

INTEGRITY

RECORD

*R Bohlmann NASA-KSC
LS-ENG-52*

7530-286-6945
FEDERAL SUPPLY SERVICE

(GPO)

DICK 267-9337
DAVE 783-0282

STC OFFICE 6463
Schedule Room 5486

Clyde Haddock Holiday Inn Rm 229

	7728
WEBB - NQC	7603
GRAMMILL 4	9828
RAMMINGS "	9826

Gil Whalen Home Phone 267 - 8288



-7728

TCP-KL-6006 GCTA Qual Unit

1-8-71 IDR#1 - 100ft LM cable connectors
close labeled incorrectly - Transferred to DR MFS-0021 LM10

close needs redesign IDR#2 CTV mounting lock not latched fully

Note - The shorter temp pulse the higher the temp - Use 12 usec as limit when becoming too warm.

IDR 003 1. step 004-013

Time for tilt down was 36 sec. Spec 37-47 sec

2. Step 004-014 When transmit 3214 initiated - camera would not tilt up

IDR 004 seq 004-017

IRIS open in 9.9 S/B 13-17 sec

close Gear Ratio problem

TCP KL-0041 (EM-2 unit)

4-13-71 John Miller Winslow Beach Apt
apt 12 783-8467 closed at 8 pm

Charlie Coe Ramada Inn
Rm 270 783-9441

Don Weber 262-2850

Andy Anderson Ramada Inn 783-9441

closed
IDR #1 Transferred to DR 008 against
GSE (GS-LCRU-NA). W17 connector
could not be mated when installed
on flange plate. Use as loose
cable.

4-14-71 Powered LCRU up at 11:00
Note - No P numbers on
Flight Y cable

4-14-71

closed
IDR #2 5-Band RCVR squelch 1.7 dB too
high. Tightened loose connectors.
Rechecked squelch and was ok.

- Note - LCRU Meter Reading for
TEMP at 3.1 volts is
about 100°F (our max operating temp)

4-14-71

0091 cont'd

IDR # 3 Seg 003-021 SS 02

Close to
LCRU DR
inherent in
LCRU

With -100.3 dbm at S-Band Diplexer
VHF XMTR came on. Did not occur
at other RF levels immediately above
and below. Suspect bad GSE att pot?

4-15-71

IDR # 4 Seg 003-049 SS 04

The 70 KHz signal out of LCRU to
GCTA did not increase in level
sufficiently when 70 KC were applied
to U/L GSEXMTR.

Recorded 2.9 db spec NKT 10 db

IDR # 5 seg 003-071 SS 02

Close DR
against VHF
Rec'd GSE

While superimposing of signals, it
was noticed that the VHF Freq
shifted. Shifted from XTAL to VFO
on Rec 10A4. This corrected the
problem. Same when crystal
heater comes on. The frequency
shifts.

IDR # 6 Sig 004-008 SS 03

closed by
Dev

S-Band XMTR (PM/WO) power
out reads 36.4 dbm SIB NKT 37.4 dbm
Corrected ILP reads ok

0091 cont'd

4-15-71

IDR #7 Seg 004-026

Freq out of Tol

Closed
DR D-1-005²Found Intermittent γ cable (video
line) DR'd γ cable.

IDR #8 Seg 004-026

Close
DR against
LCRUFreq still low with proper
Bias.IDR #9 Seg 04-070 Mod on \odot VHF

Sig Gen dropped off.

Hold open for
further T/S 4-17-71(These mod specs are very
tight). Calibrating on new
Gen. New Gen is unstable
at -88 dbm (at LCRU) and becomes
stable at ^{approx} -65 dbm (at LCRU).

IDR #10

TCP-K6-0041

4/15/71

Seq 004-099

Rad VPP out of limits

S/B 0.408 - 0.612 was 0.032

Additional Discrepancies Are Indicated
in Procedure

IDR #11

TCP-K6-0041

4/16/71

Seq 006-042

Can Not Get Locked Image
ON TV MONITOR.

IDR #12 Using the 10 ft cable, the
commands to the camera,
resulted in reversed functions.
The problem per Anderson RCA
was associated with another
DR on corative motor drive
responses.

