software. The LUCS area utilizes a 20-bit address spectrum and ranges from UCS K-code 17 down to K-code 4. The HUCS area utilizes a 21-bit address spectrum and ranges from UCS K-code 37 down to K-code 20 (Fig. 11).

With the 1AE7 generic program, translators are designated as LUCS-type or HUCS-type (but not both). All LUCS-type translators must reside in the LUCS area of UCS. The HUCS-type translators, by virtue of their address spectrums, are considered unrestricted and may reside in either the HUCS or the LUCS area. A complete list of LUCS-type translators is shown in Fig. 15.

The expansion of UCS also requires reassignment of the master head table. The master head table must always reside in the last half K-code of UCS. The master head table is moved from K-code 17 (the last K-code in 1AE6) to K-code 37 (the last K-code in 1AE7). An extra store unit must be provided in every office to store the master head table in UCS K-code 37. The first half of K-code 17 which contained the generic code is reassigned to program store. Consequently, when the transition to the 1AE7 generic program is complete, UCS K-code 17 is left vacant and available for LUCS assignments. Refer to 3.3 for additional UCS information.

4.5 Variable Disk Allocation

The existing single file store community of Burroughs disks will continue to be used by offices restarting or retrofitting to the 1AE7 generic program. Prior generic programs had fixed disk assignments based on the maximum number of program store and UCS K-codes permitted. Refer to 3.4 for additional fixed disk file store community information.

In order to accommodate the increase of both program store and UCS in 1AE7, the variable disk allocation scheme is being used. This scheme allows the file store to have the capability to provide backup for 3 to 16 UCS K-codes and 12 to 15 program store K-codes. The maximum backup capacity for program store and UCS on file store with variable disk allocation is 28 K-codes, two more than with prior generic programs. Also, an additional K-code (the 29th) containing temporary recent change data from duplicated call store is also backed up on file store (Fig. 8).

The portion of the disk file providing backup for the minimum office requirements of 12 program store K-codes and 3 UCS K-codes are fixed assigned. The remaining 13 K-codes of file store backup are assigned to either program store or UCS. Thus, an office rich in features or translations is able to operate using one file store community with variable disk allocation. If the 28 K-code backup limit is exceeded, however, either program store or UCS must be reduced to meet the file store limitations until the office can convert to the attached processor system as the backup medium.

4.6 Attached Processor System

The attached processor system is a package of hardware and software which connects a 1A processor with the 3B20D Model 2 processor complex. The attached processor system provides an optional vehicle for replacing the 1A processor file store community with a high-capacity 3B processor disk system. This added capability allows the 1A ESS switch to fully utilize the expansion of the memory spectrum.

The attached processor system has the capability to back up 26 UCS K-codes and 28 program store K-codes for a total of 54 K-codes (Fig. 16). With the attached processor system, the backup medium is not a limiting capacity item as with file store.

In offices using the attached processor system, variable disk allocation allows the larger disk address spectrum of the attached processor system to be utilized with a minimum impact on the affected software areas.

Some generic data occupies attached processor system disk space which does not exist in 4-disk file store offices. The net effect will be to create two fixed areas and two variable areas of disk space for attached processor system offices.

The first fixed area contains backup for program store K-code 20 and all other generic programs assigned disk spaces except for the temporary recent change backup block. The second fixed area contains the temporary recent change backup block and the 6 plus K-codes of backup disk space for generic program store K-code 21 through K-code 27 and call store K-code 0 and K-code 3? This second area is allocated from the additional disk space provided by the attached processor system.

The first variable area follows the second fixed area. This area contains all backup for additional K-codes needed for optional feature packages. The second variable area is for translation backup. This area occupies space identical to the translation area for file store, except that the six K-codes of the relocated generic program are also available for translations. Any unused K-codes in either variable area is generic-owned unassigned space.

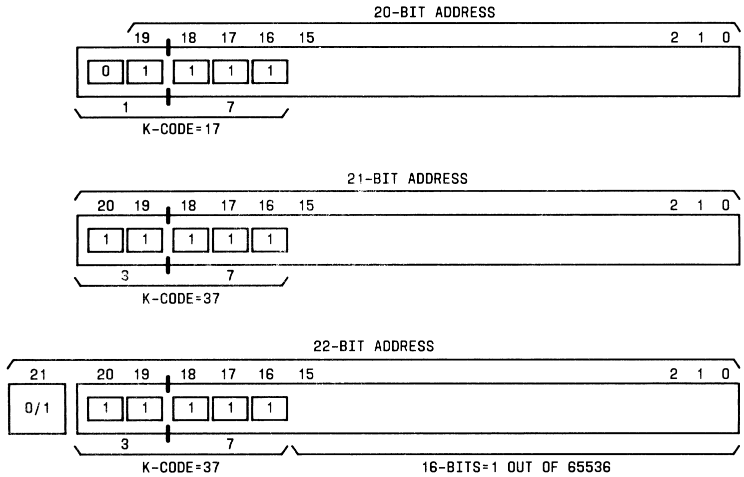


Fig. 1 — Address Spectrum

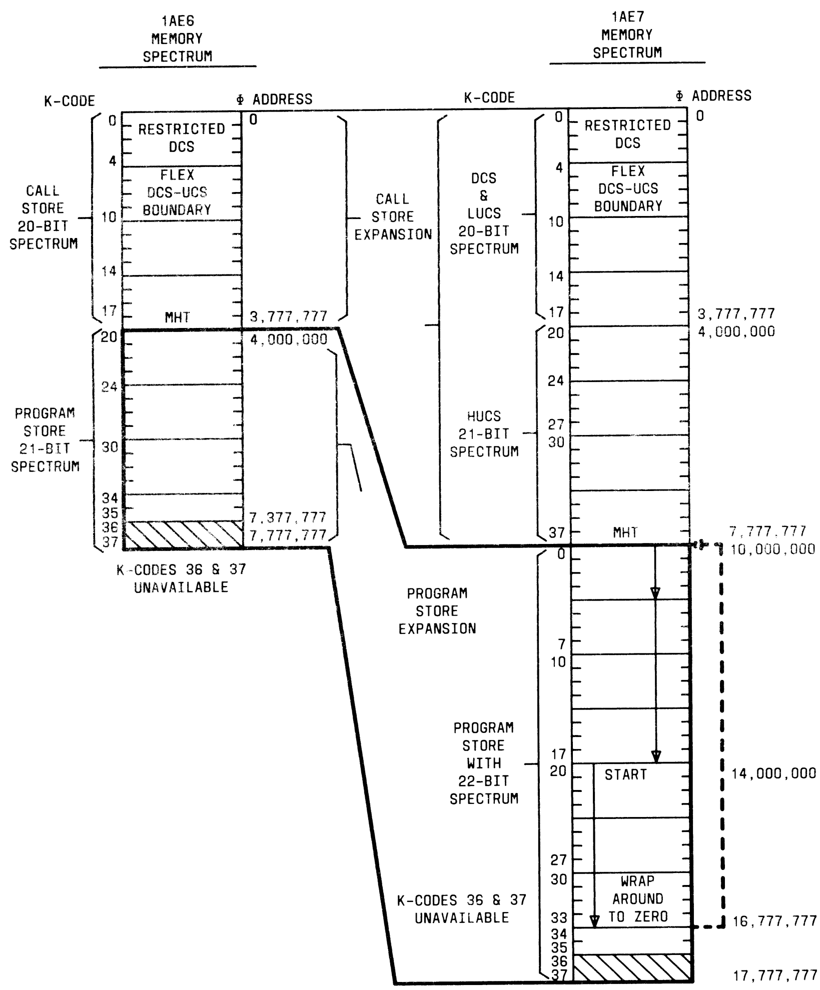


Fig. 2 — Memory Expansion

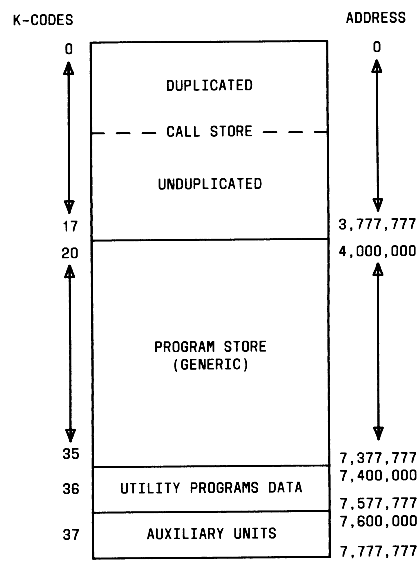


Fig. 3 — Memory Address and K-Code Spectrum (1AE6)

K-CODE-Φ	Φ ADDRESS RANGE	
0	10,000,000	10,177,777
1	10,200,000	10,377,777
2	10,400,000	10,577,777
3	10,600,000	10,777,777
4	11,000,000	11,177,777
5	11,200,000	11,377,777
6	11,400,000	11,577,777
7	11,600,000	11,777,777
10	12,000,000	12,177,777
11	12,200,000	12,377,777
12	12,400,000	12,577,777
13	12,600,000	12,777,777
14	13,000,000	13,177,777
15	13,200,000	13,377,777
16	13,400,000	13,577,777
17	13,600,000	13,777,777
20	14,000,000	14,177,777
21	14,200,000	14,377,777
22	14,400,000	14,577,777
23	14,600,000	14,777,777
24	15,000,000	15,177,777
25	15,200,000	15,377,777
26	15,400,000	15,577,777
27	15,600,000	15,777,777
30	16,000,000	16,177,777
31	16,200,000	16,377,777
32	16,400,000	16,577,777
33	16,600,000	16,777,777
34	17,000,000	17,177,777
35	17,200,000	17,377,777
36	17,400,000	17,577,777
37	17,600,000	17,777,777

NOT AVAILABLE FOR GENERIC PROGRAM (K-codes 36 and 37)

Fig. 4 — Program Store Addresses (1AE7)

K-CODE-Φ	Φ ADDRESS RANGE	
0	0,000,000	0,177,777
1	0,200,000	0,377,777
2	0,400,000	0,577,777
3	0,600,000	0,777,777
4	1,000,000	1,177,777
5	1,200,000	1,377,777
6	1,400,000	1,577,777
7	1,600,000	1,777,777
10	2,000,000	2,177,777
11	2,200,000	2,377,777
12	2,400,000	2,577,777
13	2,600,000	2,777,777
14	3,000,000	3,177,777
15	3,200,000	3,377,777
16	3,400,000	3,577,777
17	3,600,000	3,777,777
20	4,000,000	4,177,777
21	4,200,000	4,377,777
22	4,400,000	4,577,777
23	4,600,000	4,777,777
24	5,000,000	5,177,777
25	5,200,000	5,377,777
26	5,400,000	5,577,777
27	5,600,000	5,777,777
30	6,000,000	6,177,777
31	6,200,000	6,377,777
32	6,400,000	6,577,777
33	6,600,000	6,777,777
34	7,000,000	7,177,777
35	7,200,000	7,377,777
36	7,400,000	7,577,777
37	7,600,000	7,777,777

Fig. 5 — Call Store Addresses (1AE7)

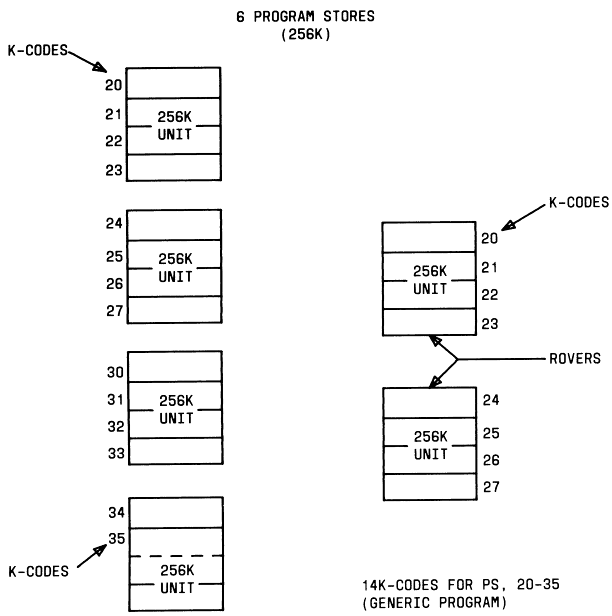


Fig. 6 — Program Store K-Code Spectrum (1AE6)

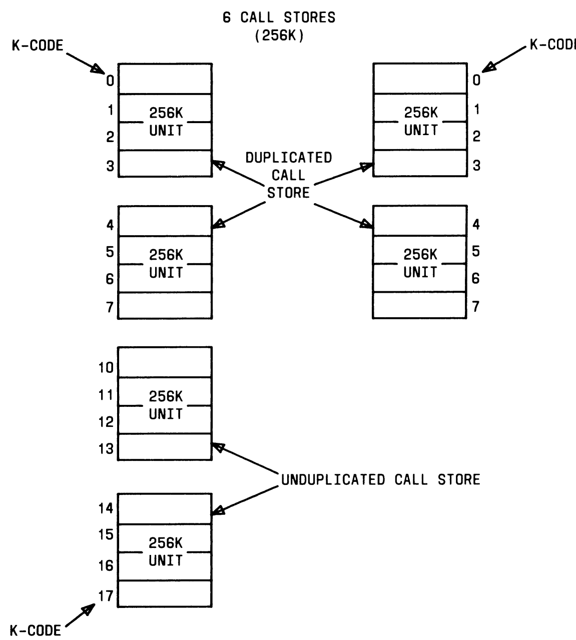


Fig. 7 — Call Store K-Code Spectrum (1AE6)

