

NOTE TABLETS

SMEAT	
NOTE TABLETS	
PART NO.	S/N
SKC32100168 - 613	1003

ITEM # <u>63</u>	SMEAT PROBLEM ITEM	DATE <u>8-1-72</u>
DR # <u>12231005</u>	ACTION ASSIGNED MSFC TO: <u>KS/R. Cohen</u>	SUSPENSE DATE <u></u>

DISCREPANCY: Urine system capacity (2000 ml) exceeded by SMEAT crewman

SHEET 1 OF 2

The SPT is currently evaluating a proposed method similar to one outlined here. This will be discussed later, however, an more detail later, but ~~initially~~ an initial impression is that it is not practical.

CORRECTIVE ACTION: Two procedural amendments for collecting urine allow the capacity of the system to be increased from 2000 ml per day to either 2700 ml or 5400 ml per day. These procedural concepts should be incorporated by tailoring their implementation around the urine output rates based upon data to be taken during Mini-SIM. Implementation of the concept for increasing collection to 2700 ml per day involves filling the Urine Bladder in the normal manner and allowing an additional void (the first in the morning) of a minimum of 700 ml (assuming the bladder is completely full) for a maximum system capacity of 2000 ml in the bladder and 700 ml in the separator. The urine drawer is then opened and the fluid in the separator is pumped into the bladder, now unconfined by the pressure plate, etc. The urine pool in the bladder is manually mixed by kneading the bag by hand. The recirculation line is removed from its compartment and the inner pinchclamp. The specimen roller is rolled back and forth on the recirculation hose three times to clear the small unmixed pocket of urine trapped in the hose and to mix it with the pool. The sample is then taken by inserting the recirculation nozzle into the sample collection bag in the normal manner. With the specimen roller removed and the recirculation valve open, the sample can be taken by applying gentle hand pressure on the urine bladder.

In the case where an Astronaut consistently voids more than 2700 ml per day the normal procedure used on a half day and half sample basis will allow the collection of 4000 ml per day.

If more urine need be collected, the procedure for 2700 ml per day noted above can be implemented using the half day, half sample method to increase collection to 5400 ml per day.

EAT LM IIM	DATE 7-1-72
ACTION ASSIGNED MSFC TO: KS/R. Cohen	SUSPENSE DATE

AGENCY:

PAGE 2 of 2

CONNECTIVE ACTION:

If flush procedures are dropped all collections can be increased by 200 or 400 ml for the 24 hour single or the half day, half sample concept.

This DR is closed pending verification in HS-62, HS-2 and possibly SMEAT.

Source of Information: S. D. McIntyre - 8/12/72)

Item #
63

Comment

Truly
8/25/72

1. What does MINISIM have to do with urine volumes? Seems like SMEAT is the place to base decisions on.
2. This approach does not account for the time that 2000 ml. is exceeded during the night.
3. It further does not account for the fact that present flight plan approach is to take urine samples (1 man, all drawers) after breakfast (Not enough time before breakfast).
4. This approach assumes that each crewman will take his own urine sample, which is not the plan, since it is extremely wasteful of crew time.
for months
5. The MDAC argument ^{for months} against a clamp on the separator urine outlet has been that the pressure plate ensures that the bag will not come off. This is not ~~to~~ true with this approach

63 (contd) in the design is not good enough for this approach.

6. Nobody is going to know at 5 PM how much his total wine void for the day will be, making the 2nd paragraph practically impossible to implement.

7. Same for the last paragraph.

8. I agree about deleting the flush if possible - when is a decision going to be made? ~~and~~

9. The text says "this DR is closed" - the bottom of the sheet says "open" ??

64 1. Is statement true about failure occurring during removal? If so, I grudgingly agree.

65 1. Straight baloney. Crippen knew how to fold bag before SMENT. It's a lousy design of the upper seal.

125

1. Baloney. We asked for a larger spoon at CDR (CSR?, CCSR?) and were talked out of it by Bill Humphrey. We need a big spoon, just like SWEAT says.

140

1. Do SWEATERS agree?

ITEM # 64	SMEAT PROBLEM ITEM	DATE
DR #	ACTION ASSIGNED MSFC TO: KS/R. Cohen	SUSPENSE DATE

DISCREPANCY: Fecal bag cuff debonds from teflon.

Agree

CORRECTIVE ACTION:

This problem usually occurs upon removal of the Fecal Bag from the commode. This is not a problem in any way to the function operation of these bags.

Design change would be a major change with potential impact to program. SMEAT crew using current bag successfully.

