From: Robert Nelson
To: Karl Kensinger; CurTrisha Banks;
Subject: FW: Addendum to comment
Date: Tuesday, January 31, 2012 7:14:45 AM

-----Original Message-----
From: keithpeshak@localnet.com [mailto:keithpeshak@localnet.com]
Sent: Tuesday, January 31, 2012 12:18 AM
To: Jeremy Marcus; Robert Nelson; Geraldine Matise
Subject: Addendum to comment

This is an addendum to my previously filed comment on IB docket 11-109 and/ or 10-142 as appropriate, the magic impossible filter bandpass characteristic (attached).

Yes, it is real. Yes, anyone can buy one now (http://www.imcsd.com). Yes, we put a shit load of effort into smaller and lighter and less precious metals - this is as good as it is likely to ever get.

Think of it like television. Back in the 1950s you licensed NTSC channels 2 and 5 in Green Bay, Wisconsin. Why not channels 3 and 4 and 6; since the lower band is 2 through 6? Because of something called db / decade. We just broke all of those laws of physics, don't ask for more.

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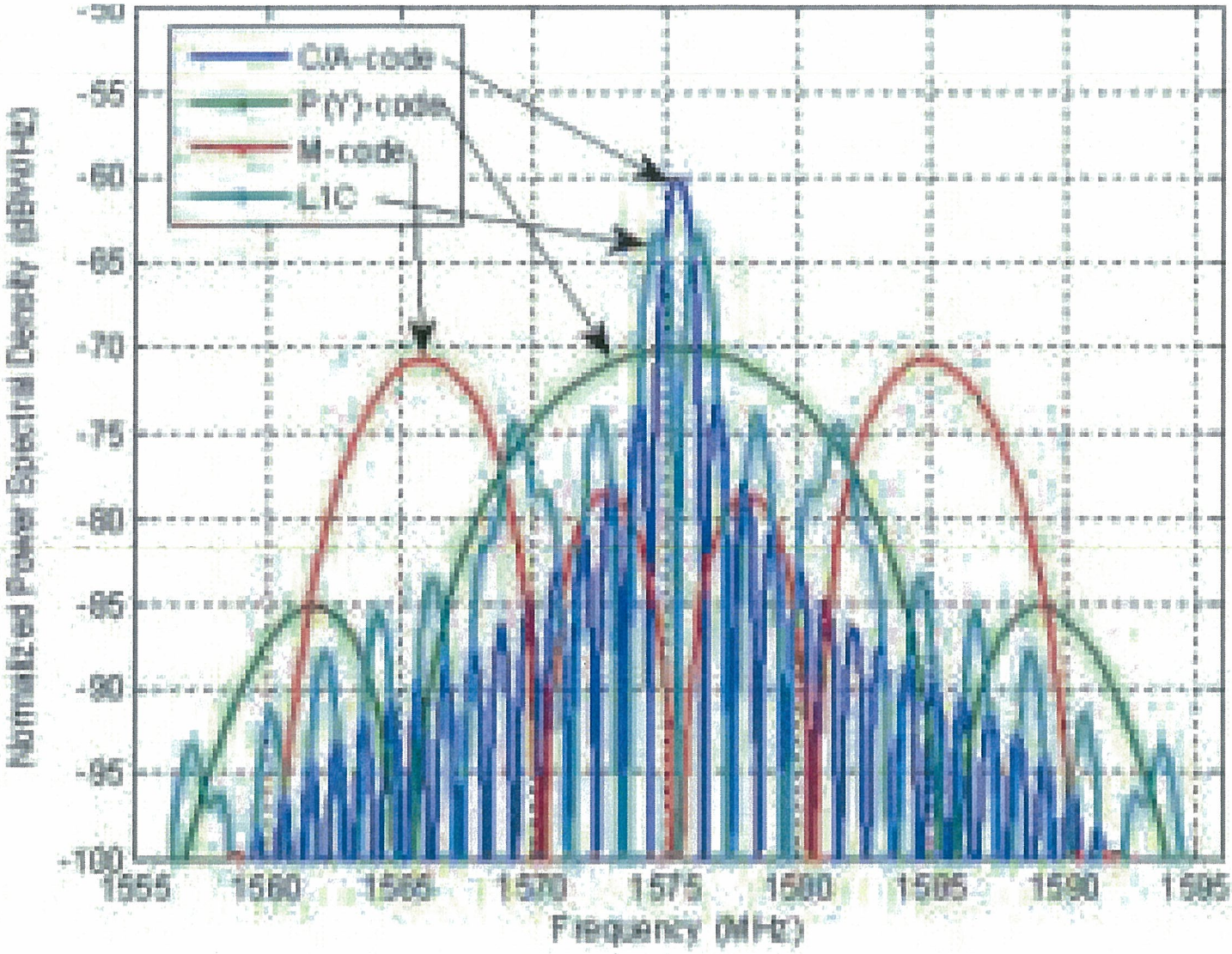