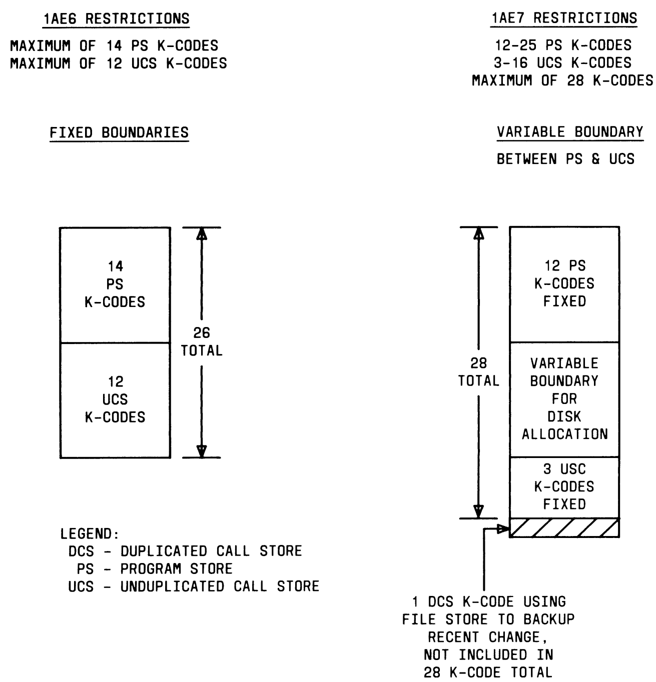


Fig. 8 — File Store K-Code Spectrum

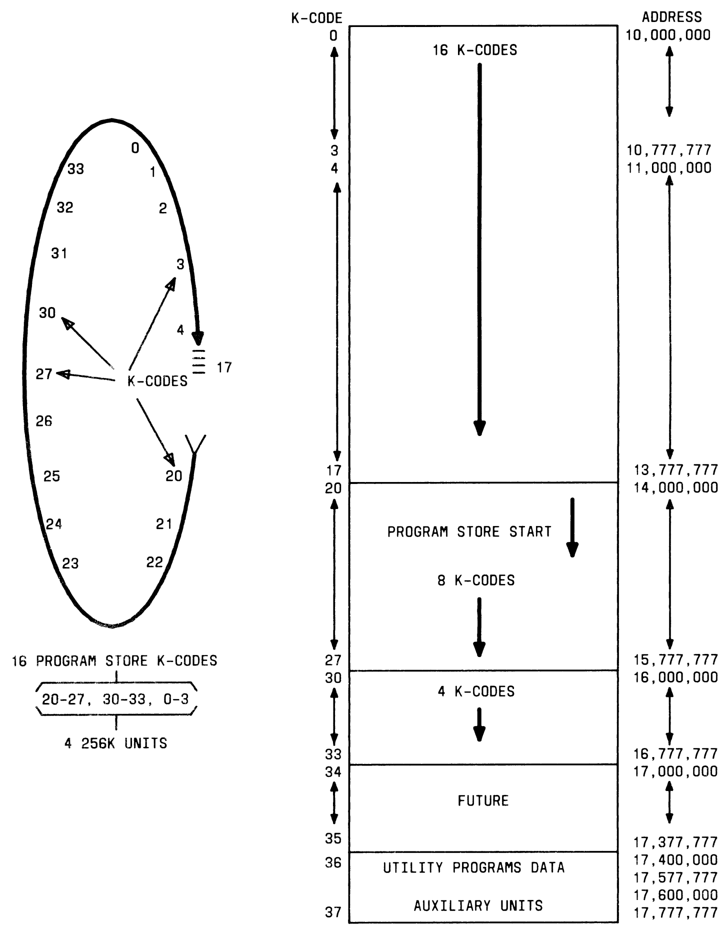
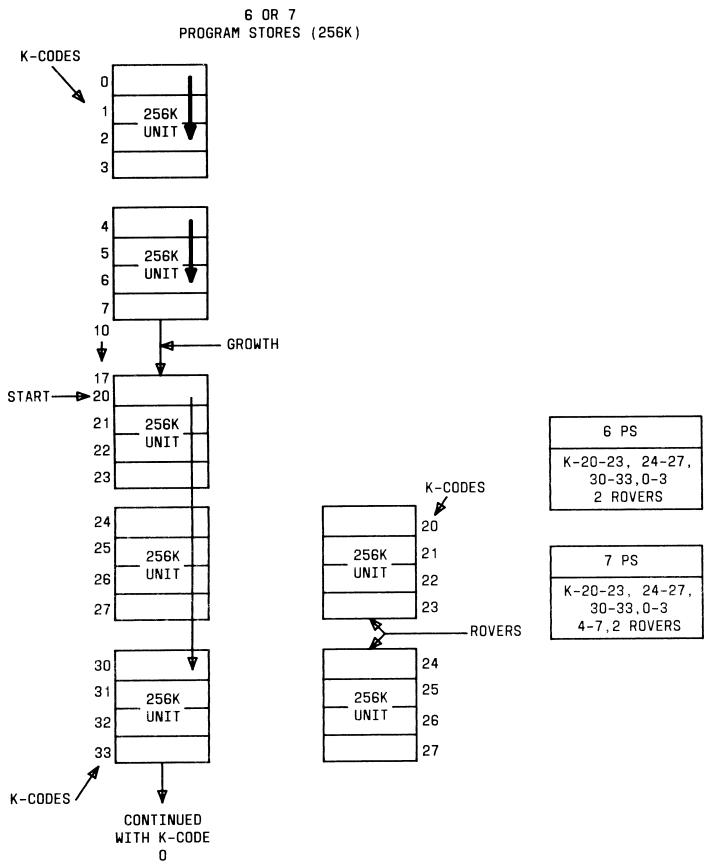


Fig. 9 — Program Store Memory Address and K-Code Spectrum (1AE7)



NOTE:
1. THE GENERIC PROGRAM STARTS AT K-20 THROUGH K-33. K-CODES 34, 35, 36, 37 ARE SKIPPED. THE GENERIC PROGRAM THEN WRAPS AROUND AND CONTINUES WITH K 0, 1, 2, 3. HENCE 16 PS K-CODES FOR FOUR 256K UNITS

Fig. 10 — Program Store K-Code Spectrum (1AE7)

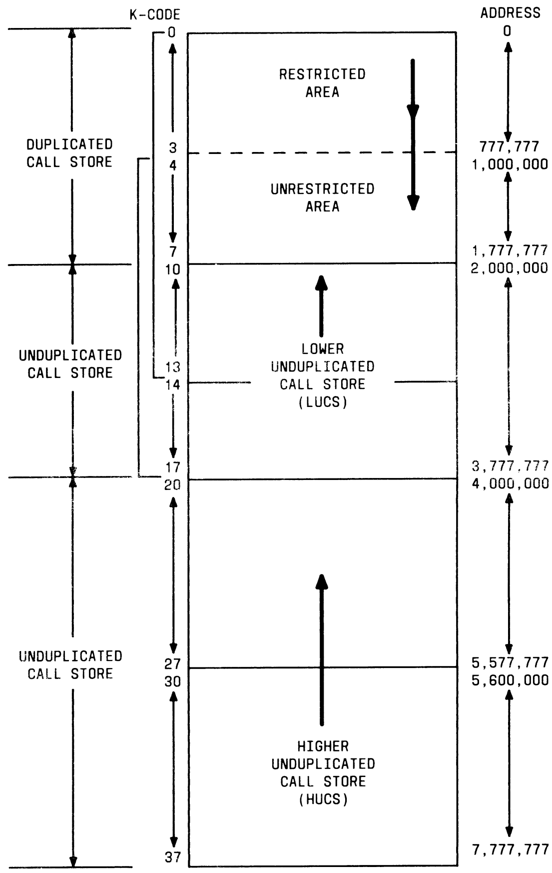


Fig. 11 — Call Store Memory Address and K-Code Specification (1AE7)

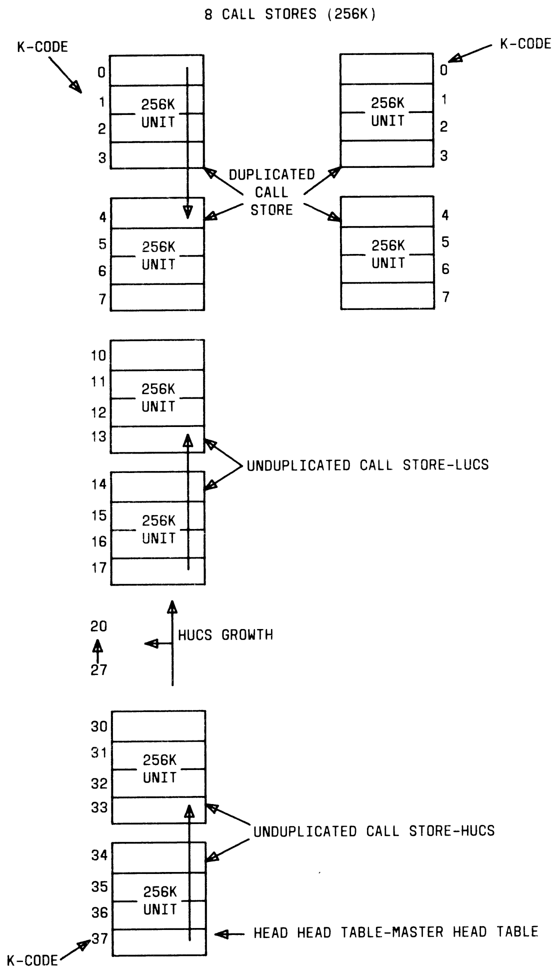


Fig. 12 — Call Store K-Code Spectrum (1AE7)

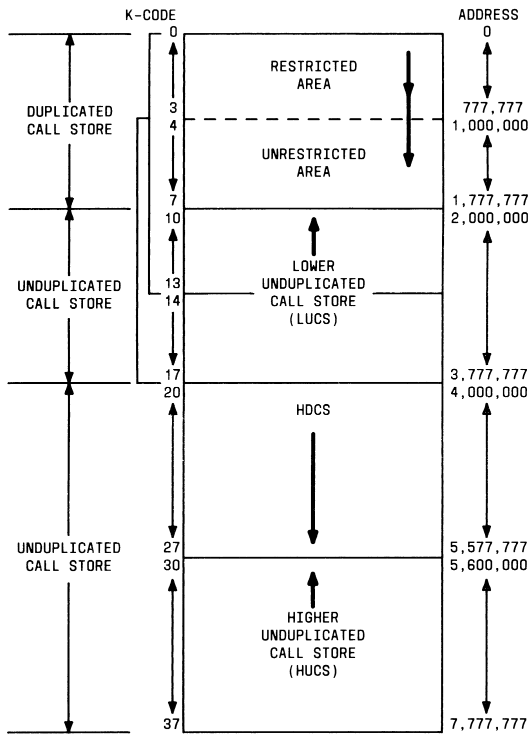


Fig. 13 — Call Store Memory Address and K-Code Specification (1AE10.02)

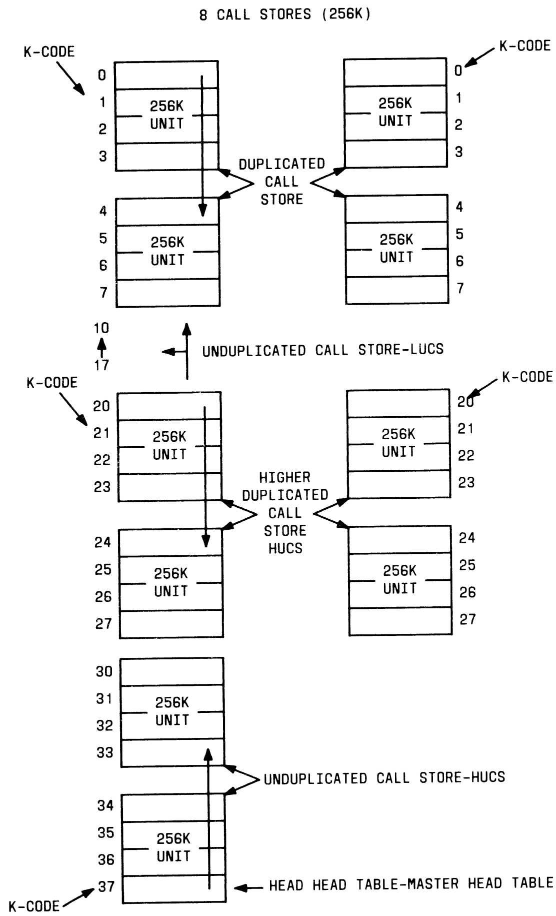


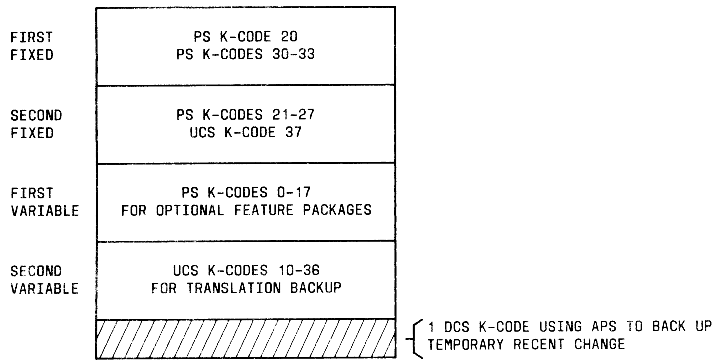
Fig. 14 — Call Store K-Code Spectrum (1AE10.02)

PA-6A002

SECTION 0002:	LOCAL/TOLL 3/6-DIGIT SUBTRANSLATOR LOCAL/TOLL 3-DIGIT SUBTRANSLATOR LOCAL/TOLL 6-DIGIT SUBTRANSLATOR
SECTION 0011:	MULTILINE HUNT GROUP COMMON BLOCKS HUNT LIST HEAD TABLE & OUTDIAL LIST HEAD TABLE HUNTING LIST & OUTDIAL LIST
SECTION 0015:	CENTREX COMMON BLOCKS DIGIT INTERPRETER TABLES SPEED CALL DIAL LIST ADDRESS BLOCKS WORDS
SECTION 0026:	TANDEM COMMOM BLOCK TANDEM DIGIT INTERPRETER TABLE
SECTION 0034:	DN-CTX GROUP NUMBER TRANSLATOR D5 INTERPRETER TABLE D6 INTERPRETER TABLE D7 INTERPRETER TABLE
SECTION 0037:	IDDD DIGIT INTERPRETER TABLE
SECTION 0048:	TOLL DIGIT-BY-DIGIT HEAD TABLE TOLL DIGIT-BY-DIGIT INTERPRETER TABLE
SECTION 0066:	RDI KEY SIGNAL SUBTRANSLATOR
SECTION 0075:	RSS COMMON BLOCK
SECTION 0076:	CCIS BAND SUBTRANSLATOR
SECTION 0081:	AC-TRTG DIGIT INTERPRETER TABLE AC-TRTG 1000'S BLOCK SUBTRANSLATOR AC-TRTG 100'S BLOCK SUBTRANSLATOR AC-TRTG ORDERED LIST SUBTRANSLATOR
SECTION 0099:	TRAVELING CLASS MARK SUBTRANSLATOR
SECTION 0101:	*GNPO/T TRANSLATOR GNPO/T SUBTRANSLATOR 1ST LEVEL NODE TABLE 2ND LEVEL NODE TABLE
SECTION 0102:	*GNP TERM TRANSLATOR NODE TABLE (ALL LEVELS)
SECTION 0103:	*NGN EXTERNAL DN TRANSLATOR TYPE E SUBTRANSLATOR TYPE D SUBTRANSLATOR TYPE S SUBTRANSLATOR
SECTION 0106:	*GNPSNI TRANSLATOR LEVEL TABLES (ALL LEVELS)
SECTION ALL:	AUXILIARY BLOCKS

*INTERNATIONAL USE ONLY

Fig. 15 — LUCS-Type Translation Blocks



NOTE:
1. The APS has the capacity to back up 26 UCS K-Codes and 28 PS K-Codes.