TCP - KL - 0053

4-19-71
10:00

1st Run with no flite hardware
Wrote dev to run continuity
check on Flite Y cable on LRV.
(EMI FEC phone 8550 John Grove - day
shift only)

IDR #1
15B

Seq 002-004 Blower getting hot.
Turned it off. They looked
it to the 220 V 5/8 110 V

IDR #2 Seq 003-004

Some break-up on the 19.5
and P15 data. Comm lab
saw very little (insignificant).

IDR #3 Seq 003-006

GM1K reported 15 db drop
in TRP

5917 GM1K Phone at nite

IDR #4 Seq 003-020

No 1.25 subCar in FM/TV

IDR #5

Seq 003-041, 003-043 No GO
DATA Drop Outs in PM1/ND
(see 7DR # 2)

IDR#6

Seq 004-013
DATA NO GO (Drop out of
Data During Voice Transmission)
Rover Running.

IDR#7

Seq 004-022
GMIL REPORTS DATA PRESENT
~~FROM EVIC~~ ON EVIC 2
DISCRIMATORS.
(EVIC 2 is in Mode P)

~~TOP SECRET~~~~SECRET~~~~TOP SECRET~~~~SECRET~~

Re Run

Seq 003-002 30% Loss OF PAM
 EKG Noise (IDR 02)

003-006 DATA GO (IDR 03)

003-017 30% Break up OF PAM
 EKG Noise (IDR 02)

003-023 DATA GO
 TV NO GO (IDR 04)

003-045 EVC-1 DATA Drop
 out During Voice Xmission.

004-012 DATA Drop out during
 Rover Running at 10 km/Hr.

IDR#8 1,25 SCO DK 5 LM was
 noisy seq 04-173 This
 was intermittent. This
 correlated with a vacuum
 cleaner. Other interference
 was also noted

TCP KL-0053

Fit units

4-20-71

Run #2

1415 Call to stations

Ran base line using
LRV power except
for initial set-up.

1500 IDR#1 Seq 003-004

PLSS EKG is no go

VHF Direct also no go
with LCRU off.

Cleaned up just prior
to seq 003-005 while or just
after YPLS was switching
mod on & off on Bio med
Sim

