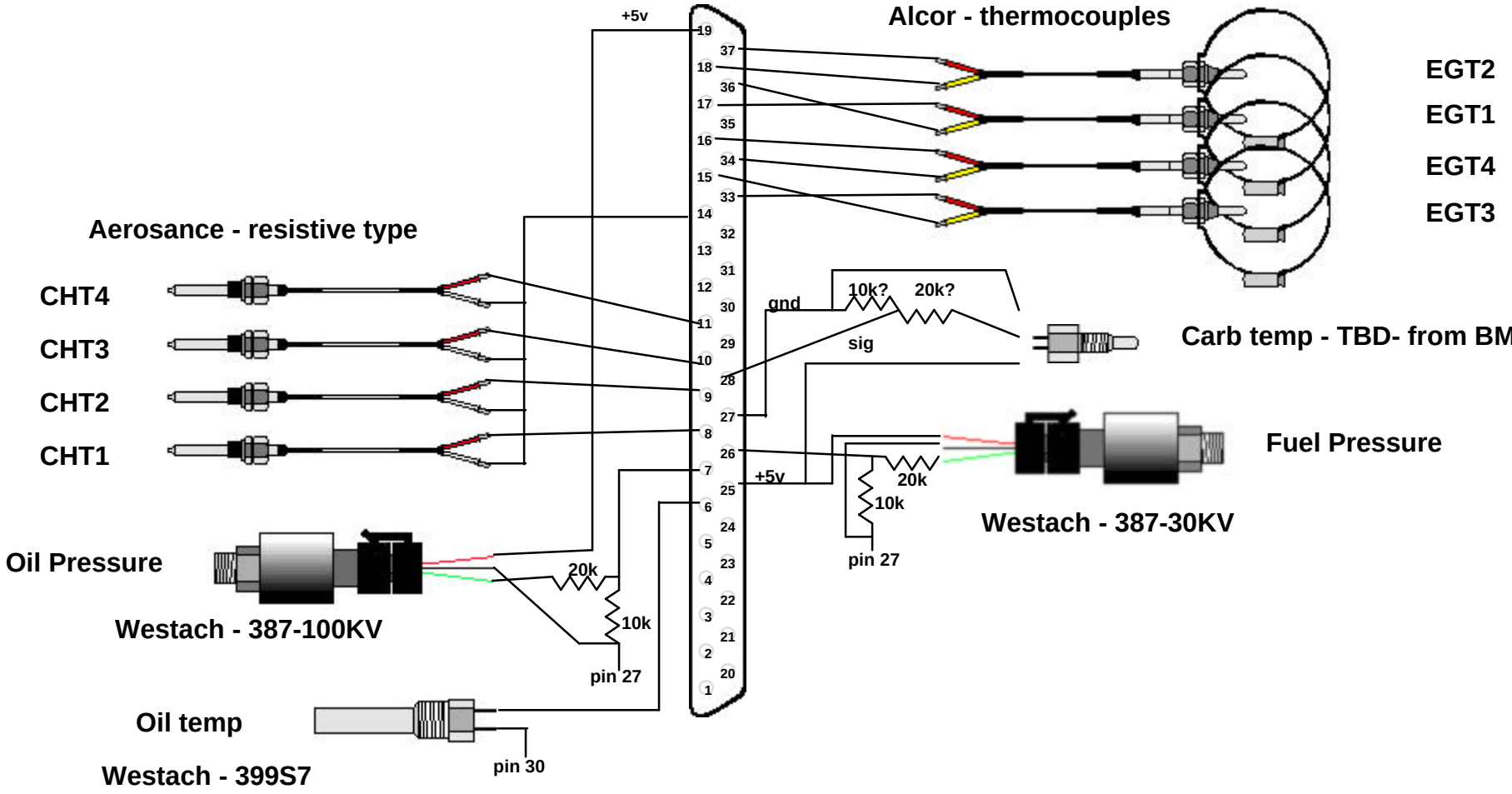
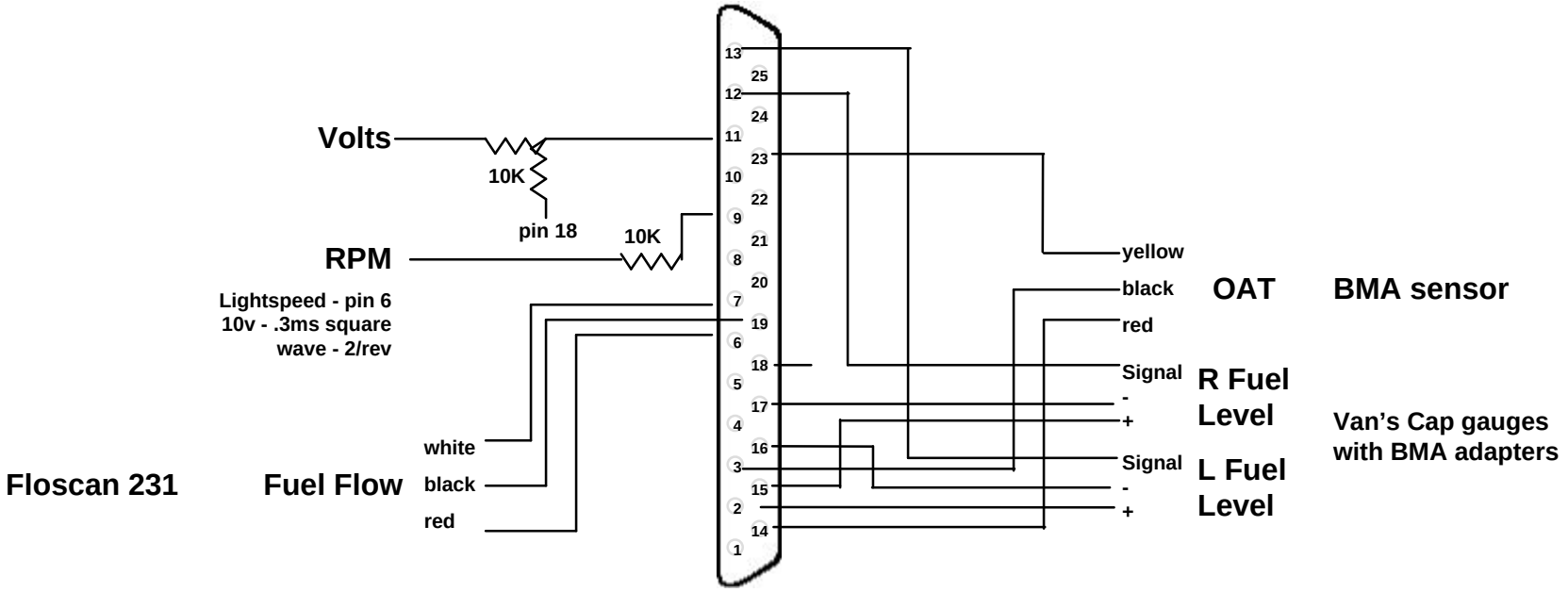
# EFIS/ONE WIRING SCHEMATIC
# v4 - December 22