LEGEND

APS - ATTACHED PROCESSOR SYSTEM
DCS - DUPLICATED CALL STORE
PS - PROGRAM STORE
UCS - UNDUPLICATED CALL STORE

Fig. 16 — APS Backup K-Code Spectrum

5. ISSUING ORGANIZATION

Produced by
The AT&T Documentation Management Organization

GBPPR PHOTOANGLO Experiments – Part 1

"In the beginning of a change, the patriot is a scarce man, and brave and hated and scorned. When his cause succeeds the timid join him, for then it costs nothing to be a patriot."

––– Mark Twain, as quoted in *Mark Twain's Notebook* (1935), edited by Albert Bigelow Paine (p. 394).

Introduction

It's July 22, 1946 and you've just settled into your room at King David Hotel in Jerusalem. You feel safe, as the hotel is widely known to businessmen from all around the world, and the British essentially control the hotel and the surrounding land. At around noon, the hotel receives a cryptic telephone message stating: *"I am speaking on behalf of the Hebrew underground. We have placed an explosive device in the hotel. Evacuate it at once – you have been warned."* Approximately 20 minutes later a massive explosion will destroy the entire southern wing of the 7–story hotel. Days later, members of the *Irgun Zvai Leumi* "united resistance" extremist group – which includes the likes of Menahem Begin and Benjamin Emanuel, future father of Rahm Emanuel – claim responsibility for the deadly bombing. Their goal was racially–motivated and driven by intense hate. Attacking the White/Christian British in an attempt to return Palestine over to complete Jewish control. When the hotel's wreckage is cleared, the British announce that 91 people have been killed, including 28 Britons, 41 Arabs, 17 Jews, and 5 others.

And thus was born modern "terrorism," giving rise to the police state(s) we all know today. Just don't count on Hollywood or CNN/MSNBC talking about *that...* Change!

Overview

While Edward Snowden's revelation that the Kenyan–Muslim–Marxist–usurper Obama regime was using the NSA to spy on Americans was no surprise to anyone with half a brain, it did help to shed light on some types of sophisticated technical surveillance techniques which have been known to those "in the field" for while. One of the neatest is an improvement on Leon Theremin's resonant cavity bug which was planted in the gift of an U.S. Great Seal, and was presented to U.S. Ambassador Averill Harriman in 1945 by Russia. The "opening" of the resonant cavity was covered with a thin metal–foil diaphragm which deflected in the presence of sound waves. When illuminated with unmoduated RF carrier, the cavity would resonant and rebroadcast a modulated (phase and a little amplitude) version of the illumination carrier. Subtract (mix) that signal with a portion of the unmodulated transmitted carrier frequency, and your left with a baseband signal containing the room audio. As quoted from the NSA's own sales brochure:

"The radar unit [PHOTOANGLO] generates an unmodulated, continuous wave (CW) signal. The oscillator is either generated internally, or externally through a signal generator or cavity oscillator. The unit amplifies the signal and sends it out to a RF connector, where it is directed to some form of transmission antenna (horn, parabolic dish, LPA [log–periodic antenna], spiral). The signal illuminates the target system and is re–radiated. The receive antenna picks up the re–radiated signal and directs the signal to the receive input. The signal is amplified, filtered, and mixed with the transmit antenna. The result is a homodyne receiver in which the RF signal is mixed directly to baseband. The baseband video signal is ported to an external BNC connector. This connects to a processing system, such as NIGHTWATCH, an LFS–2, or VIEWPLATE, to process the signal and provide the intelligence."

The NSA's PHOTOANGLO unit appears to be an updated version of their CTX400 system, which is pictured in the leaked secret brochure. The operating frequency range is 1−4 GHz. The use of lower illumination frequencies allows much deeper penetration into obstructed areas, such as concrete blocks or other "shieled" areas. From the brochure: *"The CTX4000 provides the means to collect signals that otherwise would not be collectable, or would be extremely difficult to collect and process."* The output RF power is adjustable up to 2 watts, but there is a 1 kW external amplifier option for those difficult embassy SCIFs or to remotely trickle−charge batteries via an additional antenna/diode rectifier circuit.

The baseband output(s) from these units is what's refered to as "video output." This is a mostly a historical term, and does *not* mean the output is a "real" video signal. The baseband outputs are referred to as I&Q, for "in−phase" and "quadrature−phase," and are basically buffered and amplified outputs direct from the receive mixers. The *real* signal processing takes place on these baseband I&Q output signals. By processing the I&Q signals, it is possible to extract all sorts of really neat intelligence, from room audio via any micro−Doppler phase shifts, to intercepting crypto key exchanges (i.e. passive DROPMIRE), or even remotely listening to heartbeats. Unfortunately, I don't have a clue on the software processing side, so we'll have to leave that up to someone else... It should even be possible to run the I&Q signals directly (transformer−coupled) into one of those inexpensive RTL SDR dongles, or as least start there...

The NSA's improvement on this surveillance techique is to use "radar retroreflectors" to increase the sensitivy and range of the remote gear. By planting little retroreflector circuits, it's possible to significantly increase the performance of these surveillance techniques. The NSA's LOUDAUTO device comprises a standard Knowles hearing aid microphone and simple amplifier. The audio output Pulse−Position Modulates (PPM) a low−frequency RF carrier at, say, 100 kHz.

This low−frequency carrier then toggles the gate of a quality RF FET, which basically has antennas for the drain and source. The PPM signal then "chops" the microwave RF illumination carrier to impose the (amplitude) modulation coming from the microphone. The NSA recommends the Rhode & Schwarz FSH−series of handheld spectrum analyzers for receiving and demodulating the reflected RF carrier. You know, using a $9,000 spectrum analyzer to recover a signal you can demoduate for about $100 in parts...

The GBPPR PHOTOANGLO unit described here will be mostly for experimentation, but should be a useable starting point. Most of the RF components were hamfest/eBay finds or salvaged from other gear, so the exact parts may be difficult to track down, but it should be easy to track down suitable equivalents.

The main oscillator is based around a manually−tuned (potentiometer) Avantek 2−4 GHz YIG−tuned oscillator. This is buffered by an optional wideband 2−7 GHz RF isolator (HP0960−0638). A Transco SPDT RF relay selects between the internal YIG oscillator or an external RF source, such as a synthesized oscillator.

The RF signal then passes through a Narda 6 dB directional coupler to split the signal between going to the receiver's Local Oscillator (LO) and to the transmitter amplifier stage. An optional HP33008C PIN diode modulator can be used to ampltiude modulate the transmitted signal, if so needed.

In real−world surveillance devices of this type, it's common to "chop" up the RF illumination carrrier (AM) to help extract the target intelligence from the noise via a lock−in detector tracking the transmitted modulation phase on the receive side. That will be project for the more advanced student...

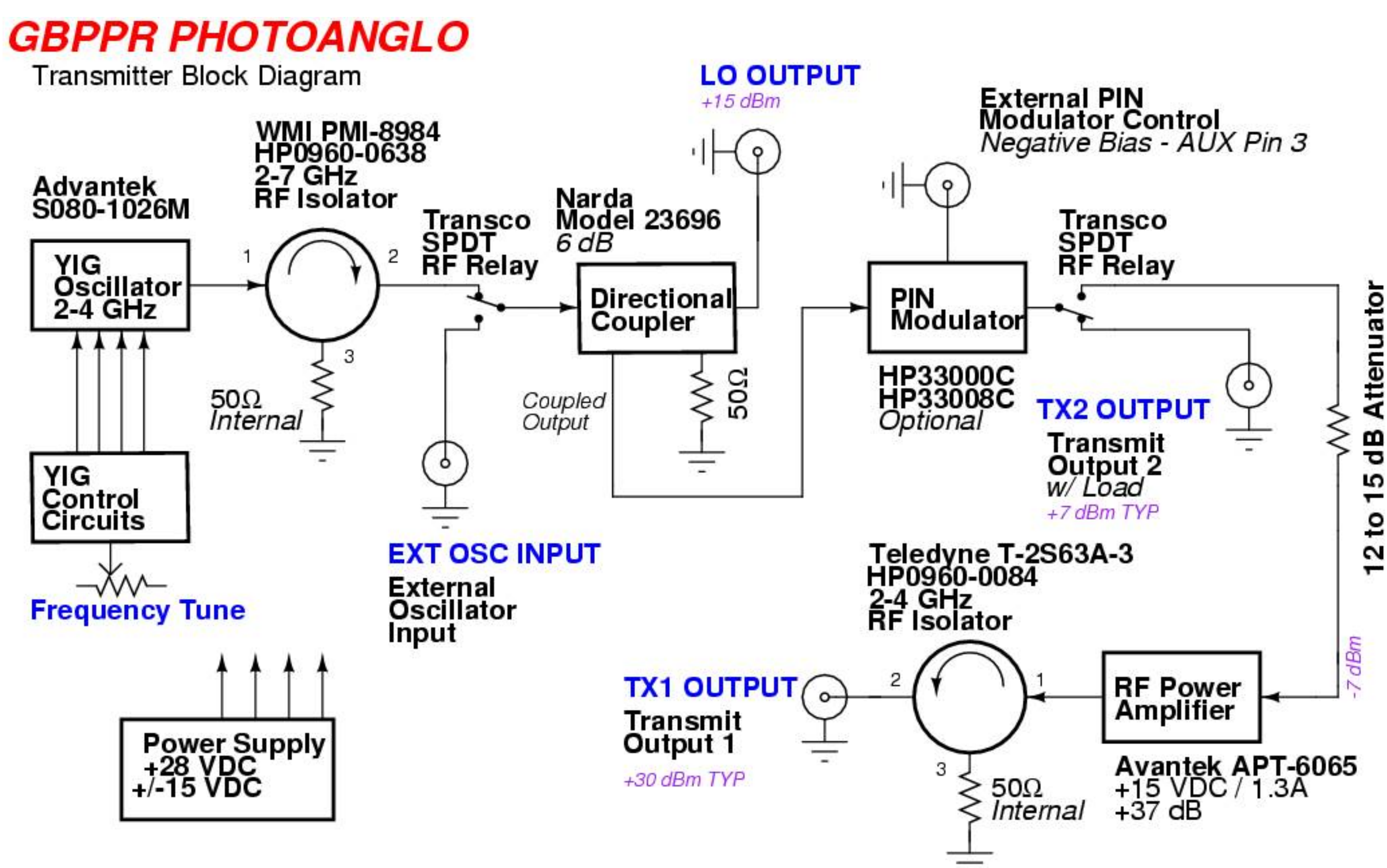
The RF signal then enters another Transco SPDT RF relay to select the use of an internal 1 watt RF amplifier, or to send the transmit signal "as−is" to a front−panel connection. The RF amplifier is an Avantek APT−6065 wideband (2−6 GHz) amplifier with 37 dB of gain and a P1dB output around +30 dBm. A linear−biased amplifier is *required* if you amplitude modulate the carrier to prevent distortion.

An optional RF isolator (HP0960−0084) is on the output of the Avantek APT−6065 to prevent any damage in case you forget to hook the transmit antenna up and to increase isolation between stages. The entire transmitter unit is powered by an external supply providing +28, +15, and −15 VDC sources.