IDR#2 " Selector SW on LCRU
does not line up

SFR 04-04/505 1m POWERING UP

Fm

. 4793 ②

2265.5

~~2265.5~~

2265. 4952 ③

2265. 4875 ①

2265.5 4 1/2 MHz

EM

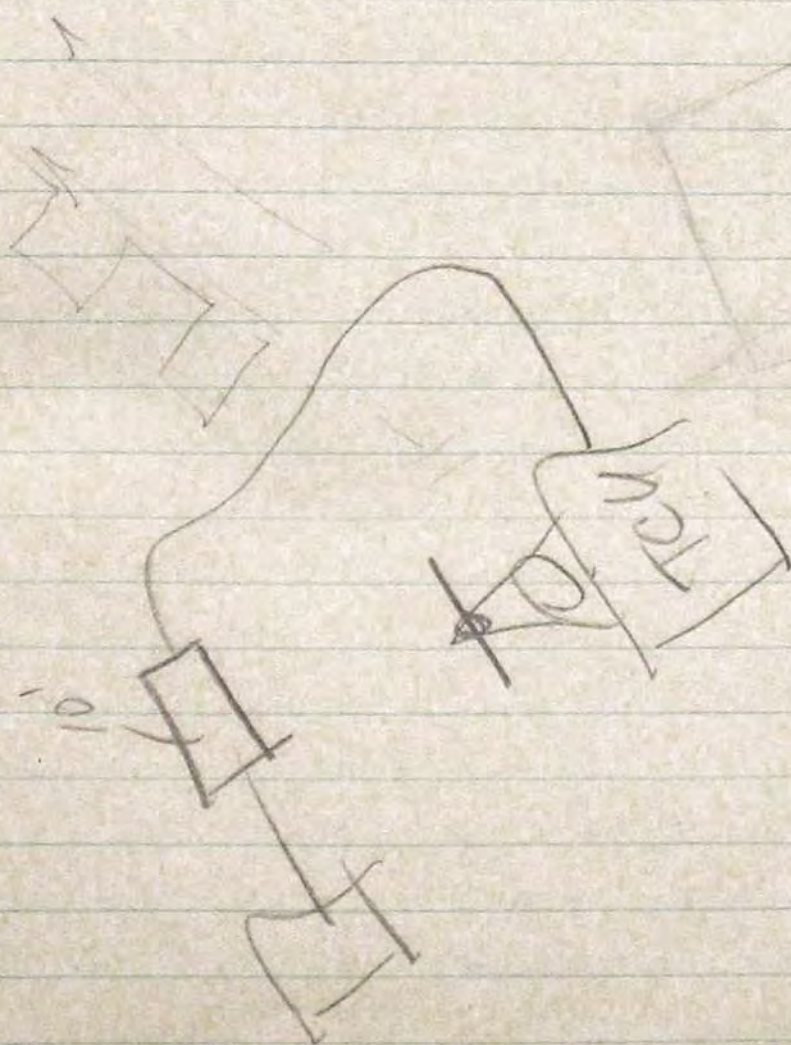
2265. 4432

AC 4MHz total

2265. 7684

2265. 4612

2265



Dave - For OOA3 Mission
Sim - we have agreement between
MSC, RCA, Me, etc that we will
use the LCRU EM-2 (with its
Hi Gain and Lo Gain antennas) and
the Flite GCTA. The GFE Bond
Room paper may need some
straightening since NASA TPS was
used for non-flight hardware
and a GAC TPS was used
for the Flite hardware.

TCP-KK-0093

IDR #1 LCRU Batt low
changed Batt

IDR #2 PLSS Batt's low

5-24-71 Flight No 1 GCTA

GCTA Assy P/N 2265826 S/N 004

CTV 2265840-501 S/N 009

TCU ^{42"} 2265825-501 S/N 009

(~~32"~~ cable part of TCU)

Master "Y" Cable (Flight) but not for Apollo 15)

P/N 8670957-502 S/N ~~3012~~ 3012

Antenna Handling Fixture (GTO)

HGA 8371851-501 S/N 0001

LGA 8371852-501 S/N 0001

LCRU Flight No 1

P/N 8370854-502 S/N 3001

Test Adpter with LCRU (GTO)

8779383-501 S/N 3002

Ancillary Stowage Container Flt No 1

8370857-502 S/N 3001

Container 8670958-501 S/N 3001

LGA with stuff 8670994-502 S/N 3001

HGA 8370891-502 S/N 3001

5-24-70

6006 Flite #1 GCTA

Page 2-12 Invalid Commands

IDR #1

35010000 moves camera
pan left. Repeated 3 times.

3504 and 3502 causes camera
to pan right and stops.

3511, 3512, and 3514 and
camera responded.

Used another GSE Command
Unit. The problem was ~~re~~
repeated. Camera did not respond to 3901.

Talked to Bill Perry - he's
checking into the problem.

Meantime we plan to
finish 6006 and then

do additional T/5 if
we can come up with

anything. Also talking
to RCA plant.

Bill Perry says ok to use CTV in
0045 if we can't resolve
problem tonight.

Seq 00A-017 IRIS Open and IRIS Close was
IDR #2 12 sec. Repeated it again. S/B 13-17 sec

TCP KH 0041

5/26/71 IDR 01

Seq 002-052-03

In The TV/RMT Mode The Power Consumed read 15.2 Watts. Spec 12.0 to 15.0 Watts

Measured Input resistance of GCTM simulator

J1 Pins 1 & R1 220 Ω

J1 Pins 6 & R 44 Ω

5/27/71 IDR 02 TCP-KH-0041 Seq. 003-008

VHF PWR is 27.9 DBM S/B 25.4 DBM

ILP Was 22.8 We Rerun ILP And

It came out 27.4 Giving A

VHF PWR READING OF 26.5 dBm

5/27/71 IDR 03 TCP-KH-0041 Seq. 03-016

RF Level is -98.8 DBM. S/B NMT -99 DBM

ILP Was 41.8 We Rerun the ILP And

It came Out to be 41.9 dbm.

