....USING DAPNAV.... (DAPNAV2)

Dana Wiese U.S.G.S. 3/91

..DAPNAV..

DAPNAV is a GPS/LORAN logging program written for the DAP M/FLEX PC1000 computer. At an interval determined by the NAvtrac GPS a string (GGA) of GPS data and LORAN (GLL) data is captured, logged , numbered, and date/time tagged. An event tick and a beep is also output.

If a 'P' is pressed the program halts acquisition. It may be neccessary to press this more than once.

If a 'G' is pressed during a Pause (P), acquisition is restarted and renumbering begins at 0 again. It may be neccessary to press this more than once.

If an 'E' is pressed at any time the program stops and all files and ports are closed. The data file is saved as the named file. It may be neccessary to press this more than once.

If an error occurs in the program while running the program is stopped and data is saved in a file named DATA.DAT.

..SETTING UP THE SYSTEM..

COM 1 on the DAP1000 is the lower connector. The cable with the reset button and charger go here. This is connected to the PALM/ DAP COM 1 on the BOX. and ~~printer~~ Serial printer

COM 2 on the DAP1000 is the top connector. The standard 15 pin to 25 pin connector cables go here. This is connected to the DAP/IBM DAP COM 2 on the BOX.

The LORAN output BNC goes to the LORAN BNC on the BOX.

The GPS I/O PORT 1 is connected to the GPS I/O on the BOX.

The KEY OUT on the BOX is connected to the REMOTE EVENT MARK on the EPC.

NAVTRAC GPS I/O SETUP:

SETUP: Offset = offset from GMT
I/O: Port #1 NEMA 0183 custom
I/O Custom Entry 1:

..Talker ID/NEMA Messages: LC = Y
GGA = Y
All the rest = N

Baud Rate =4800
Periodic Output Rate = 300 sec.
Output Checksum = No
NEMA Precision = Precision

LORAN Setup:
Under Inital Settings/SF make sure DATA INPUT/OUTPUT is 183

The GPS and the Tape Timer should be synced in time.
Set the Timer to the GPS time then turn off the GPS. Turn on the GPS just before a 5 minute mark on the Timer. (Press the POWER button on the GPS approx. 4 secs. before the 5 min mark.). Every 5 minutes data will be output of the GPS.

Run 'DAPNAV' on the DAP1000.
Enter the date (a CR will accept current values)
Enter the time (a CR will accept current values)
Enter your Filename(XXXXX.DAT)
After you have entered your filename a CR will begin the data acquisition and the next 5 min interval data output will be logged.

..DUMMPING DAPNAV DATA FILES..

Connect COM 1 on the DAP to the PC serial port.
Go to the DAP directory on the PC. run 'COM'.
At the 'A>' prompt on the DAP run 'COM'.
On the DAP choose '2'(MASTER).
On the next DAP screen choose '1'(SEND).
Enter..'c:=a:xxxxx.dat'
Where: c = destination drive on the PC
a = DAP drive
xxxxx.dat = data file on DAP
When the file is transfered choose '7'(END). You will return to the A> prompt.