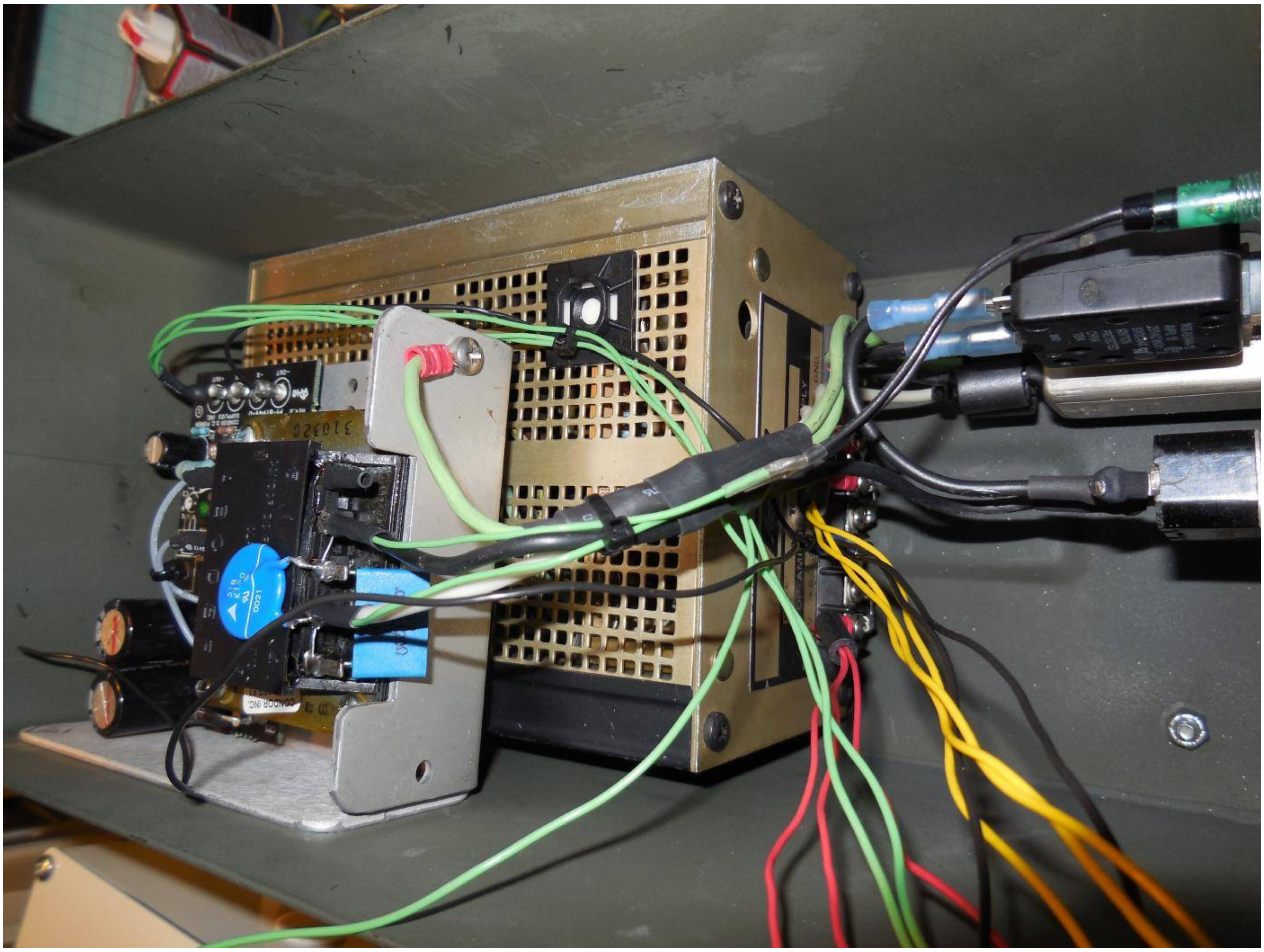
A small voltage regulator board will convert the +28 VDC down to +24 VDC for the YIG's heater connection. The raw +28 VDC is used for the Transco RF relays and is also regulated down to +15 VDC for the YIG oscillator itself. Since the Avantek APT−6065 draws around 1.3 amps, it will have its own +15 VDC source from an external power supply.

The Avantek 2−4 GHz YIG oscillator has its own control circuit board. This is a standard voltage−controlled, constant−current source based around a LT1677 op−amp and an IRF510 MOSFET. A 50k ohm multiturn potentiometer controls the final output frequency.

The matching GBPPR PHOTOANLGO receiver unit will be described and bulit in a later article. I ran out of money this month...



Pictures & Construction Notes



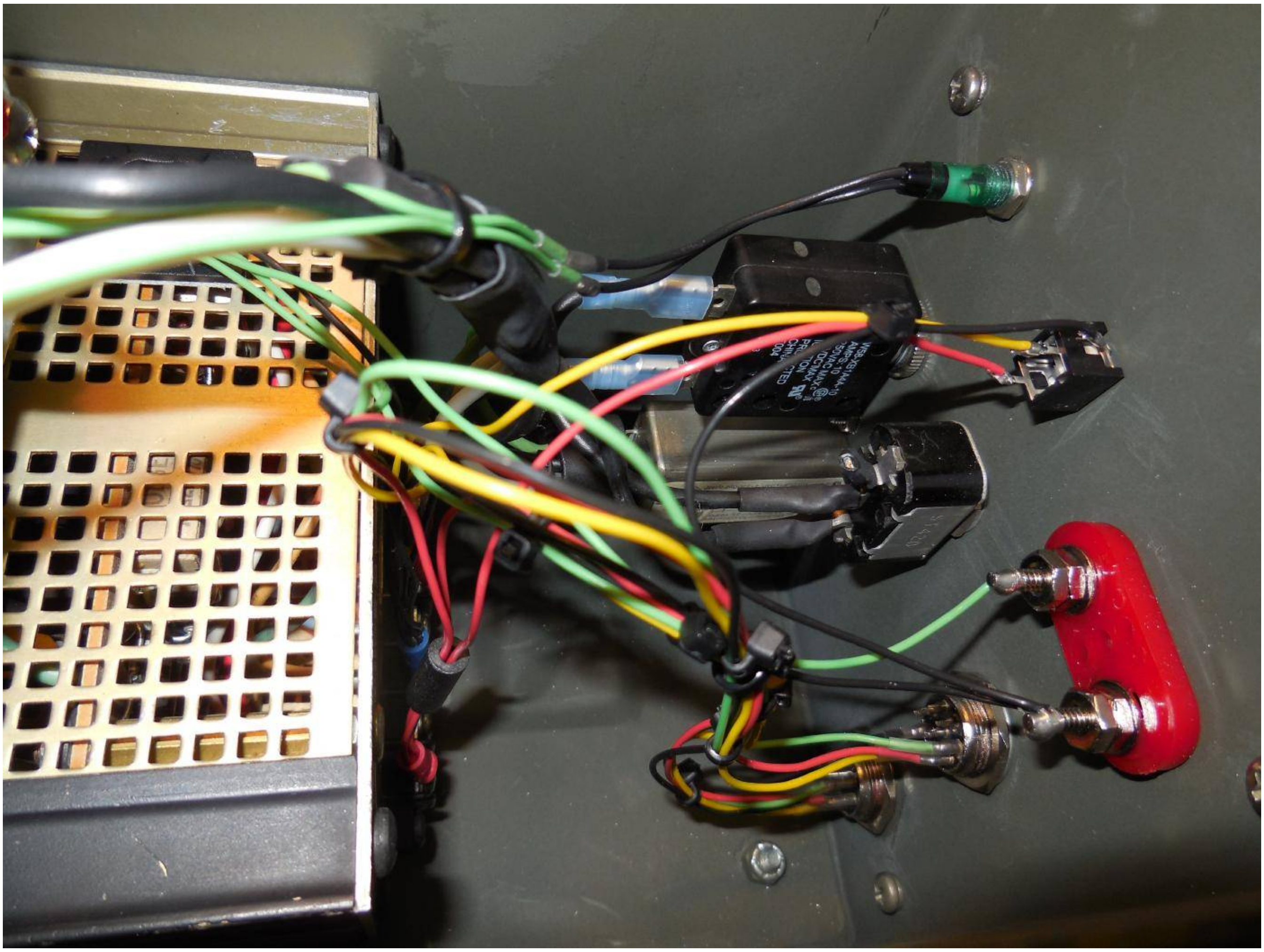
Overview of the GBPPR PHOTOANGLO TX/RX Power Supply.

It's based around an Acopian TD15−160 +/− 15 VDC power supply capable of supplying around 1.6 amps, and a Condor HB28−1−A+ +28 VDC power supply capable of supplying around 1.0 amps.

The Acopain will power the majority of the transmitter and receiver circuits, while the +28 VDC power supply is required for operating the Transco RF relays and will also be regulated down to a clean +15 VDC source for the YIG oscillator.

The blue disk on the transformer's primary is a 150 VAC Metal−Oxide Varistor (MOV) to protect against any voltage transients on the incoming AC mains.

The blue rectangle device on the primary is an optional "snubber." This device consists of a series 120 ohm / 0.033 µF AC−rated capacitor to prevent the generation of a large voltage spike when power is turned off.



Overview behind the front−panel.

The power supply will be built into an old ammo can.

The 120 VAC mains input is via a standard filtered IEC connector.

The black "hot/live" lead then passes through a panel−mounted 15 amp circuit breaker then goes to a SPST switch for power control.

The white wire is the AC mains "neutral." The green wire is the AC mains Earth ground.

Three optional ferrite beads are on each of the AC mains wires (right after the IEC connector) to help knock down any incoming EMI on the power line.

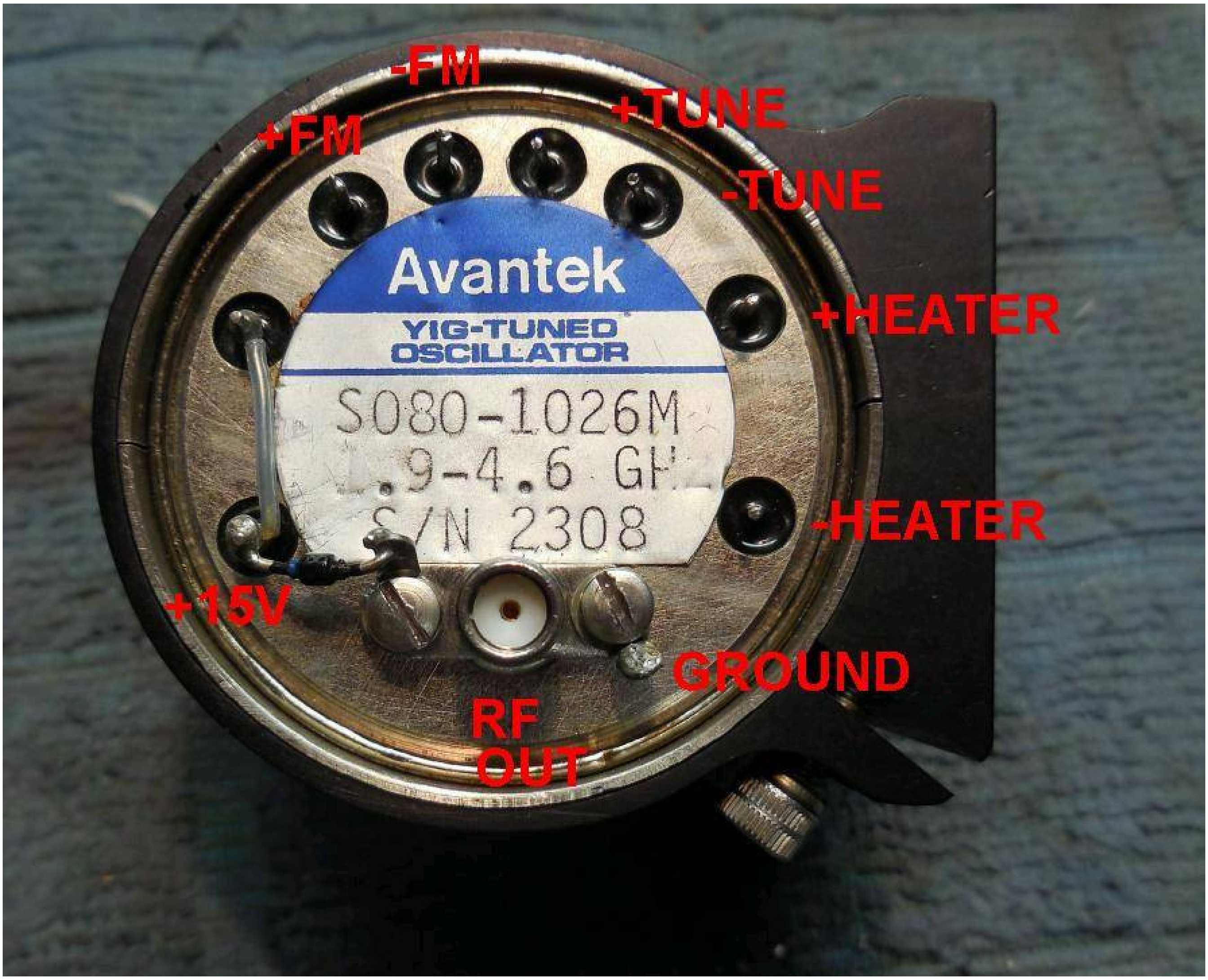
Front–panel overview of the completed GBPPR PHOTOANGLO TX/RX Power Supply.

The banana jack is for an optional +28 VDC output and the 1/8–inch stereo jack (Tip: +15V / Ring: −15V / Sleeve: ground) is also for an optional +/− 15 VDC output. These will be useful for powering external hardware and should be added for future expansion.

There is a green neon lamp for a "power on" indicator.

Two 8–pin microphone jacks are used for the +/− 15 VDC and +28 VDC outputs. Only four of the pins are used on each connector:

Pin	Description	Internal Wire Color
1	+28 VDC Output	Green
2	+15 VDC Output	Red
3	-15 VDC Output	Yellow
4	Ground (Common)	Black



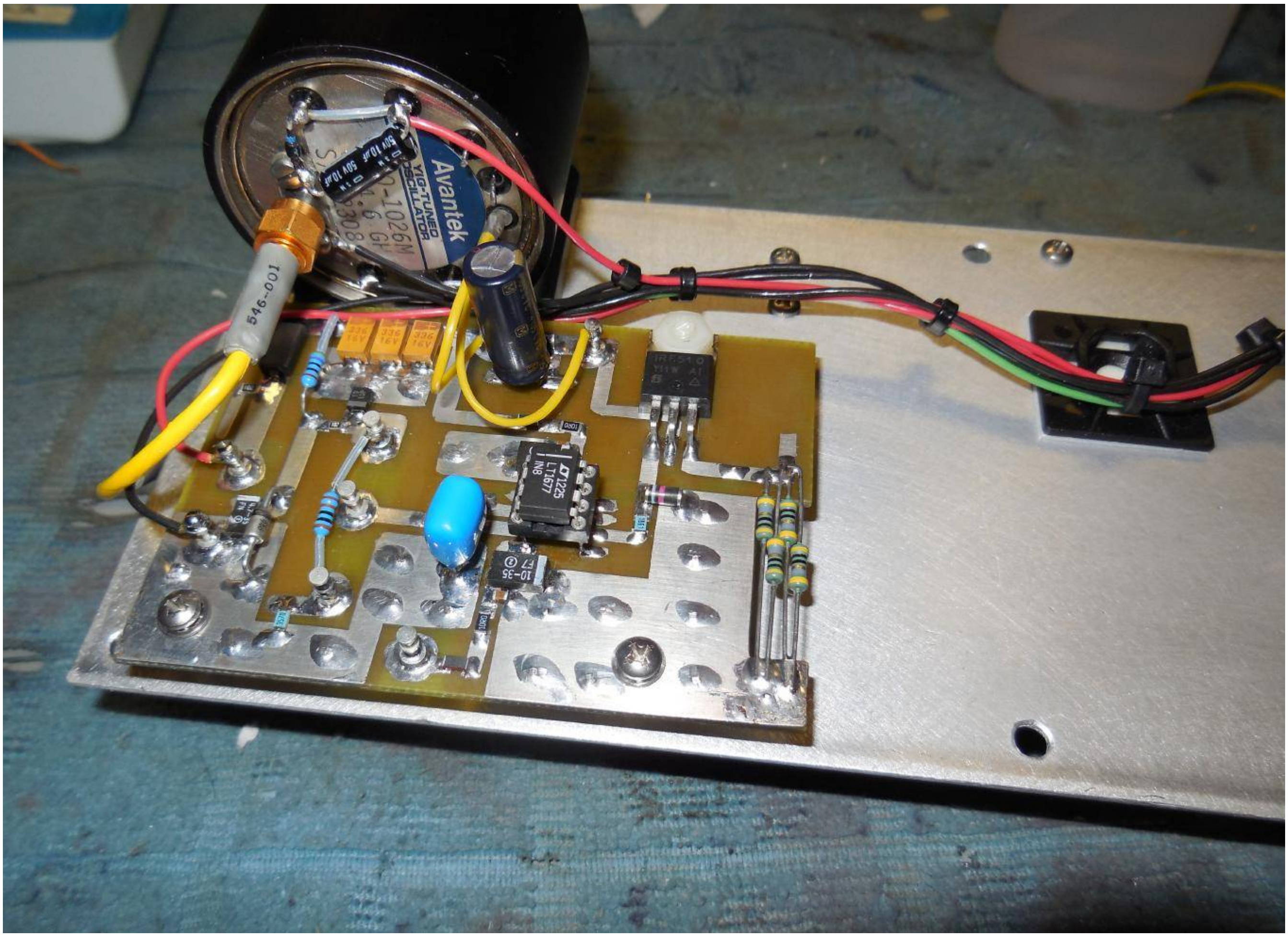
Overview of the Avantek S080−1026M 2−4 GHz YIG−tuned oscillator.