5/27/71 IDR 04 Seq 003-021
 VHF XMTR ACTIVATED MOMENTARILY
 AT -98.8 DBM. XMTR IS NOT SUPPOSED
 TO COME ON. Same thing happened
 DURING EMZ TESTING. (IDR THAT TIME WAS TRANSFERRED
 TO A DR AGAINST EMZ)

5/27/71 IDR 05 Seq 007-051
 1.25 MC SCO FREQ IS 1.244674
 S/B 1.246875 to 1.253125 MHz
 Closed Per Dev 28 Which calls for a particular
 crystal to be used in each S-Band Receiver.

5/27/71 IDR 06 Seq 003-073
 Same AS IDR 03 ^{EXCEPT} THIS IS ON THE
 LO GAIN RECEIVER

5/27/71 IDR 07 Seq 003-078
 Same AS IDR 9 EXCEPT THIS IS
 ON THE LO GAIN RECEIVER.

5-27-71 TCP 0041

Seq 004-071

IDR#8

1 KHz level S/B 1 to 1.7 V P-P
was varying 1.5 to 3.0 V P-P

Sand-pile test VHF was
interfering. Essentially stopped
testing ~~it~~ and went to T/S.

IDR#5

Found wrong crystal in FM
receiver. Rechecking tests that
need to be retested. New reading
is 1.252261 MHz

IDR#1

T/S

Reconfigured for step 02-051
read 15.36 watts. (at 32 VDC)

Turned SCO off
read 14.9 watts

Turned 70 KHz on
no difference

at 36 VDC & at 44 VDC = 13.86 watts

Residual seq 002-031

Int Pwr 16.8 VDC 5.46 watts

29.0 VDC 4.55 watts

All Power readings in TV/RMT must be made
with SCO on GCTASim.

20 MAY 71

5-28-71 TCP-0041

IDR # 14 step 006-023

Voice modulates 14.5 KC on Radio.
LCRU in PM1/NB

IDR # 15 step 006-027

Noise spikes on 14.5 KC on Radio
only when VHF XMTR is keyed
LCRU in PM1/WB

IDR # 16 step 006-045

Camera responded to 3501 &
Same problem as 6006 problem.

5-29-71 KL-6007 FIT #1 Sub Sat

IDR #1 PTSU Digital Command unit does not display 2nd number of message number when verifying with tape. No constraint, we use manual operation (keyboard) for Sub Sat testing.

Above IDR upgraded to DR.
Setups complete. Signed 3 minor desc.

6-1-71 IDR #2 seq 10-01A
Data bits for Part Exp are incorrect,
T/S and found AC amps for decom were giving trouble.
Patched direct and everything appears ok.

IDR #3 seq 10-026
Appears IHP is incorrect.
T/S and found some errors

IDR #4 seq 010-104 s/s 02
Sub bit error ^{light} does not
come on

6/2/71 TCP - HL 6007-A Flt #9 sub sat.
IDR #6 leg 012-~~040~~ 041 GMIL has
excessive data dropouts.

IDR#7 leg 012-042 Can Not
Verify print out on monitor.
in lab of Digital Commands by
GMIL on V/L Monitor.

VOID

6/11 LCRU - FLT #1 BACK TO POINT FOR
CREW C2F2 OPERATION ON MONDAY.

TELECON SINDERSON

- a. DR 0050 - R/L CONTROL PANEL;
RCA WILL TOUCH-UP WITH ACRYLIC
PAINT NEXT WEEK.
- b. DR 0026 - STORAGE CONTAINER
NO TOP ASSY PART NO.
RCA MAKING NAMEPLATE, AVAILABLE
ON 25th TENTATIVE INSTALL ON
28th
- c. BATTERY MARKING -
RCA HAS KIT TO MARK "TOP"
ON BATTERIES NEED TO SCHED.
- d. QUAL UNIT FAILURE - COAX SHIELD
BROKE LOOSE FROM TNC.
NEED PROCEDURE FOR RCA TO
VALIDATE LOW GAIN AND
HIGH GAIN ANTENNA TO
LCRU CABLES. MIGHT
REQUIRE RETURN OF HG TO
FACTORY, HE WILL LET US
KNOW MONDAY.