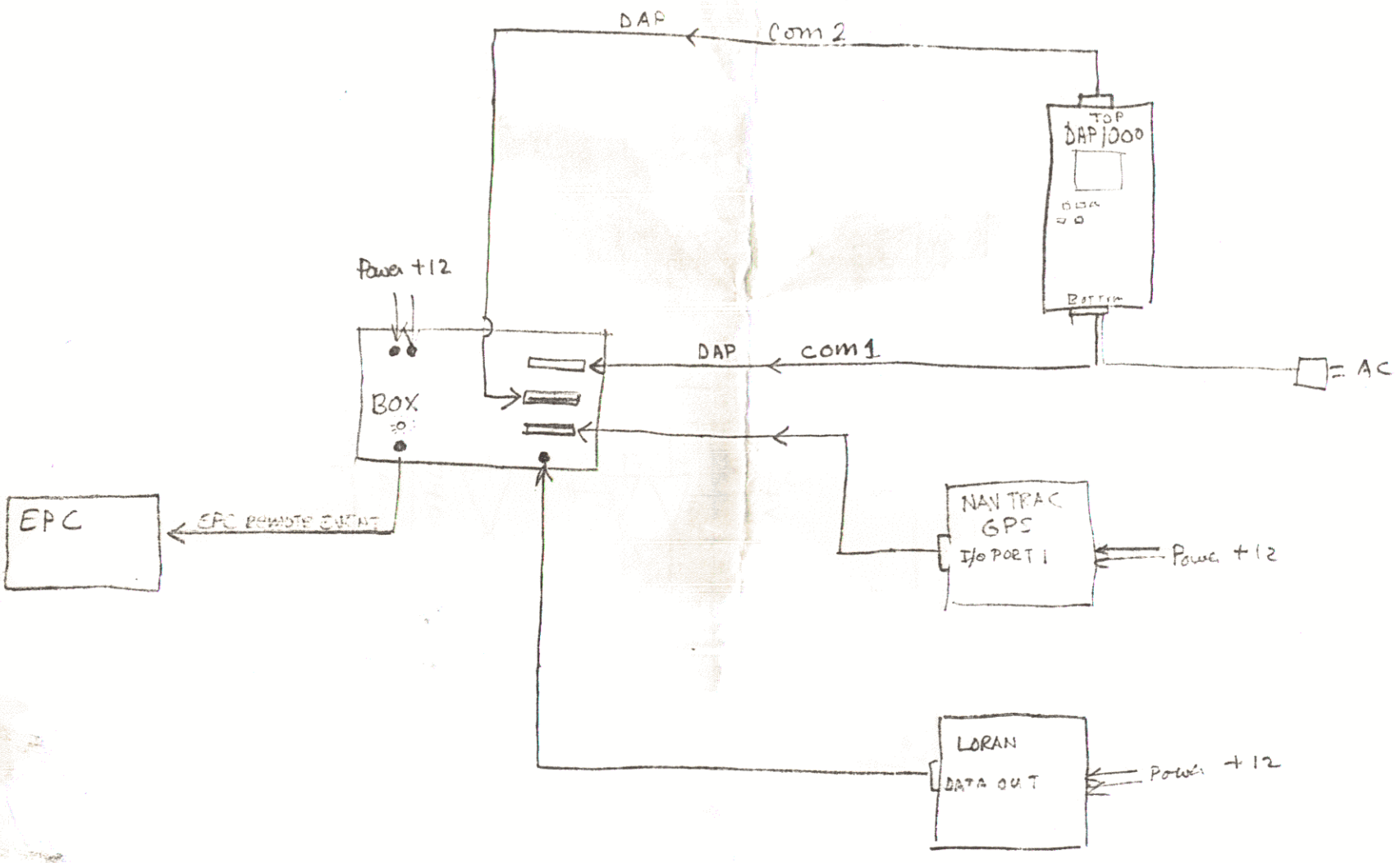
NOTE: To get the shifted keys (red keys), press FCT then the key you want (:, ;, ?, =, etc..).

NOTE: Always keep the power cube (on COM 1 - lower port) plugged in when using com ports.