**Use at your own risk... not final yet.**
**(I’m still having issues sending data from the EFIS/One to the Transponder and COM)**

# ANALOG 1


+5v
Alcor - thermocouples
EGT2
EGT1
EGT4
EGT3
Aerosance - resistive type
CHT4
CHT3
CHT2
CHT1
gnd
10k?
20k?
sig
Carb temp - TBD- from BM
Fuel Pressure
+5v
20k
10k
pin 27
Westach - 387-30KV
Oil Pressure
20k
10k
pin 27
Westach - 387-100KV
Oil temp
pin 30
Westach - 399S7

# ANALOG 2

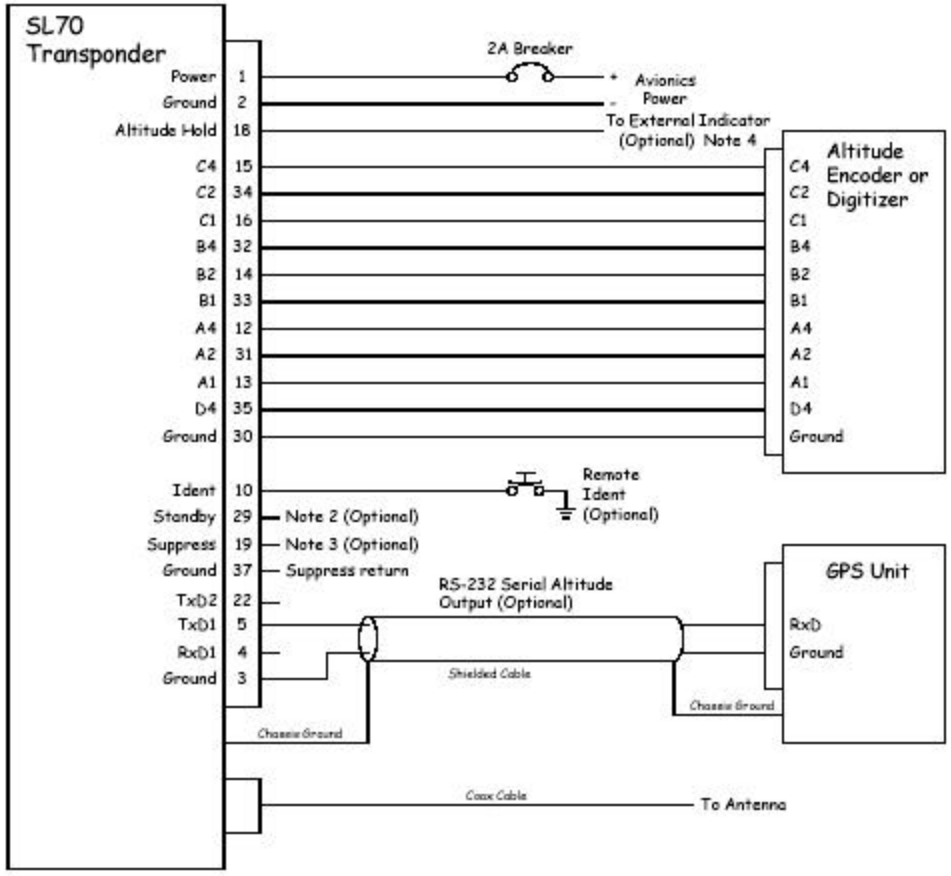

Volts
10K
pin 18
10K
RPM
Lightspeed - pin 6
10v - .3ms square
wave - 2/rev
Floscan 231
Fuel Flow
white
black
red
13
25
12
24
11
23
10
22
9
21
8
20
7
19
6
18
5
17
4
16
3
15
2
14
1
yellow
black
red
Signal
-
+
Signal
-
+
OAT
BMA sensor
R Fuel Level
L Fuel Level
Van's Cap gauges with BMA adapters

# GROUNDING SENSORS

**Sensor grounds may either be connected to ground pins on the EFIS/One, or a wire from a ground pin on each of the Analog connectors shall be connected to a central ground buss on the airplane, to which the instrument grounds shall also be connected**

# Transponder Encoder Cable

| EFIS 1 | Desc | SL-70 |
|---|---|---|
| 2 | C2 | 34 |
| 3 | C1 | 16 |
| 4 | B4 | 32 |
| 5 | B2 | 14 |
| 6 | B1 | 33 |
| 7 | A4 | 12 |
| 8 | A2 | 31 |
| 9 | A1 | 13 |
| 15 | AP disc | |
| 16 | C4 | 15 |
| 25 | Ground | 30 |