6223

6/21/71 IDR 1 TCP-1RL 6006 RT FBIT 1 GCTA
 Step 004-002 When 29.0 VDC Power
 Supply Was turned On fuse Blew
 in LCRU Simulator Panel (29VDC
 Fuse 1 Amp)

Adjusted Using A Current Limiter. The
 Surge Current Caused The Fuse to Blow.
 Closed By Dev To TPS (Procedure)

6/21/71 IDR 02 TCP-4k-6006 S/S 2
 When the TV was commanded
 to Tilt and Pan Simultaneously,
 at the limits excessive current
 was drawn causing G53 29VDC
 lamp to Blow.

Troubleshooting revealed that when cable
 W4 was moved it would cause a
 short lowering the voltage input
 to camera (TV) and TCU Due To Limiting
 (current) of the 29VDC Power supply
 The reason why TCU/CTV would go off
 when camera would go into right
 pan stop switch, is that TCU would
 vibrate the mast holding GCTA onto
 workstand as it hit into the pan
 right stop.

Transferred this IDR to DR against
 G5E

6/22/71 TCP KL-6006 SN004

Seq 004-017

Camera Appears to Hesitate Prior To
Hitting stops At Low End.

IDR closed by Dev
~~to~~ Adjusted Negator

6-23-71 Flight # 2 Equipment

GCTA Ass'y 2265826 S/N 005

CTV 2265840-501 S/N 005

TCU 2265825-501 S/N 005

(42" cable part of TCU)

T/S IDR09 TCP 0041

All ME's in spec except 1 KHz in
FMTV at -6 dbm read 9 KHz SIB 8.778

Test data included on yellow sheet.

The control panel is being shipped
to 3M.

For Delta 0041 FLT 1 patched RF
to rooftop for GMIL DIR "Look see"

6-24-71 Completed SIT on FLT hardware #1
No problems

Signed dev to delete VSWR and
GCTA testing from TCP-0042 for
FLT #1.

Packed-up all hardware except
"Y" cable LCRU #1, Test adapter.

6-25-71 TCP 0042 LCRU #1
 IDR #1 step 003-008 VHF XMTR Put in
 29.1 dbm SB > 25.4 dbm

6/29/71 TCP 0042 LCRU #4
 IDR #2 step 004-070.
 Mod Index Read 9.25 SB 4.752 to 8.778

6/29/71 TCP 0042 LCRU #1
 IDR #3 step 004-091
 #A Mod Index Reads 1.25 SB 0.735 to 1.225
 Step 004-100
 #B Mod Index Reads 9.5 SB 4.752 To 8.778

~~6/30/71~~

6-29-71

T/S IDR's on 0042 LCRU #1.

IDR #2 now in spec after using
end-to-end correction factor after recalibration.
(correction factor is 4.416 in lieu of 5
IDR #3 item #8 also in spec for some
reason.

Rechecked NB GSE config and noticed
it was 3% high above nominal but
within normal adjustment. Did not
do any readjustments and reread
at 1.2 rad (in spec).

Removing LCRU #1 and sending
to Bond Room.
Setting up for LCRU #2.

6/30/71 TCP HL 0041 LM 10 LCRU 2
 IDR#1 Seq 003-008
 VHF XMTR PWER Reads 25.15
 SB NLT 25.4

6-30-71 IDR#1 Reseated VHF coupler several times.
 1st time the reading changed about
 2 db. Three other times it repeated
 (+28.8, +28.0, +27.07 and 27.5). Closed
 IDR by dev to ensure ~~center~~ spring
 of hat coupler rides the center of the
 LCRU antenna.

Redid IKP for D/K S-Band - 46.12db
 No IDR.

Pick-up LCRU #2 LGA and HGA
 (in handling fixtures) and GCTA#1
 and GCTA#2 tonite at 22:00 tonite

Someone has VHF Freq clearance
 tomorrow starting at 0730 a.m. Would
 like to finish MI's by then.