This particular Yttrium Iron Garnet (YIG) oscillator was salvaged from some older microwave gear, so the exact part number doesn't appear on Avantek's website. All their YIGs tend to be quite similar, though.

This particular YIG oscillator tunes from 1.9 to 4.6 GHz with a 20 MHz/mA tuning current. The RF output (SMA jack) is around +16 dBm. Any similar YIG oscillator will work.

The +24 VDC heater connection is optional, but recommended for stable operation. Tie the **−HEATER** pin to the common ground.

The YIG's **+FM** and **−FM** pins are used for applying FM modulation or phase−locking, and they will not used in this application.



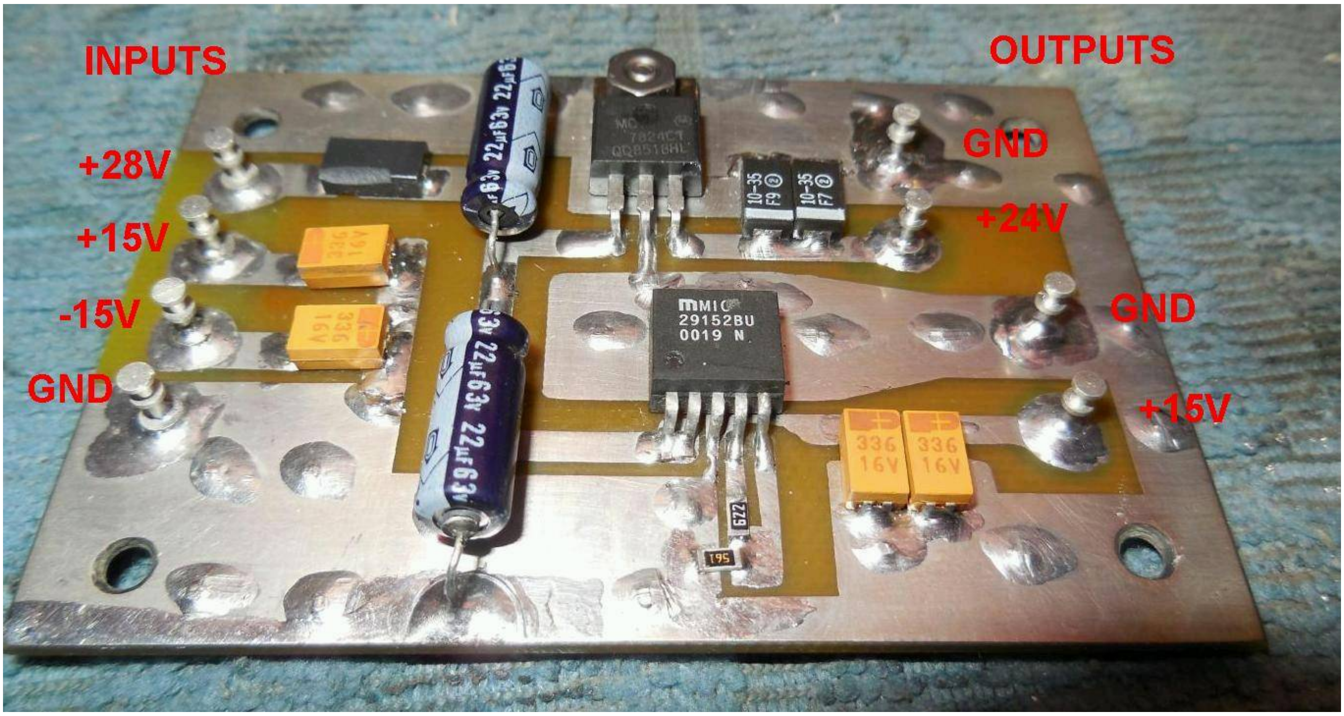
Constructing the YIG oscillator control board.

Since YIGs are current–tuned devices, we'll have to use a LT1677 op–amp buffer and IRF510 MOSFET in a voltage–controlled, constant–current configuration to ensure the YIG tuning lines see the proper current.

Four 0.1% 40 ohm resistors in parallel form the current shunt for the IRF510. A 1 volt drop across these resistors equals 100 mA of YIG tuning current.

Since the YIG tunes at 20 MHz per milliamp, the tuning current for the low frequency end of 1.9 GHz is 95 mA. The tuning current for the high frequency end of 4.6 GHz is 230 mA. This corresponds to an equivalent 0.95V and 2.3V voltage drop across the shunt resistors.

A 10–turn, 50 kohm panel–mount precision potentiometer will provide the main frequency tuning.



GBPPR PHOTOANGLO transmitter voltage regulator board. The input voltages are from the external power supply.

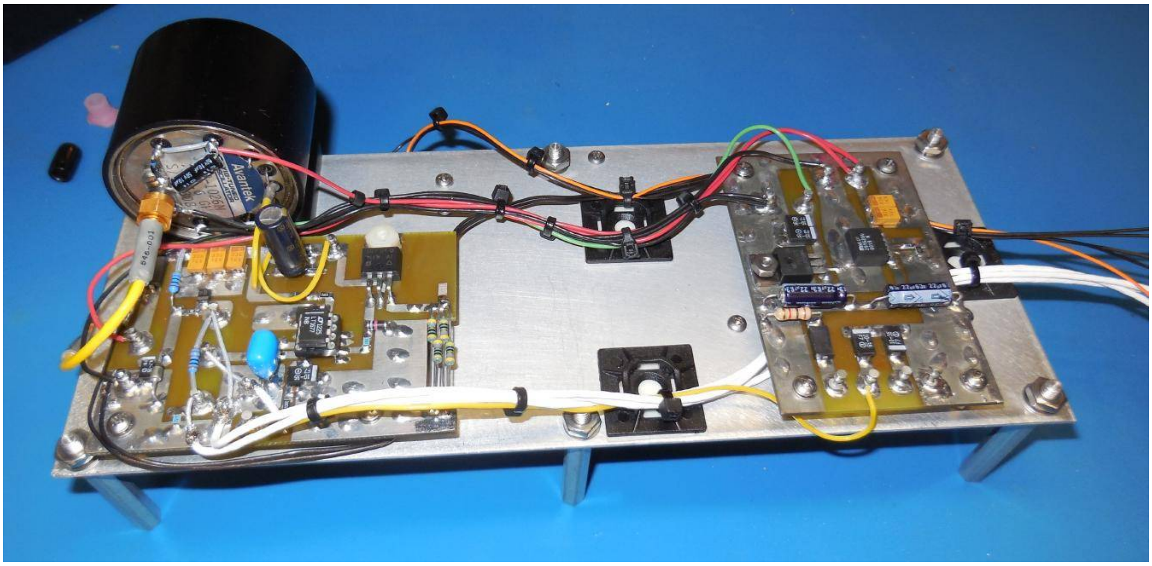
This takes the incoming +28 VDC and converts it to +24 VDC for the YIG's heater connection and a clean +15 VDC source for the YIG's main power.

The heater draws around 100 mA initially, then backs down as the unit warms up. The YIG's main +15 VDC also draws around 100 mA continuous, separate from the tuning current.

A standard LM7824 voltage regulator is used for the YIG's **+HEATER** supply. The **–HEATER** pin is tied to the common ground.

A Micrel MIC29152BU voltage regulator is used for the +15 VDC power. The MIC29152's voltage setting resistors are 6.2 kohm and 560 ohm and should be 1% tolerance.

The +28 VDC input is also used to power the Transco RF relays.

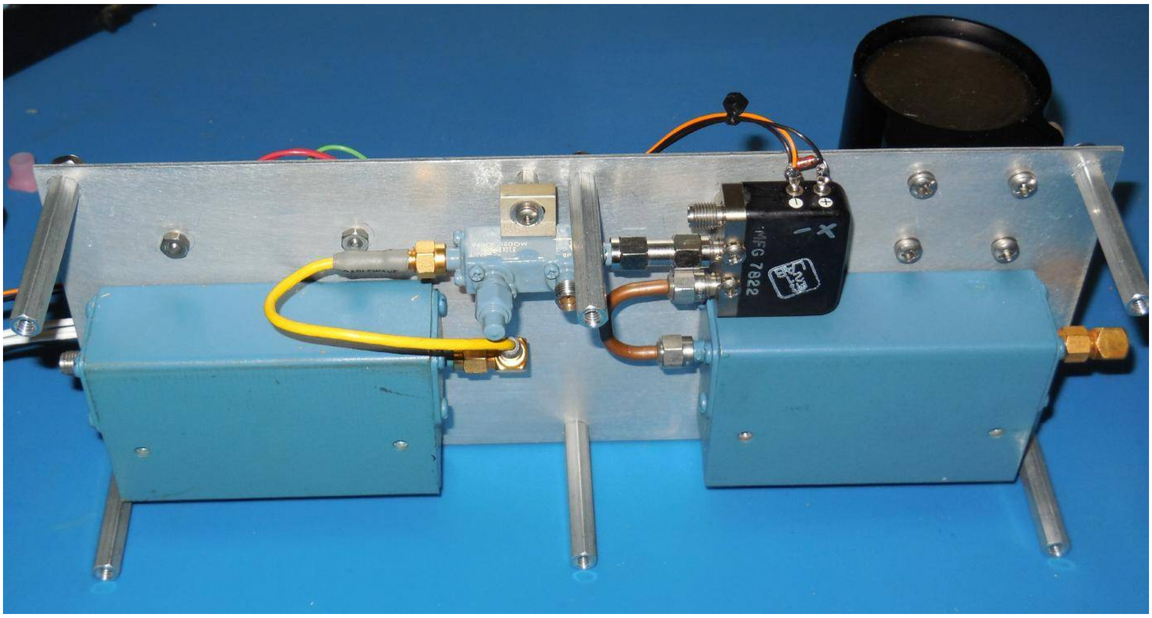


Mounting the Avantek S080−1026M YIG, tuning control board (left), and voltage regulator board (right) onto a piece of sturdy aluminum plate.

The lines to the panel−mounted frequency tune potentiometer are pieces of scrap white Teflon coaxial cable.

The frequency tune potentiometer has a few 1% metal−film resistor in series and parallel to tweak the tuning range from around 0.7 to 2.6 volts and to minimize thermal drifting within the potentiometer.

The YIG oscillator can be mounted via rubber vibration absorption hardware to help minimize the generation of any microphonic modulations which could interfere with the transmitted RF carrier.



Rear−view of the aluminum mounting plate.

On the output of the YIG is a HP0960−0638 2−7 GHz RF isolator (blue rectangle device on the right). This is to isolate the YIG oscillator from any impedance mismatches further down the RF chain. This device is optional, but recommended.

The output from that isolator is then sent to a Transco 82152−919C74700 SPDT RF relay (port 1). This is to select either the internal YIG oscillator or an external (port 2) RF oscillator. The NSA's PHOTOANGLO does this, so we'll do it too...