C/A-code
P(Y)-code
M-code
L1C
Normalized Power Spectral Density (dBW/Hz)
-50
-55
-60
-65
-70
-75
-80
-85
-90
-95
-100
1555
1560
1565
1570
1575
1580
1585
1590
1595
Frequency (MHz)

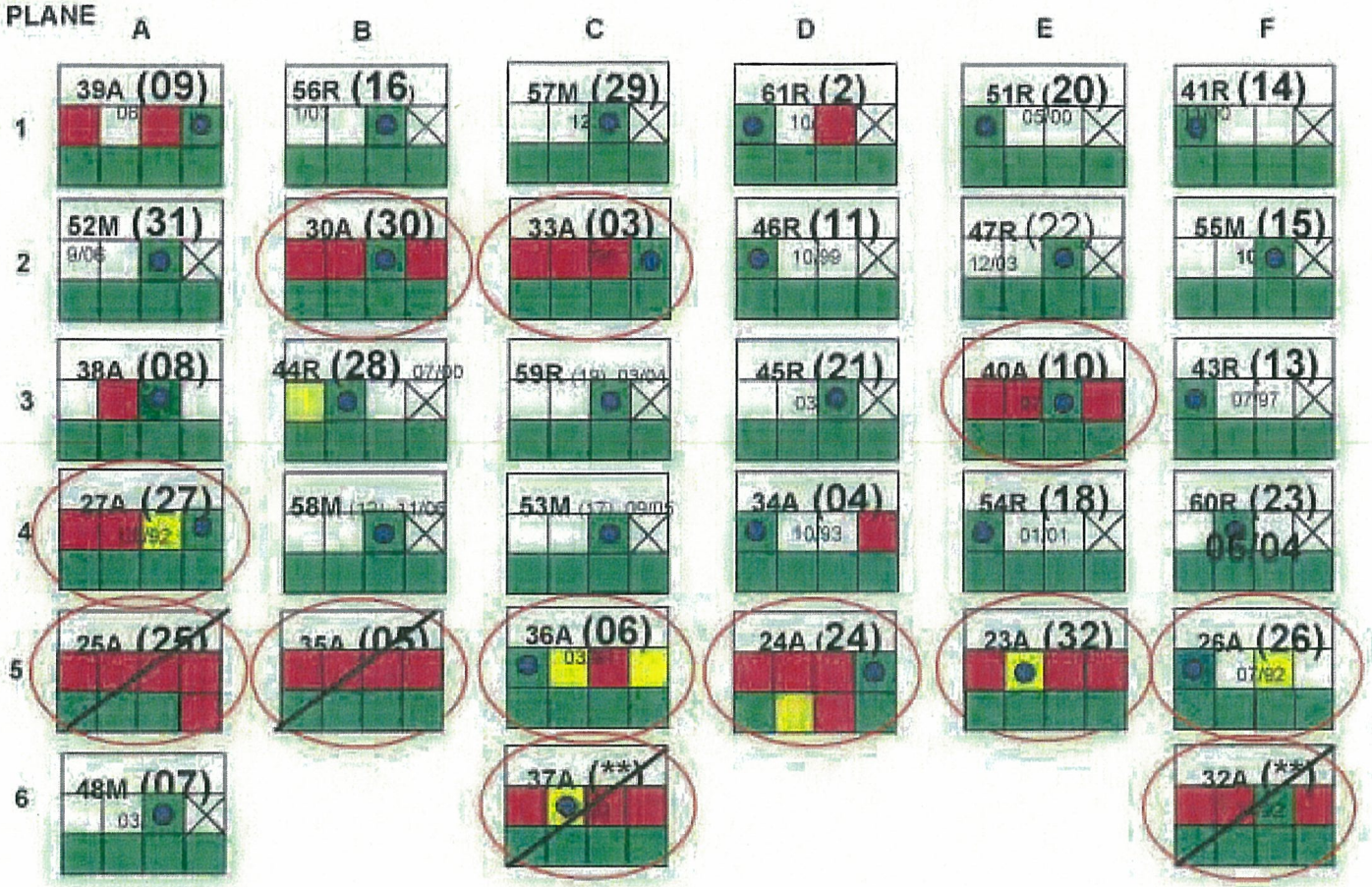
GPS Space and Control
Clock and Reaction Wheel
Performance Status