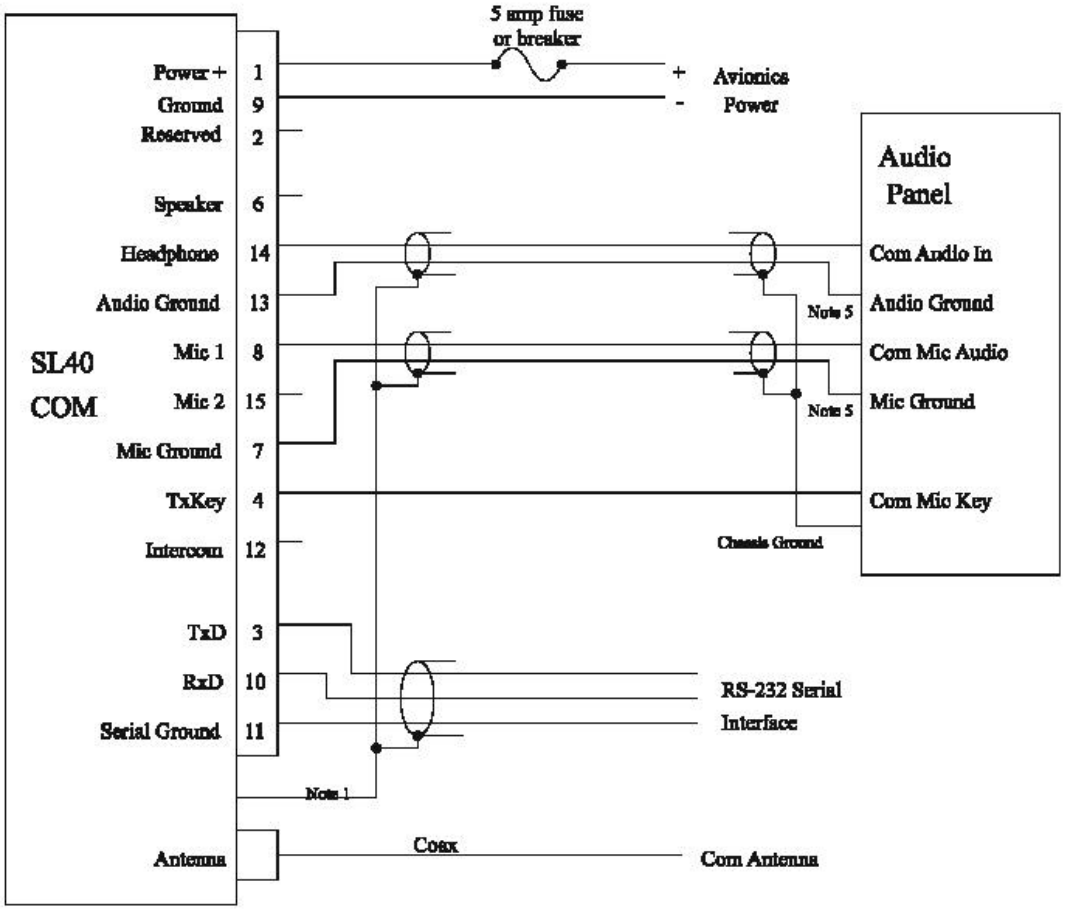



**NOTE -- The SL70 has 4 ground pins! I connected the EFIS/One encoder "ground" to pin 30 of the SL 70**

# Serial A port to Com1

| EFIS 1 | Description | SL-40 |
|---|---|---|
| 5 - blue | Ground | 11 |
| 3 - red | RX from EFIS/One | 10 |
| 2 - yellow | TX to EFIS/One | 3 |

**Shielded Cable - shield connected to radio tray**



# COM1 to Intercom

| SL40 | DRE 244e | |
|---|---|---|
| 1 | Power | |
| 9 | Airframe Ground | |
| 13 | Audio GND | Shielded |
| 14 | Headphone | |
| 8 | Mic 1 | Shielded |
| 7 | Mic ground | |
| 4 | Tx key | |

**Shield connected to radio tray**

# SENSOR NOTES

**CHT sensors are resistive type - Will show about 12K ohms at room temperature and the EFIS/One will see this as an open wire. The sensors must be about 220 degrees before the resistance will drop to the point where a reading can be obtained.**

**EGT sensors are thermocouples - they will produce a small voltage at room temperature**

## Voltage pressure sensors -

With the sensor reading 0 PSI, set that A/D value to read 0 PSI on the display. Since the sensor runs from 0.5 - 4.5 volts, 9 times that A/D count will give you 9 times the displayed value.

A 100 PSI sensor reads AD=100 with no pressure.

AD=100, Display=0 PSI
AD= 900, Display=100 PSI.