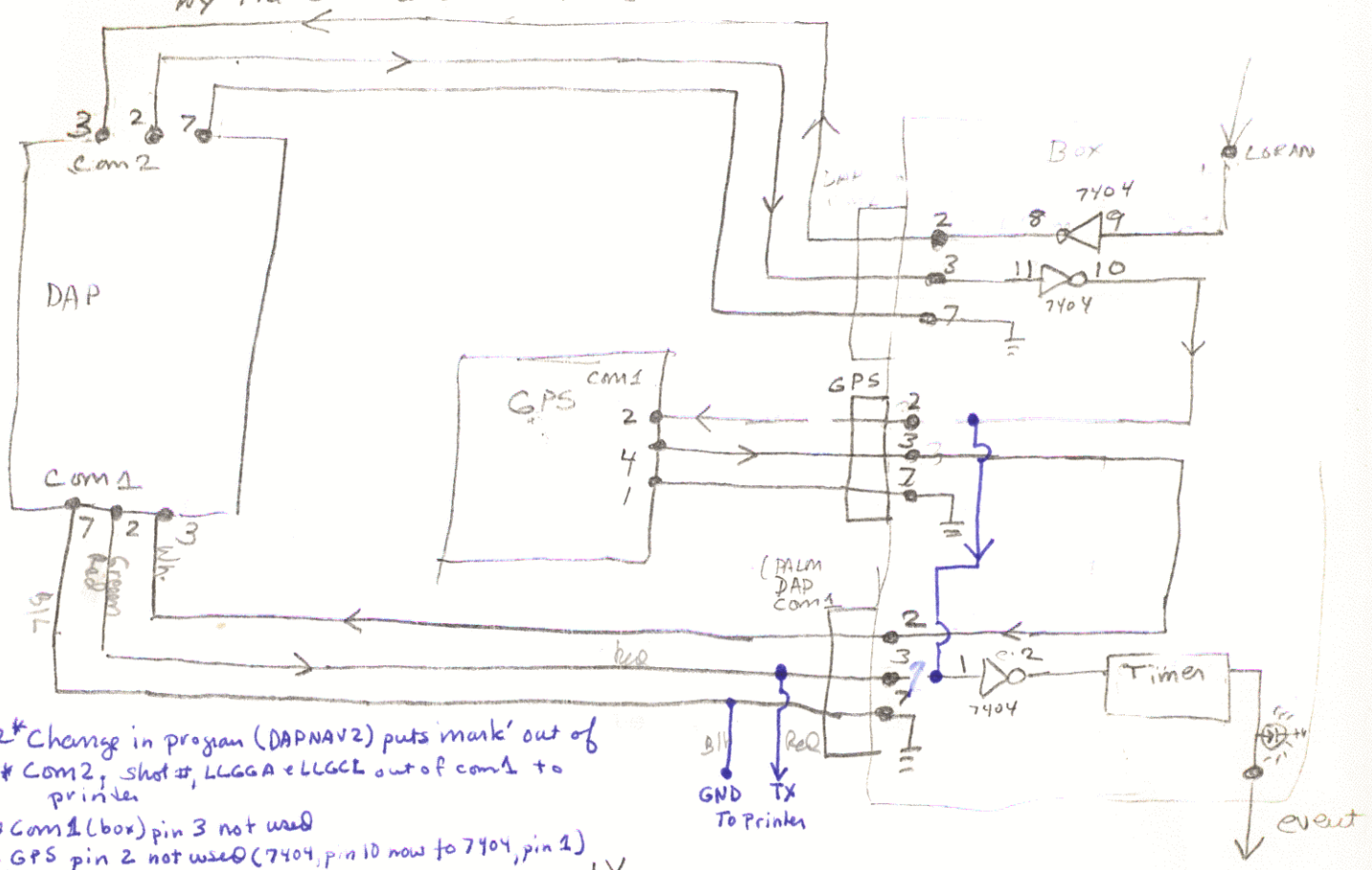
NOTE: Alway make all computer and nav gear connections before applying power to the BOX otherwise 'EVENT' may latch high.

DAPNAV - COM ~~SETUP~~ SETUP
NOTE: PSVAL = Ø
~~PSSCREEN = Ø to 100~~
PSCREEN = Ø or >10000
} program will not run unless setup this way