IDR#2 Seq 004-050 step .05
 M1 reads 2.98 S/B 3.196 to 3.536

7/1/71 IDR No 7 was closed by a dev
to the procedure. Now multiply by
4.416 instead of 5 kHz/VPP because of
IDR from 0042 which shows that the
Signal Data Demand cal factor is Not 5 but
4.416; New Results 7.94.

7/1/71 IDR NO 3 closed by a dev to (No 39)
the procedure. The VAF Gen was re
~~cal~~ calibrated when it was found
to be that the seal was broken,
and the step rerun. Reading came out
to be 7.0 on the re run.

7/1/71 IDR NO 4 closed by dev 39
to procedure. Same reason as for
IDR NO 3. New Reading came
out to be 3.85.

7/1/71 IDR NO 9 We reran the sequence
and got - 5.5 Sig, and -28.5 Noise
giving a reading 23.0

6/30/71 TCP-0041 LCRU 2 Seq 004-070
 IDR 3 1Kc Reads 3.75 sb 4.752 to 8.778
 T shooting Revealed The VHF Gen Was
 out of Cal. (Seal Broken)
 Re ran sequence and got 7.0

6/30/71 TCP-0041 LCRU 2 Seq 004-084
 IDR 4 5.41KHz Reads 4.0KHz sb 2.16 to 3.99.
 Re cal Gen. and Reson freq
 got 3.85

7/1/71 TCP-0041 LCRU 2 Seq 004-138
 IDR 5 10.5 KHz Reads .65 sb
 .383 to .638

7.35 KHz Reads .55 sb
 0.323 to .538

7/1/71 TCP-0041 LCRU 2 Seq 004-159
 IDR #6 11KHz Reads 1.25
 SB 0.735 to 1.225.

7/1/71 TCP-0041 LCRU 2 Seq 004-164
 IDR #7 11KHz Local FM/TV
 Reads 9.0 sb 4.752 to 8.778

IDR 008

TCP-17L-0041 LCRU 2

Seq 004-174

S/N Ratio Was 19.0 56 INLT 20db

7-1-71 Tried T/S IDR #8 however too much interference from other testing (Simulator Bldg). Noticed your VHF U/R Gen was offset by considerable amount (260.5 vs 259.7). This may explain some of your difficulties on site shift. Did no further T/S because of interference problems.

Talked to MSC-FOD - we will not perform TCP-KL-0059 on Flt #2 prior to launch of Apollo 15.

Ref ~~IDR #~~ seq 004-184:

The VHF gen was returned. In looking at the data - the gen may have been out of tune or ~~starting~~ started drifting at seq 004-130.

The audio gain control ~~on~~ or the S-Band Revers ~~to~~ can change M1 readings by as much as 5% max volume lowers readings.

7-1-71 Approx 40% of LCRU battery vent
valves do not meet vent specs

Need direction from MSC to not fly
with top thermal blanket on CTV for
Apollo 15.

TCU	2265825-501	SN 005	} FIT #2
CTV	2265840-501	SN 005	
LCRV	8370854-502	SN 3003	} FIT #3
RL Pan.	8670948-501	SN 005	
HGA	8370891-502	SN 3003	
LGA	8670994-502	SN 3003	
TEST ADAPTER	8777383-502	SN 3001	
YCAR	8670957-502	SN 3012	

LGA Carrying Case	8371852-501	SN 0001
HGA " "	8371851-501	SN 0001

AUX ITEM STORAGE CONTAINER ^{TOP}_{HALF} 8670958-501

AUX ITEM STORAGE CONTAINER (All Ant and all Parts of Container)

8370857-502 SN 3003

9-28-71

TCP-KL-0041 LM-11 FIT#3 LCRU
 IDR #1 CB cannot be pulled out,
 Paint has bound it. Transferred
 to LCRU DR. Repaired by removing paint,
 FIT#4 TCU mast will be shipped
 in Monday for fit checks with
 LRV. If OK this mast will replace
 the one on FIT#2 TCU. RCA will
 send mech engt to do the work.

DR against HGA optical sight - has
 frost blemish. Will return FIT#3
 HGA after Nov/1 fit checks for
 repair.