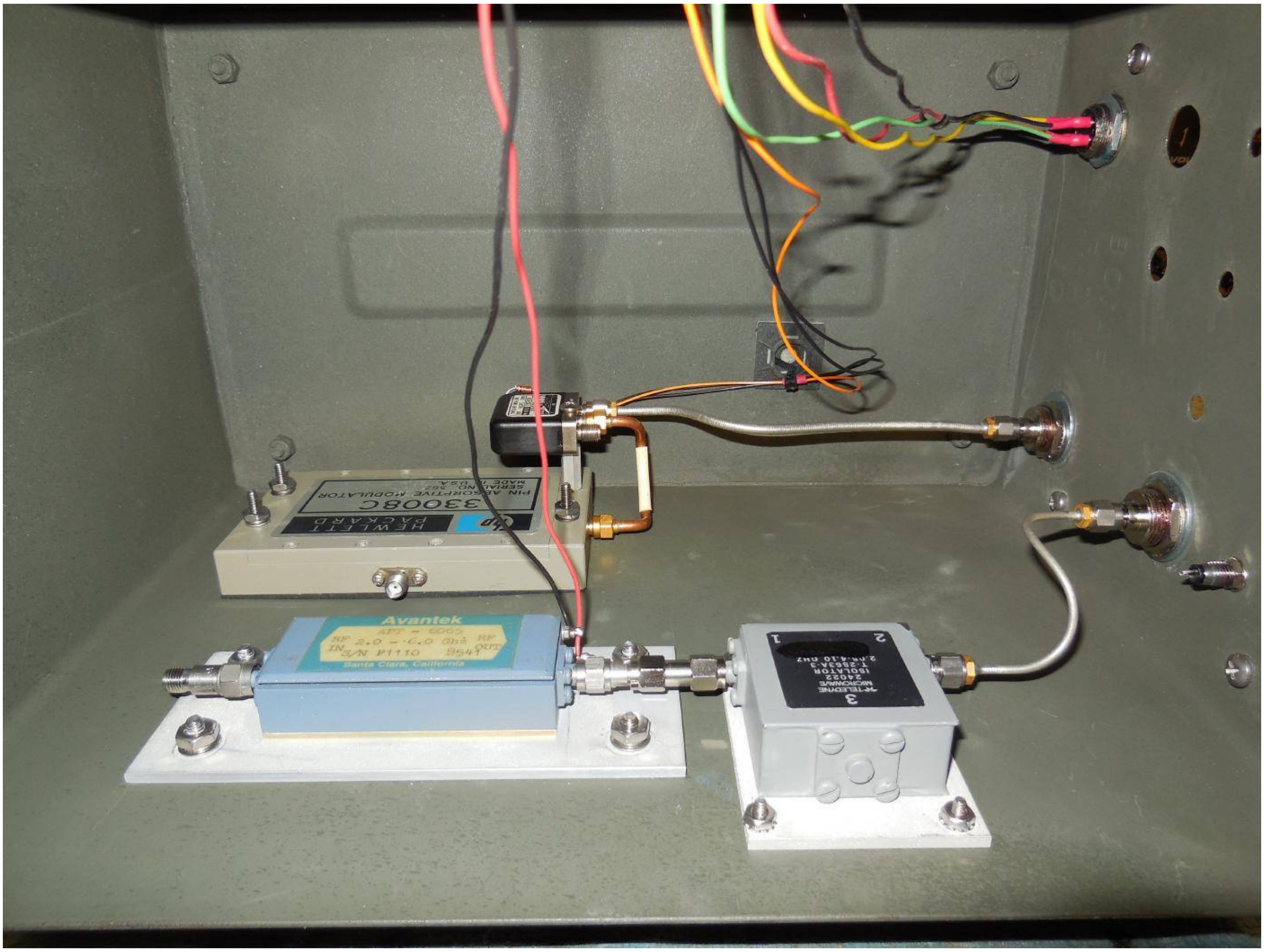
The output from the RF relay passes through a Narda Model 23696 6 dB, 2−4 GHz directional coupler. The coupled 6 dB port is sent through the PIN modulator and then onto the RF amplifier.

The pass−through (output) port of the directional coupler is then sent to another optional HP0960−0638 2−7 GHz RF isolator (blue rectangle device on the left) and then finally to a panel−mounted SMA−to−N jack for use as the **LO OUTPUT**. It should be around +15 dBm, but using the PIN modulator will attenuate the RF power a little bit more.

Closeup view of the HP33008C PIN modulator and the Transco 82152−919C74700 SPDT RF relay used for selecting the transmitter output port.

The HP33008 is designed for the 3.7−8 GHz range, but it will still work here for modulating the RF signal with only slightly increased insertion loss. The "correct" modulator would be the HP33000, which covers 1−4 GHz. The HP33001 cover 8−18 GHz. The letter in the part number refers to the isolation range, C = 40 dB, D = 80 dB. They all use a negative bias (100 mA MAX). It's applied via the SMA jack on the "top." I've yet to find a manual for these HP33000−series PIN absorptive modulators, so if you have any info please let me know.

The RF relays require +28 VDC for proper operation. They'll be selected via panel−mounted SPST switches by toggling their ground lines. They can also be controlled externally via the optional **AUX CONTROL** port.



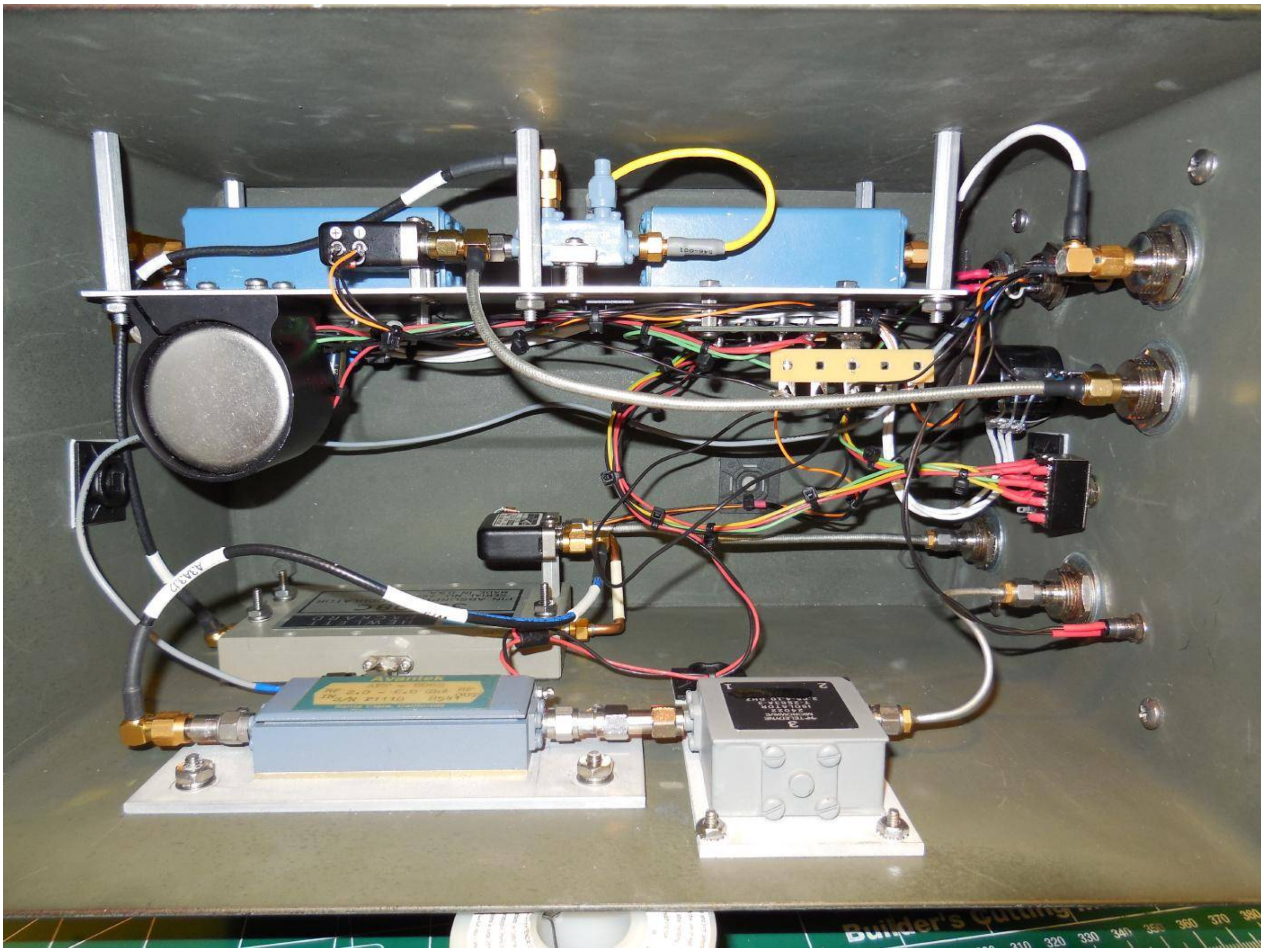
Mounting the Avantek APT−6065 wideband (2−6 GHz) amplifier and the optional HP0960−0084 isolator on its output.

The Avantek APT−6065 will need to dissipate a bit of heat, so it's mounted to a scrap aluminum plate before attaching to the side of the case. Use a liberal amount of heatsink compound to ensure good thermal contact.

The RF input to the Avantek APT−6065 should be around −8 dBm, so you may have to add an external attenuator on the input.

The final **TX1 OUTPUT** is via a panel−mounted SMA−to−N jack.

The optional Transco RF relay mounted on the HP33008C PIN modulator can be used to bypass the RF amplifier stage. This connects (port 2) directly to the **TX2 OUTPUT** which is also a panel−mounted SMA−to−N jack.

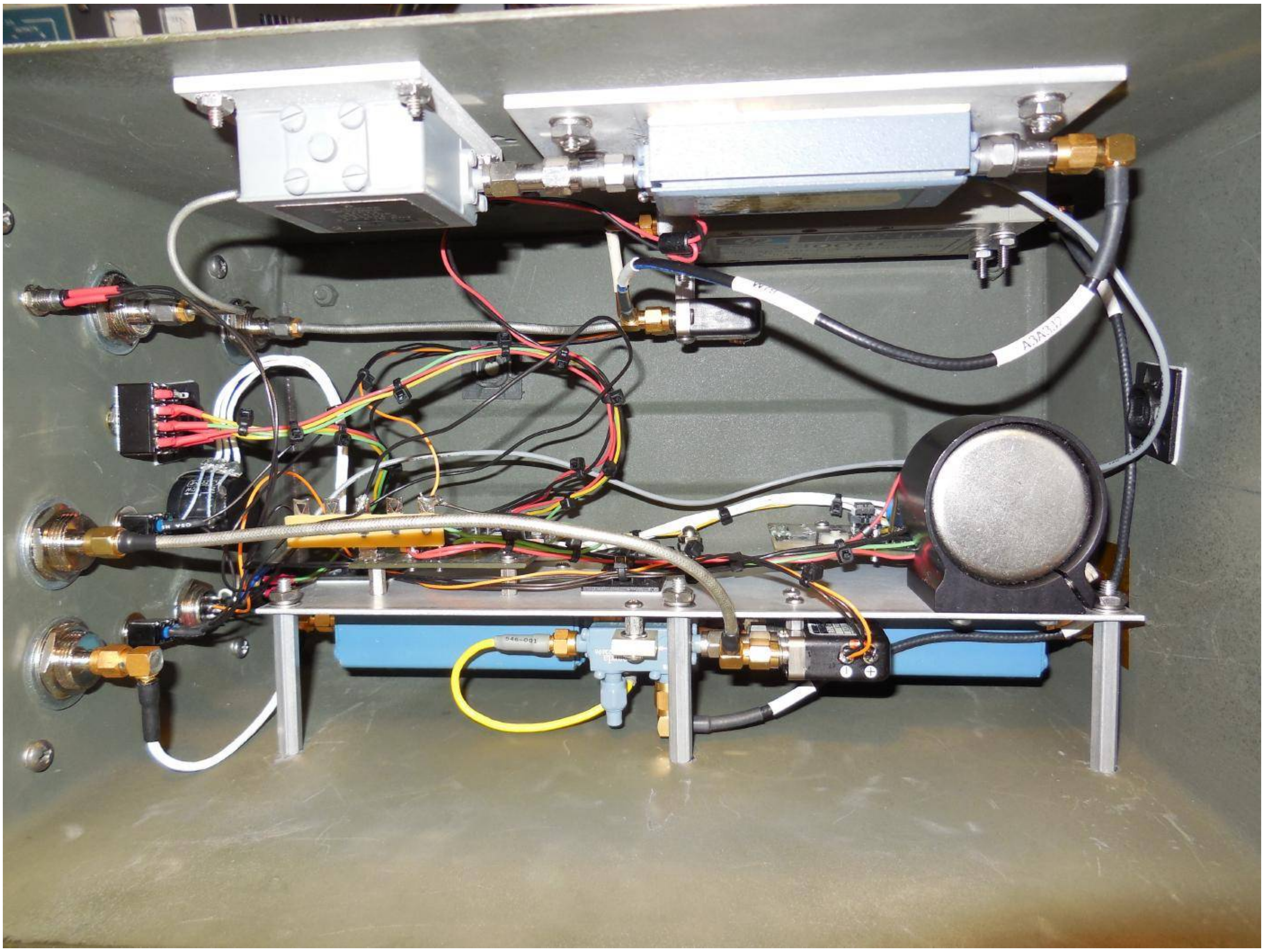


Internal overview of the (partially) completed GBPPR PHOTOANGLO transmitter unit.

The aluminum plate with the YIG oscillator and its control/voltage regulator board are mounted to the side of the case via standoffs.

Regular coaxial cables are used for some of the RF connections due to testing purposes. These will be replaced with RG−402 or RG−405 conformable coax for better isolation in the future.

A 12 to 15 dB attenuator may need to be added to the input of Avantek APT−6065 to meet its input RF power (−8 dBm) requirement. This may vary in your own design.



Alternate internal overview.

The **FREQ TUNE** 50 kohm potentiometer is a high−quality, 10−turn type with a turns counter.

An optional 4DPDT switch was added to act as a power switch for the +/−15 & +28 VDC supplies.

Pinout for the optional 8−pin **AUX CONTROL** auxiliary control port:

Pin	Description
1	Transmit Output Select (Ground to enable TX2 Output)
2	External Oscillator Select (Ground to enable External Oscillator Input)
3	PIN Modulator Bias & Modulation
8	Ground (Common)

Pinout for the 4−pin **TX POWER** external DC power input jack:

Pin	Description
1	+28 VDC Input
2	+15 VDC Input
3	−15 VDC Input
4	Ground (Common)

Finished front−panel overview of the GBPPR PHOTOANGLO 2−4 GHz Transmitter.

The N jack on the upper−right is the approximately +15 dBm **LO OUTPUT** (Local Oscillator Output) which will go to the PHOTOANGLO receiver unit. The N jack next to it is for the optional **EXT OSC INPUT** (External Oscillator Input, +15 dBm MAX).

The N jack on the center−left is the main +30 dBm **TX1 OUTPUT** (Transmit 1 Output) from the Avantek APT−6065 amplifier. The N jack below that is the +7 dBm **TX2 OUTPUT** (Transmit 2 Output) and should have a 50 ohm load on it. This is could also be handy for shutting down the transmitter RF output without having to power down the entire unit.

The red **YIG POWER** switch is to controls the +/−15 & +28 VDC input power supplies. The yellow **TX OUT 2** / **TX OUT 1** switch controls the transmitter output select RF relay. **TX OUT 1** is the default. The green **EXT OSC** / **INT OSC** switch controls the external/internal oscillator select RF relay. **INT OSC** is the default.

Below the yellow switch is the **FREQ TUNE** multiturn potentiometer with a turns counter. Next to it is the 8−pin **AUX CONTROL** input jack.

Below the **AUX CONTROL** is the 4−pin **TX POWER** jack which goes to the GBPPR PHOTOANGLO TX/RX Power Supply.