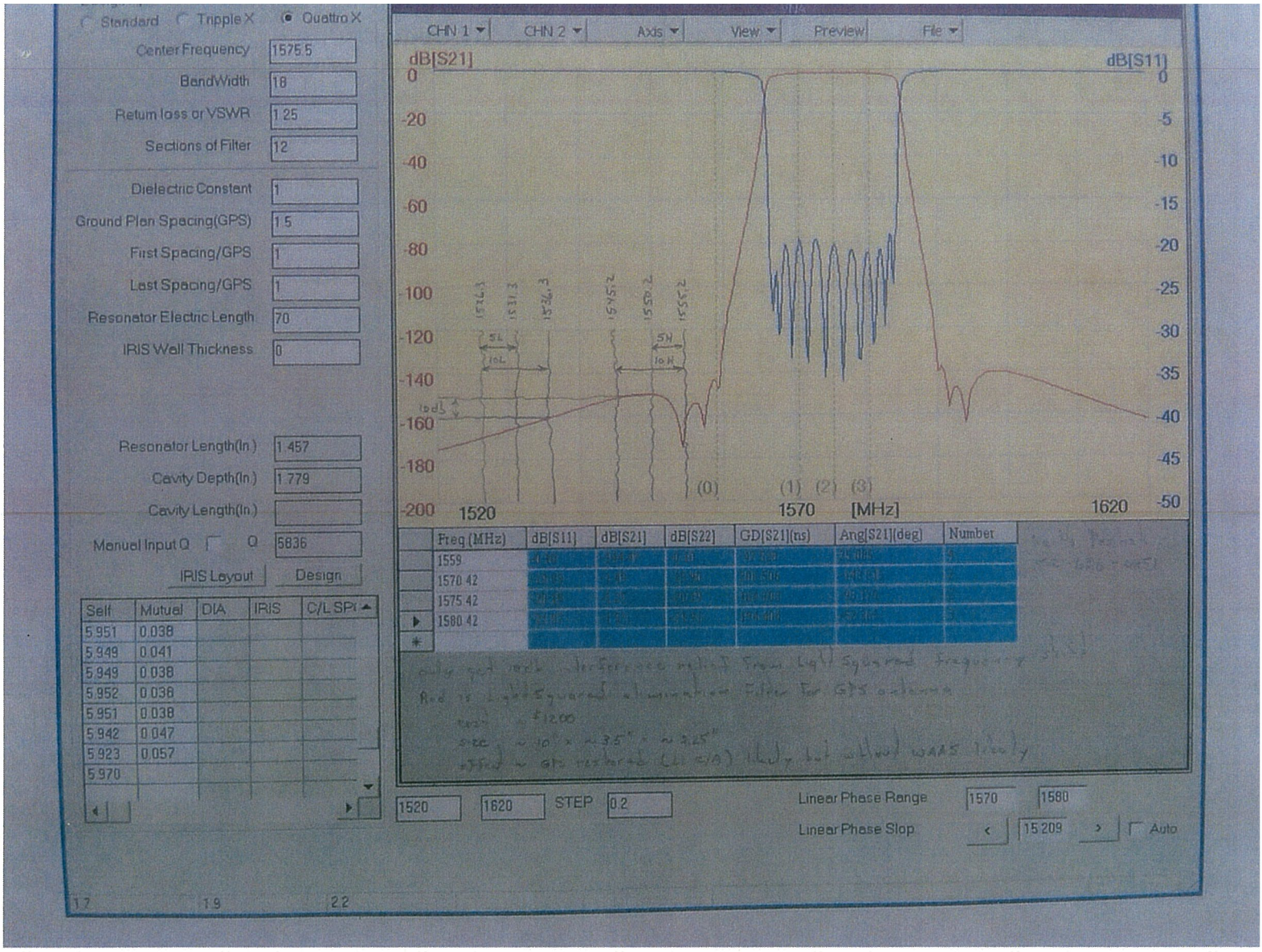
Clock*

1	2	3	4
X	2	3	4

Wheel
* II/IIA = Rb, Rb, Cs, Cs
IIR = Rb, Rb, Rb
Diagonal Line = Unhealthy

meets spec	functional
watch list	watch list
dead	dead
unused	unused
in use	




Standard
Tripple X
Quattro X
Center Frequency 1575.5
BandWidth 18
Return loss or VSWR 1.25
Sections of Filter 12
Dielectric Constant 1
Ground Plan Spacing(GPS) 1.5
First Spacing/GPS 1
Last Spacing/GPS 1
Resonator Electric Length 70
IRIS Wall Thickness 0
Resonator Length(In.) 1.457
Cavity Depth(In.) 1.779
Cavity Length(In.)
Manual Input Q
Q 5836
IRIS Layout
Design
Self | Mutual | DIA | IRIS | C/L SPA
5.951 | 0.038
5.949 | 0.041
5.949 | 0.038
5.952 | 0.038
5.951 | 0.038
5.942 | 0.047
5.923 | 0.057
5.970
CHN 1
CHN 2
Axis
View
Preview
File
dB[S21]
dB[S11]
0
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
0
-5
-10
-15
-20
-25
-30
-35
-40
-45
-50
1520
1570
1620
[MHz]
(0)
(1)
(2)
(3)
Freq (MHz) | dB[S11] | dB[S21] | dB[S22] | GD[S21](ns) | Ang[S21](deg) | Number
1559
1570.42
1575.42
1580.42
1520
1620
STEP 0.2
Linear Phase Range 1570 1580
Linear Phase Slop 15.209
Auto