ITEM # 65	SMEAT PROBLEM ITEM	DATE
DR #	ACTION ASSIGNED MSFC TO: KS/R. Cohen	SUSPENSE DATE

DISCREPANCY: Fecal bag sealing procedure.

CORRECTIVE ACTION: This problem is agreed to be one of establishing adequate crew training in the procedure required to seal the bags. No problem since indoctrination to crew on proper procedures.

Source of Information - S. D. McIntyre - 8/18/72.

~~The so called~~ the so called indoctrination
 The only thing which we were prebreathing
 session, which was held which we were prebreathing
 prior to the test, accomplished was to convince
 us that the fecal bag sealing
 procedures definitely had some problems
 It took the so called expert 25 men
 with the help of Mr. Sauer to get the bag
 sealed and he couldn't have made it then
 without the help of Mr. Sauer and two young engineers
 was not sealed any better than we had been

SKYLAB PROGRAM OFFICE CONTACT:

doing ~~all along~~ prior to this quote
"training session." The primary problem
is in the second read. There are
numerous pieces of green adhesive backing (1)
(2) to be removed just to make
this one read and then it's almost
impossible to make it neat.

The bags are still folded by
the crew in the same manner that we
demonstrated to MA Kleinknecht prior
to the test.

AN ADEQUATE SEAL CAN BE
MADE WITH THE CURRENT BAG, THERE
IS JUST A LOT OF ~~top~~ green paper,
seals sticking where they shouldn't
stick, and then the ~~seal being a finger~~
~~rather crude looking~~ having the
seal look rather crude when you
are finished.

ITEM # 125	SMEAT PROBLEM ITEM	DATE 8-5-72
DR # 1S260312	ACTION ASSIGNED DE/W. Bush TO: _____	SUSPENSE DATE _____

SCREPANCY: Eating utensils are too small.

RECTIVE ACTION:

These utensils are flight type and were presented at all food system design reviews. No action anticipated on this item.

Comment: Present utensils are 3/4 size, smooth surface for ease of cleaning. Results of KC-135 zero-g flights indicates no problem in food quantity adhering to spoon, 12-sets are on hand. 3/4 size was chosen on basis of wt, vol., and ease of "cleaning out" cans.

*we still feel the large spoon
is required to clean the container
in the manner MOTO experiments
require and to make eating a
the time required to eat reasonably*

ITEM # 140	SMEAT PROBLEM ITEM	DATE 8-8-72
DR # 1S260341	ACTION ASSIGNED TO: MSEC/S. McIntyre	SUSPENSE DATE

SCREPANCY: Crew stated wet wipes are very difficult to remove.

RECTIVE ACTION: The wet wipes are compacted in the dispenser (301 wipes/dispenser) spring tension is used to keep the wet wipes at the front of the dispenser and the first few will be a little difficult to remove. No action anticipated on this item.

Note: Dispenser were fabricated by MSC not per Skylab flight drawings.

They are difficult to remove all the way to the end - the last one comes out easy!

FCOD Concurrence _____

ITEM # <u>158</u>	SMEAT PROBLEM ITEM	DATE <u>8/17/72</u>
DR # <u>12231347</u>	ACTION ASSIGNED TO: <u>DE/W. Huffstetler</u>	SUSPENSE DATE <u> </u>

DISCREPANCY:

Crew reports they need more locations for light mountings on IMSS work table.

NOTE: SMEAT does not have benefit of Skylab portable spotlight for additional lighting capability in dim lighted areas.

*Problem is you need more light
shiny on the table.*

CORRECTIVE ACTION:

SMEAT UNIQUE - Light mountings on IMSS work table is not Skylab concept. Skylab carries portable spotlights which attach to the universal mount and floor grid. Lighting levels and mounting locations for IMSS, universal mount, and OWS grid have been reviewed and accepted in OWS flight No. 1 by FCOD.

Conan

FCOD Concurrence

ITEM # 178.0	SMEAT PROBLEM ITEM	DATE 8-3-72
DR # 1S260283 12231372	ACTION: ASSIGNED TO: KW/R. A. McComb	SUSPENSE DATE

DISCREPANCY: Poor Lighting for SMEAT

RECTIVE ACTION: SMEAT lighting is not a duplication of OWS lighting.