GBPPR PHOTOANGLO 2.4 GHz Transmitter with the matching GBPPR PHOTOANGLO TX/RX Power Supply (bottom).

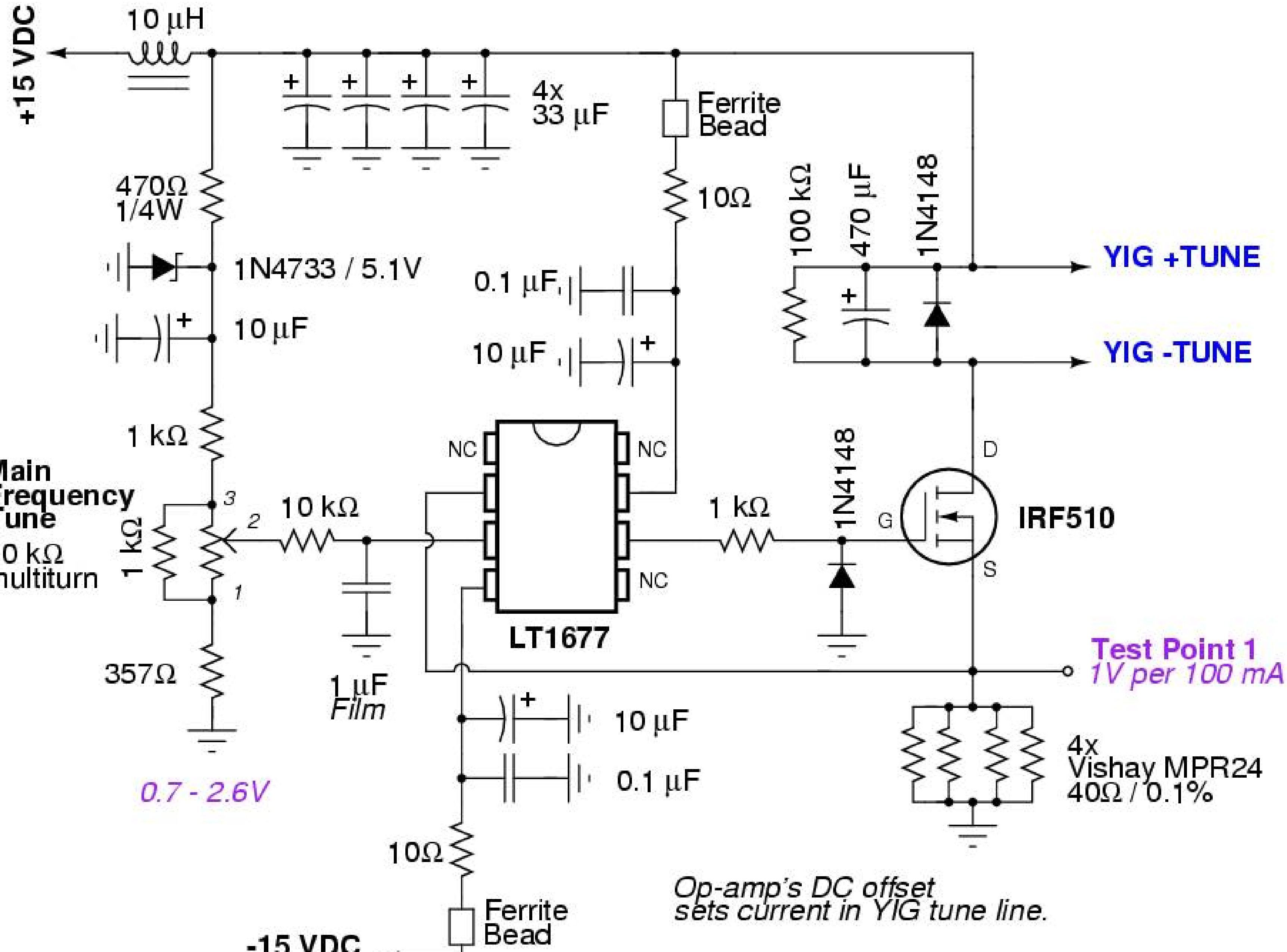
GBPPR PHOTOANGO 10W 2.4 GHz Amplifier with the matching GBPPR PHOTOANGLO 15V / 3A Power Supply (top).

Below is a chart of the transmitter's frequency versus RF output power (from the Avantek APT−6065). The roll−off above 4 GHz has to due with the isolator on the output of the APT−6065 amplifier.

Frequency (MHz)	RF Input (dBm)	RF Output (dBm)
2000	-8.0	+29.1
2100	-8.1	+29.1
2200	-8.1	+29.3
2300	-8.2	+30.2
2400	-8.2	+30.5
2500	-8.5	+30.4
2600	-8.4	+30.8
2700	-8.3	+30.7
2800	-8.2	+31.0
2900	-8.3	+30.7
3000	-8.4	+30.6
3100	-8.4	+30.5
3200	-8.5	+29.9
3300	-8.3	+29.8
3400	-8.2	+29.9
3500	-8.3	+29.4
3600	-8.1	+29.3
3700	-8.4	+28.9
3800	-8.6	+28.3
3900	-8.5	+28.3
4000	-8.4	+28.4
4100	-8.3	+27.5
4200	-8.6	+27.3
4300	-8.5	+24.4
4400	-8.2	+24.1

GBPPR PHOTOANGLO

Transmitter - Manual YIG Tuning Control



CTX4000

ANT Product Data

(TS//SI//REL TO USA,FVEY) The CTX4000 is a portable continuous wave (CW) radar unit. It can be used to illuminate a target system to recover different off net information. Primary uses include VAGRANT and DROPMIRE collection.

8 Jul 2008

(TS//SI//REL TO USA,FVEY) The CTX4000 provides the means to collect signals that otherwise would not be collectable, or would be extremely difficult to collect and process. It provides the following features:

- Frequency Range: 1 - 2 GHz.
- Bandwidth: Up to 45 MHz
- Output Power: User adjustable up to 2 W using the internal amplifier; external amplifiers make it possible to go up to 1 kW.
- Phase adjustment with front panel knob
- User-selectable high- and low-pass filters.
- Remote controllable
- Outputs:
- Transmit antenna
- I & Q video outputs
- DC bias for an external pre-amp on the Receive input connector
- Inputs:
    - External oscillator
    - Receive antenna

Unit Cost: N/A

Status: unit is operational. However, it is reaching the end of its service life. It is scheduled to be replaced by PHOTOANGLO starting in September 2008.

POC: [redacted], S32243, [redacted], [redacted]@nsa.ic.gov

Derived From: NSA/CSSM 1-52
Dated: 20070108
Declassify On: 20320108

PHOTOANGLO

ANT Product Data

(TS//SI//REL TO USA,FVEY) PHOTOANGLO is a joint NSA/GCHQ project to develop a new radar system to take the place of the CTX4000.

24 Jul 2008

(U) Capabilities

(TS//SI//REL TO USA,FVEY) The planned capabilities for this system are:

- Frequency range: 1 - 2 GHz, which will be later extended to 1 - 4 GHz.
- Maximum bandwidth: 450 MHz.
- Size: Small enough to fit into a slim briefcase.
- Weight: Less than 10 lbs.
- Maximum Output Power: 2 W
- Output:
- Video
- Transmit antenna
- Inputs:
- External oscillator
- Receive antenna

(U) Concept of Operation

(TS//SI//REL TO USA,FVEY) TS//SI//REL TO USA,FVEY) The radar unit generates an un-modulated, continuous wave (CW) signal. The oscillator is either generated internally, or externally through a signal generator or cavity oscillator. The unit amplifies the signal and sends it out to an RF connector, where it is directed to some form of transmission antenna (horn, parabolic dish, LPA, spiral). The signal illuminates the target system and is re-radiated. The receive antenna picks up the re-radiated signal and directs the signal to the receive input. The signal is amplified, filtered, and mixed with the transmit antenna. The result is a homodyne receiver in which the RF signal is mixed directly to baseband. The baseband video signal is ported to an external BNC connector. This connects to a processing system, such as NIGHTWATCH, an LFS-2, or VIEWPLATE, to process the signal and provide the intelligence.

Unit Cost: $40k (planned)

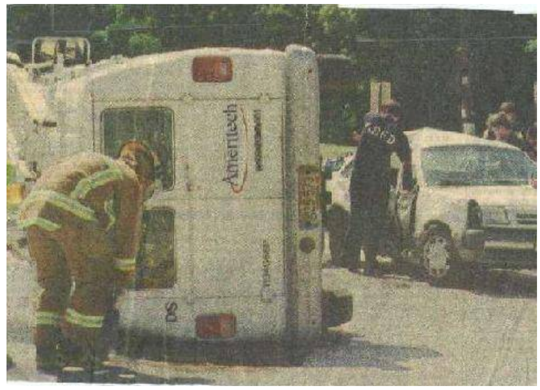
Status: Development. Planned IOC is 1st QTR FY09.

POC: [redacted], S32243, [redacted], [redacted]@nsa.ic.gov

Bonus


THE PALESTINE POLICE FORCE.
WANTED!
REWARDS WILL BE PAID BY THE PALESTINE GOVERNMENT TO ANY PERSON PROVIDING INFORMATION WHICH LEADS TO THE ARREST OF ANY OF THE PERSONS WHOSE NAMES AND PHOTOGRAPHS ARE SHOWN HEREUNDER
MENAHEM BEIGIN
ARIEH BEN-ELIEZER
LEIB BOTKO
REUBEN FRANCO
MAREK KAHANE
ITZHAK RUBINSTEIN
JAFFA DI
HAIM SACHS
EMANUEL STRASBERG
YAACOV VINIARSKY
HEZEL WARHAFTIG

End of Issue #119



Any Questions?

Editorial and Rants

(http://sipseystreetirregulars.blogspot.com/2014/02/a-sipsey-street-public-service.html)

The state of Connecticut is making lists of firearm owners to raid. It seems obvious to me that it is thus only fair to list those anti-constitutional tyrants who will have blood on their hands the moment the first Connecticut citizen is shot by the Connecticut State Police while carrying out their orders.

Connecticut State Senators who voted "YES" on "An Act Concerning Gun Violence Prevention and Children's Safety," also known as "Public Law 13-3" or "Connecticut Senate Bill No. 1160, 3 April 2013."

John W. Fonfara, 99 Montowese St., Hartford 06114-2841
Eric D. Coleman, 77 Wintonbury Ave., Bloomfield 06002-2529
Andrea Stillman, 5 Coolidge Ct., Waterford 06385-3309
Gary LeBeau, 501 Canyon Ridge Dr., Broad Brook 06016-5602
Kevin Kelly, 240 York St., Stratford 06615-7952
Steve Cassano, 1109 Middle Tpke, E Manchester 06040-3703
Anthony J. Musto, 15 Maymont Ln., Trumbull 06611-2111
Beth Bye, 99 Outlook Ave., West Hartford 06119-1432
Andres Ayala, PO Box 55106, Bridgeport 06610-5106
Terry B. Gerratana, 674 Lincoln St., New Britain 06052-1833
Michael A. McLachlan, 47 W Wooster St., Danbury 06810-7731
Bob Duff, 50 Toilsome Ave., Norwalk 06851-2425
Toni Boucher, 5 Wicks End Ln, Wilton 06897-2633
Paul Doyle, 38 Thornbush Rd., Wethersfield 06109-3554
Carlo Leone, 88 Houston Ter., Stamford 06902-4449
Toni N. Harp (no longer in the Legislature, she is now the Mayor of New Haven, CT).
John McKinney, 986 S Pine Creek Rd., Fairfield 06824-6348
Martin M. Looney, 132 Fort Hale Rd., New Haven 06512-3630
Donald E. Williams, Jr., 41 Malbone Ln., Brooklyn 06234-1563
Edward Meyer, 407 Mulberry Point Rd., Guilford 06437-3204
Dante Bartolomeo, 167 Reynolds Dr., Meriden 06450-2568
Gayle Slossburg, 14 Honeysuckle Ln., Milford 06461-1671
Joan V. Hartley, 206 Columbia Blvd., Waterbury 06710-1401
Leonard Fasano, 7 Sycamore Ln., North Haven 06473-1283
Joseph J. Crisco, Jr., 1205 Racebrook Rd., Woodbridge 06525-1822
L. Scott Frantz, 123 Meadow Rd., Riverside 06878-2521

Connecticut House Members who voted "YES" on "An Act Concerning Gun Violence Prevention and Children's Safety," also known as "Public Law 13–3" or "Connecticut Senate Bill No. 1160, 3 April 2013."