DAP 1000 setup

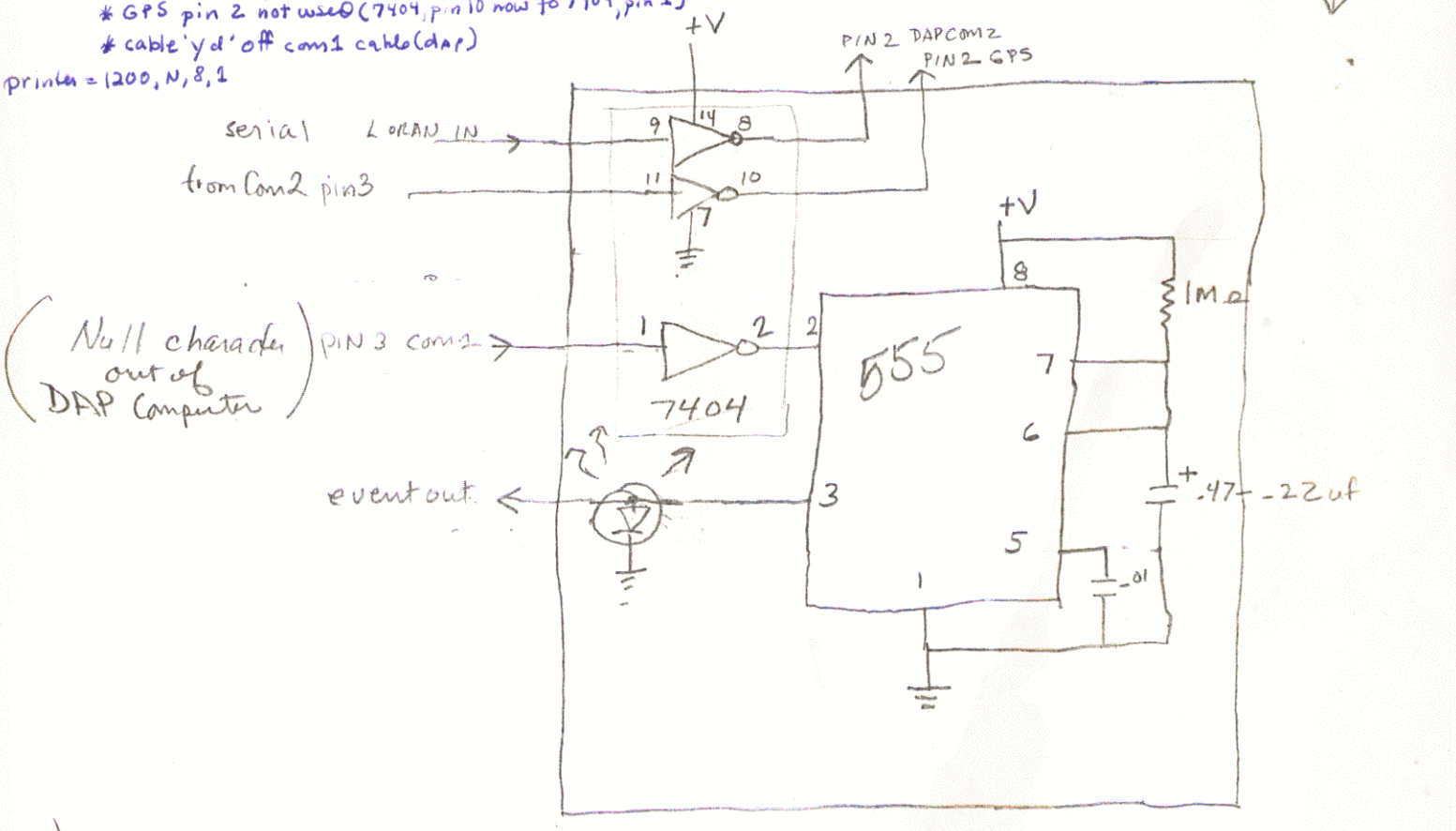


Unit Saves GPS then LORAN DATA TO A FILE and sends out a null character to the Event Box. Time of the trigger is controlled by the GPS and DAPNAV SOFTWARE



5/92* Change in program (DAPNAV2) puts mark' out of
* Com2, shot #, LLGGA & LLGCL out of com1 to printer
* Com1 (box) pin 3 not used
* GPS pin 2 not used (7404, pin 10 now to 7404, pin 1)
* cable 'y'd' off com1 cable (DAP)

printer = 1200, N, 8, 1



Dana Wiese 813-893-3684 x3051 Event Box 3/91
USGS