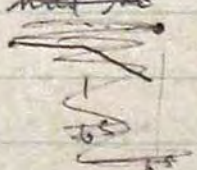
IDR-002 - SEQ 003-008 S/S 03. VAF XMTA

CLOSED
 BY DEV (Not have
 Glance at 5
 Touch Loop)
 TOUCHING POWER READS 25.2 S/B 25.4
 (similar to page 23 5/27/71) Planbit is
 Coupler MAY VARY READING AS MUCH AS 2db

IDR-003 SEQ-007-036 - LCRU METER
 Read. 3.9 VENDOR CAL mag 3.6 (diff than
 +/- 5 db for -75) about 10 db for -65

NEW LP of 40 NOT 42.5

all reading good except -65 ~~had to~~
~~point to compare with in~~
 cal pt for 65 db was
 WRONG.



10-1-71

(DR-004 TEAR IN BLANKET OF GLTA
(MAY BE A DUPLICATE OF ANOTHER DR)

(DR-005 - TRACE ON SCOPE NOISY COULDN'T TAKE
PICTURE OF SYNC PULSE ETC.
TRANSFERRED TO DR AGAINST CTS RCVR.

TCP 0041

LCRU # 9

12-13-71

16:30 Power outage, LCRU was off.

"Phantom" strikes again.

Took IDR # 2

Power outage may last till 4:00 a.m.

Using extension power cables.

Boeing Pwr people will call 15 min before Xfering, Turn-off LCRU during Xfer of power.

12/13/71

Level of 29.0 VDC Power meter
reads 28.58 TM Reading came
out to be 29.2 VDC difference
is 0.62 SB NMT 0.4 VDC. temp
was 82-83° 2.6 meter Reading
meter Reading 2.3

Cal Curve Comp Volt 29 VDC

TM Reading 29.2 VDC

DVM 28.58 VDC

Seq 03-052 IDR # 3 taken

12/14/71

LCRU XMTR VHF RF Level

Reads 297.054 MHz

SB 296.7910 to 296.8090 MHz

LCRU is in external Power
measured OK in internal Power
Seq 03-088

T13 IDR #4 Switched to Internal Power
 Reading 297.053 MHz went From PM1/WB
 TO FM/TV Internal Reading 297.053 MHz
 Went TO PM2/NB Internal Reading 297.053 MHz

2 ~~_____~~ Found That The Sig Gen Frequency Had
 Drifted OFF Re Set Gen And
 Reading in PM1/WB Ext Pwr
 Read 296.8027 MHz ^{+25 kHz} SPEC
 Closed Per Dev 16 to Set
 Gen TO 296.8027 ±

IDR #4 Needs RCA And FCDR sig
 To Sell.

12/14/71 IDR #5
 Level of ~~_____~~ to Sanborn
 Recorder TM came out to be
 0V0Hs \Rightarrow 14.5 kHz giving a Voltage
 reading of 29.25 VDC The LCRU
 meter 1.9 came out to 28.25 VDC
 (Vendor Curves) difference came
 out to be 1.0 VDC so NMT \pm 0.5 VDC
 Sec 003
 Same Type of Problem as
 IDR #3 Sec 03-104 PM1/WB
 EXT Power is Mode

TCP - 0091 #4

12-14-71 IDR #6 Seq 04-112 VPP reads
approx .8 which makes M1 too low.
Tried recal of discriminator however
numbers are 2X as should be.

Used spec anal wrong. The normal recal
of discriminator (1st null) pushes div to
approx 25 KHz. By using equal side band-
to-carrier only 75 KHz is used. We ~~found~~
apparently were in the non-linearity. Recal'ing
on side-band-to-carrier equal levels gave me
a 6.048 fudge factor in lieu of 5.37.

IDR #7 Seq 04-124

Best VPP we could read was .76
which gives .380 Recal #: 5/B .383-.638

Changed the 3 small coax
cables on synchronizer to large
Dia cables and placed etc
about material around LCRU
VPP read 0.825 calculating
to .412 rad

IDR #8 Seq 04-157

10.5 KHz level Reads .36
sb .383 to .638

Discrepancy #2 Seq 04-179

11 KHz level Reads .675
sb .935 to 1.225

12/15/71 After completion of seq 004
 Worked on IDR # 8 (Both Discrepancy)
 re checked the Percent modulation
 re adjusted but both (10.5 & 11 kHz)
 levels at - 88 PM2/NB were
 still out of spec low.