Catherine Abercrombie, 64 Parker Ave., Meriden 06450-5945
Ernest Hewett, 29 Colman St., New London 06320-3558
Peter Tercyak, 150 Belridge Rd., New Britain 06053-1008
Brenda Kupchick, 85 Liberty St., Madison 06443-3258
William Tong, 99 Chestnut Hill Rd., Stamford 06903-4030
Gary Holder-Winfield, 480 Winchester Ave., New Haven 06511-1920
James Albis, 369 Coe Ave., Apt 14, East Haven
David Alexander, 277 Pearl St., Enfield 06082-4368
Bryan Hurlburt (Stepped down to take a position with the USDA's Farm Service Agency.)
Diana Urban, 146 Babcock Rd., North Stonington 06359-1334
Gail Lavielle, 109 Hickory Hill Rd., Wilton 06897-1135
Claire Janowski, 263 Hany Ln., Vernon 06066-2740
Edwin Vargas, 141 Douglas St., Hartford 06114-2422
Angel Arce, 248 Franklin Ave., Hartford 06114-1841
Susan Johnson, 120 Bolivia St., Willimantic 06226-2818
Joe Verrengia, 160 Colonial St., West Hartford 06110-1814
David Arconti, Jr., 141 Great Plain Rd., Danbury 06811-3844
Tom Vicino, 92 Carter Hill Rd., Clinton 06413-1230
Joe Aresimowicz, 248 Lower Ln., Berlin 06037-2231
David Kiner, 5 Cranberry Hollow, Enfield 06082-2200
Toni Walker, 1643 Ella T Grasso Blvd., New Haven 06511-2801
Patricia Widlitz, 12 Island Bay Cir., Guilford 06437-3058
Timothy Larson, 33 Gorman Pl., East Hartford 06108-1450
Christina Ayala, 506 Brooks St., Bridgeport 06608-1303
Terry Backer, 125 Jefferson St., Stratford 06615-7810
Roland Lemar, 6 Eld St., New Haven 06511-3816
Roberta Willis, PO Box 1733, 30 Upland Meadow Rd., Lakeville 06039-1733
Tom O'Dea, 37 Holly Rd., New Canaan 06840-6406
David Baram, 5 Warbler Cir., Bloomfield 06002-2233
Matthew Lesser, 1160 S Main S.,t Apt 110, Middletown 06457-5034
Christopher Wright, 35 Ruth St., Apt 49, Bristol 06010-3218
Arthur O'Neill, 617 Bucks Hill Rd., Southbury 06488-1952
Brian Becker, 14 Candlewood Dr., West Hartford 06117-1009
Rick Lopes, 208 S Mountain Dr., New Britain 06052-1514
Elissa Wright, 51 Pearl St., Groton 06340-5732
Elizabeth "Betty" Boukus, Legislative Office Bldg., Rm 4017, Hartford 06106
Geoff Luxenburg, 45 Chatham Dr., Manchester 06042-8522
James Maroney, 22 Saranac Rd Milford 06461-9401
Larry Butler, 70 Blackman Rd., Waterbury 06704-1203
Juan Candelaria, 28 Arch St., New Haven 06519-1511
Brandon McGee, 43 Warren St., Hartford 06120-2117
Robert Megna, 40 Foxon Hill Rd., Unit 54, New Haven 06513-1166
Charles "Don" Clemons, 130 Read St., Bridgeport 06607-2021
Michelle Cook, 499 Charles St., Torrington 06790-3420
Patricia Miller, 95 Liberty St., Apt A4, Stamford 06902-4732
John Shaban, 29 Ledgewood Rd., Redding 06896-2916
Bill Aman, 878 Strong Rd., South Windsor 06074-2006
Philip Miller, 24 Bushy Hill Rd., Ivoryton 06442-1108
Victor Cuevas, 17 Keefe St., Waterbur,y 06706-1616
Mike D'Agostino, 575 Ridge Rd., Hamden 06517-2519
Russ Morin, 495 Brimfield Rd., Wethersfield 06109-3209
Richard Smith, 25 Jeremy Dr., New Fairfield 06812-2109
Prasad Srinivasan, 268 Grandview Dr., Glastonbury 06033-3946
Bruce Morris, 315 Ely Ave., Norwalk 06854-4619
Stephen Dargan, 215 Beach St., Unit 1G, West Haven 06516-6133 (290 Kneeland Rd, East Haven)
Paul Davis, 335 Smith Farm Rd., Orange 06477-3127
Ted Moukawsher, 48 W Elderkin Ave., Groton 06340-4933
Mitch Bolinsky, 3 Wiley Ln., Newtown 06470-1812
Stephen Walko, 7 Charter Oak Ln., Greenwich 06830-6911

Mike Demicco, 6 Deborah Ln., Farmington 06032-3031
Mary Mushinsky, 188 S Cherry St., Wallingford 06492-4016
Patricia Dillon, 68 W Rock Ave., New Haven 06515-2221
Sandy Nafis, 49 Whitewood Rd., Newington 06111-2133
Larry Cafero, Jr., 6 Weed Ave., Norwalk 06850-2224
Terrie Wood, 50 Saint Nicholas Rd., Darien 06820-2823
Joe Diminico, 26 Finley St., Manchester 06040-5616
David Yaccarino, 1804 Hartford Tpke., North Haven 06473-1248
Elaine O'Brien, 1321 Hill St., Suffield 06078-1024
Kim Fawcett, 234 Collingwood Ave., Fairfield 06825-1877
Chris Perone, 8 E. Rocks Rd., Norwalk 06851-2919
Christie Carpino, 29 Sovereign Rd., Cromwell 06416-1136
Lonnie Reed, 60 Maple St., Apt. 44, Branford 06405-3562
Andy Fleischmann, 25 Sherwood Rd., West Hartford 06117-2739
Mae Flexer, 452 Main St., Danielson 06239-2104
Emmett Riley, 150 Yantic St., Unit 160, Norwich 06360-4248
Daniel Fox, 14 Carter Dr., Stamford 06902-7013
Matt Ritter, 169 N Beacon St., Hartford 06105-2246
J. Brendan Sharkey, 600 Mount Carmel Ave., Hamden 06518-1606
Jason Rojas, 128 Langford Ln., East Hartford 06118-2369
Gerald Fox, III, 66 Fairview Ave., Stamford 06902-8129
Mary Fritz, 43 Grove St., Yalesville 06492-1606
Livvy Floren, 210 Round Hill Rd., Greenwich 06831-3357
Henry Genga, 5 Elaine Dr., East Hartford 06118-3515
John Frey, 2 Copps Hill Rd., Ridgefield 06877-4013
Linda Gentile, 158 Hodge Ave., Ansonia 06401-3236
Robert Sanchez, 269 Washington St., New Britain 06051-1024
Minnie Gonzalez, 97 Amity St., Hartford 06106-1001
Ezequiel Santiago, 991 State St., Bridgeport 06605-1504
Jeffrey Berger, 134 Gaylord Dr., Waterbury 06708-2181
Auden Grogins, 155 Brewster St., Apt 5L, Bridgeport 06605-3111
Hilda Santiago, 86 South Ave., Fl 3, Meriden 06451-7624
DebraLee Hovey, 296 Fan Hill Rd., Monroe 06468-1329
Bob Godfrey, 13 Stillman Ave., Danbury 06810-8007
Antonio Guerrera, 194 Catherine Dr., Rocky Hill 06067-1096
Brian Sear, 11 N Canterbury Rd., Canterbury 06331-1209
Elizabeth Ritter, 24 Old Mill Rd., Quaker Hill 06375-1319
Tony Hwang, PO Box 762, Fairfield 06824-0762
Joseph Serra, PO Box 233, Middletown 06457-0233
Gregg Haddad, 28 Storrs Heights Rd., Storrs Mansfield 06268-2322
John Hampton, 33 West Mountain, Simsbury 06092
Charlie Stallworth, 35 Wickliffe Cir., Bridgeport 06606-1929
Themis Klarides, 23 East Ct., Derby 06418-2640
Noreen Kokoruda, 85 Liberty St., Madison 06443-3258
Jonathan Steinberg, 1 Bushy Ridge Rd., Westport 06880-2104
Jack Hennessy, 556 Savoy St., Bridgeport 06606-4125

"A free people ought not only to be armed and disciplined, but they should have sufficient arms and ammunition to maintain a status of independence from any who might attempt to abuse them, which would include their own government."

––– Quote from George Washington (1732–1799), first President of the United States.

"All tyranny needs to gain a foothold is for people of good conscience to remain silent."

––– Quote from Thomas Jefferson (1743–1826), third President of the United States.

Didn't hear about this one in the mainstream media, did you? Probably because the suspects all kinda look like they could be Obama's sons...

Woman's Plot to Rob Man of $1,500 Led to Harrowing Ordeal for Innocent Couple

March 12, 2014 – *From: madison.com*

by Ed Treleven

A Feb. 23 home invasion and robbery, in which a pregnant woman was raped and her husband was badly beaten in their home, was supposed to have happened to a man who lives next door, according to a criminal complaint filed Tuesday.

A companion of the man, Efemia Neumaier, initially plotted with the alleged robbers to set up a robbery at the man's home, prosecutors say. After the robbery had gone wrong, Neumaier aroused the man's suspicions when she told a police officer investigating the incident that he might have been the intended target, the complaint states.

That led the man to search Neumaier's Facebook account, where he foundmessages about the plot to rob him, according to the complaint.

The complaint charged six people for their alleged roles in the robbery and sexual assaults at the couple's home, located off East Washington Avenue in Madison's Carpenter–Ridgeway neighborhood.

Michon A. Thomas, 22, along with Kristopher J. Hughes, 20, and Eric D. Bass, 23, all of Madison, were each charged with three counts of first–degree sexual assault, armed robbery and conspiracy to commit armed robbery.

Neumaier, 21, and DeAndrae L. Mayweathers Jr., 23, both of Madison, were charged with conspiracy to commit armed robbery, while Demarco D. Mallit, 22, of Madison, was charged with harboring or aiding a felon and felony theft.

According to the complaint, events began Feb. 22 when Neumaier sent a Facebook message to Thomas telling him that she wanted him to rob a man, identified in the complaint only by his initials, because he had $1,500.

Neumaier later told police that she had wanted to set the man up to be robbed because he "was a pig with women and needed to be in troublefor that," according to the complaint.

Thomas and others then gathered at Mallit's apartment on Fordem Avenue to plan the robbery, Mallit told police on Feb. 25.

All six suspects appeared in court Tuesday. Bail for Hughes and Thomas was set at $50,000, while Mayweathers was jailed on $10,000 bail. Mallit and Neumaier were jailed on $5,000 bail. No bail was set for Bass, who said he is getting his own lawyer and will be back in court Wednesday.

According to the complaint:

The couple told police they were asleep in bed about 4:30 a.m. on Feb. 23 when they were awakened by people in their home. The woman said her husband was pistol–whipped and choked, and that she was sexually assaulted.

One of the three men, the woman said, was wearing a "Scream" mask and had a handgun, and she saw another man also with a gun.

When the men burst into the bedroom, the woman told police, they began shouting, "Stay down! Where's the money?" She said they told the men to take whatever they wanted, pleading with them that she was pregnant. At least one of the men said, "Someone's gonna die tonight!"

The woman said the man later identified as Thomas made her perform sex acts on him and raped her.

The men left with electronics, including the couple's cellphones, their wallets and credit cards. The couple then tried to find aneighbor but had to go to a nearby Walgreens to call police.

As police canvassed the neighborhood, Officer Jerry Briesath spoke to Neumaier, who was at a home next door to the couple. She initially lied about her identity.

She suggested that someone might have been coming to rob the man at the home where she was because he carries cash and runs his own business. The man told Briesath that nobody knows where he lives because he keeps his address private.

After leaving the home, Briesath was called back a short time later because of a disturbance there. The man shouted that Neumaier was connected to the robbery next door and that he wanted her "the (expletive) out of here."

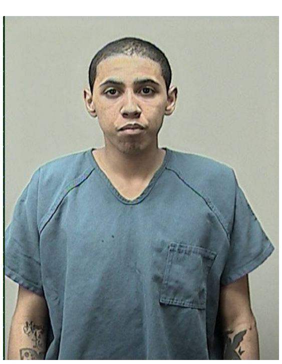
Briesath said he heard Neumaier yelling that "it wasn't supposed to happen like this!"

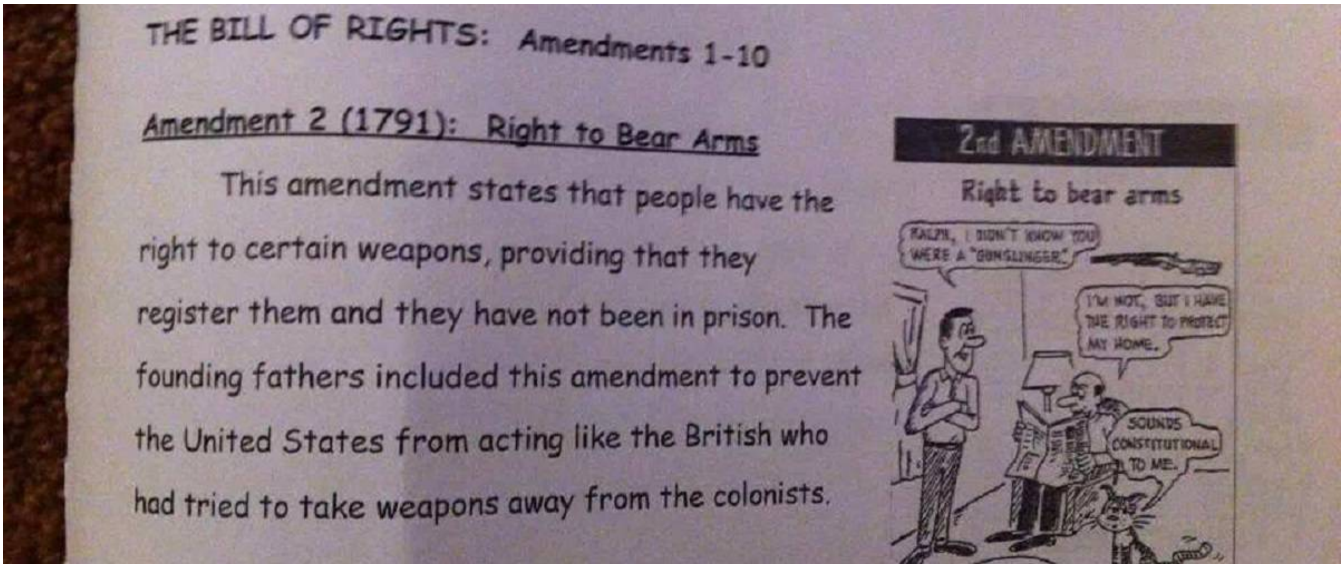
The man told Briesath that he became suspicious after the officer had left. He looked at Neumaier's Facebook postings and saw that she had been in contact with Thomas. He said he saw statements about "hitting the wrong address," how much money he carried and when it would be a good time to "hit" him.

In one of the postings, Neumaier told Thomas that he could rob her and the man in a parking lot and that she would scream, and Thomas could have someone pick him up afterward. Thomas responded, "I'm tryin' to put this together now."

Neumaier then told Thomas it would be better to do it at the man's house "where there are no cameras."

Mallit told police that Mayweathers drove Thomas, Bass and Hughes to the robbery and that they returned to his apartment about 5 a.m. He said Bass talked about pistol–whipping a man, and the others laughed, treating it like a joke.




THE BILL OF RIGHTS: Amendments 1-10

Amendment 2 (1791): Right to Bear Arms

This amendment states that people have the right to certain weapons, providing that they register them and they have not been in prison. The founding fathers included this amendment to prevent the United States from acting like the British who had tried to take weapons away from the colonists.

What Grant Middle School in Springfield, Illinois and most other schools (sadly) teach today...

What they should *really* be teaching:

> ***"A well regulated militia, being necessary to the security of a free state, the right of the people to keep and bear arms, shall not be infringed."***

Change!