Worked on IDR # 5 Re called
 Sanborn recorder and re
 ran seq 03-104

LCAO Meter Reading	<u>1.8</u>
Value from Cal Curve	<u>28 Volts</u>
Value from TM	<u>14.182 kHz</u>
Value from Curve	<u>28</u>

Difference SB NMT 0.5

Difference is 0

so by recal Sanborn data is good

Worked on IDR # 3 after working IDR # 5

LCAO Meter Reads 1.8

Value From Cal Curve 28 Volts

Value from TM curve 28 V

Level of 29.0 VDC Power Supply 27.67

difference between TM and 29.0 VDC

Power Supply .33 SB NMT 0.4

so by recal. of Sanborn recorder
 data is good.

4-13-72

Ret TPS "A" ABC GCTA - 005 - 16
 Performs RTV mod to CTV.

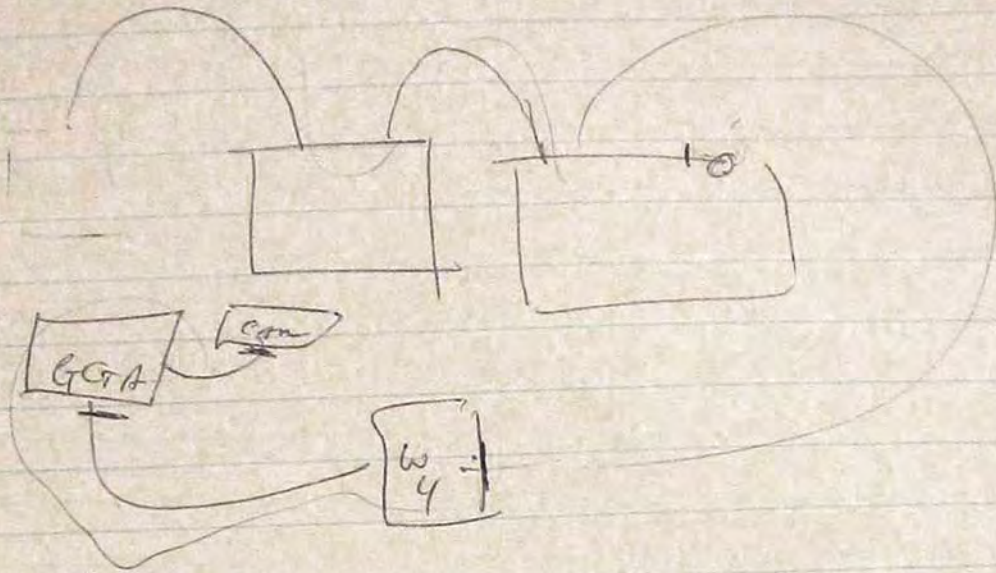
Hanson is on second shift if you need help getting signatures on mod sheets. We want to start the mod ASAP. Bob McCann said it was ok to do mod in Lab Annex. It'll take approx 20 hrs including epoxy cure times to do the mod. RCA is bringing mod kit in about 10:30 tonight. R&T needs to be completed by midnight. We'll use our QC on 0042 to cover mod work. You may have to slow 0042 to do the mod.

3/14/72

IDR#	<u>02</u>	PMI/NO	1(KH) level
36.570	Mod	Reads	1.25 50
0.735	To 1.225	Rad	

Found The CTS OSCILLOSCOPE TO
 Be out of Cal New Reading
 2.2 giving A Reading of 1.2
 in Spec.

Closed By Dev To Check Cal
 of scope.



$$\begin{array}{r}
 122 \\
 \hline
 60 \overline{) 7360} \\
 \underline{60} \\
 136 \\
 \underline{120} \\
 160
 \end{array}
 \quad
 \begin{array}{r}
 2 \\
 \hline
 60 \overline{) 120}
 \end{array}$$

CURE TIME START 2 0300
ELAPSED TIME 2 1044