In the mission, portable lights will be available.

with the exception of the portable lights the SMEAT lighting is a good simulation of the OWS lighting

FOOD Concurrence

the only problem with the lighting is for close work and if the Skylab portable light can be used for all their requirements there is no prob

SKYLAB PROGRAM OFFICE CONTACT:

CLOSED

ITEM # <u>7</u>	SMEAT PROBLEM ITEM	DATE <u>7-27-72</u>
DR # <u>1S260152</u>	ACTION ASSIGNED DE4/W. J. Huffstetler TO: KW/J. L. Lowery	SUSPENS DATE

DISCREPANCY: The IMSS ^{suppository} ~~depository~~ was unmarked. Needs identification

CORRECTIVE ACTION: Identification established and passed on to crewman. FDF updated to reflect identification.

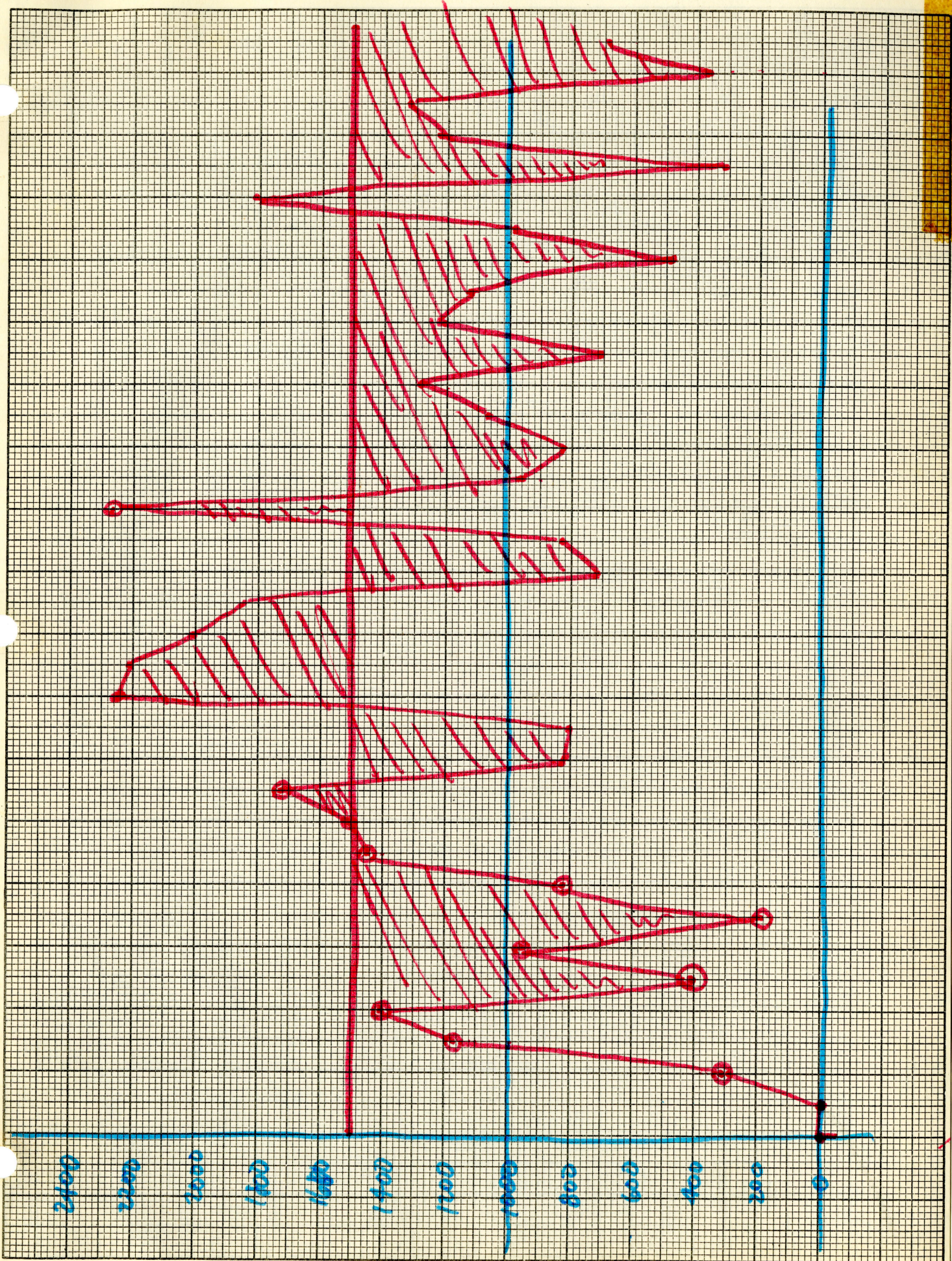
Concurrence

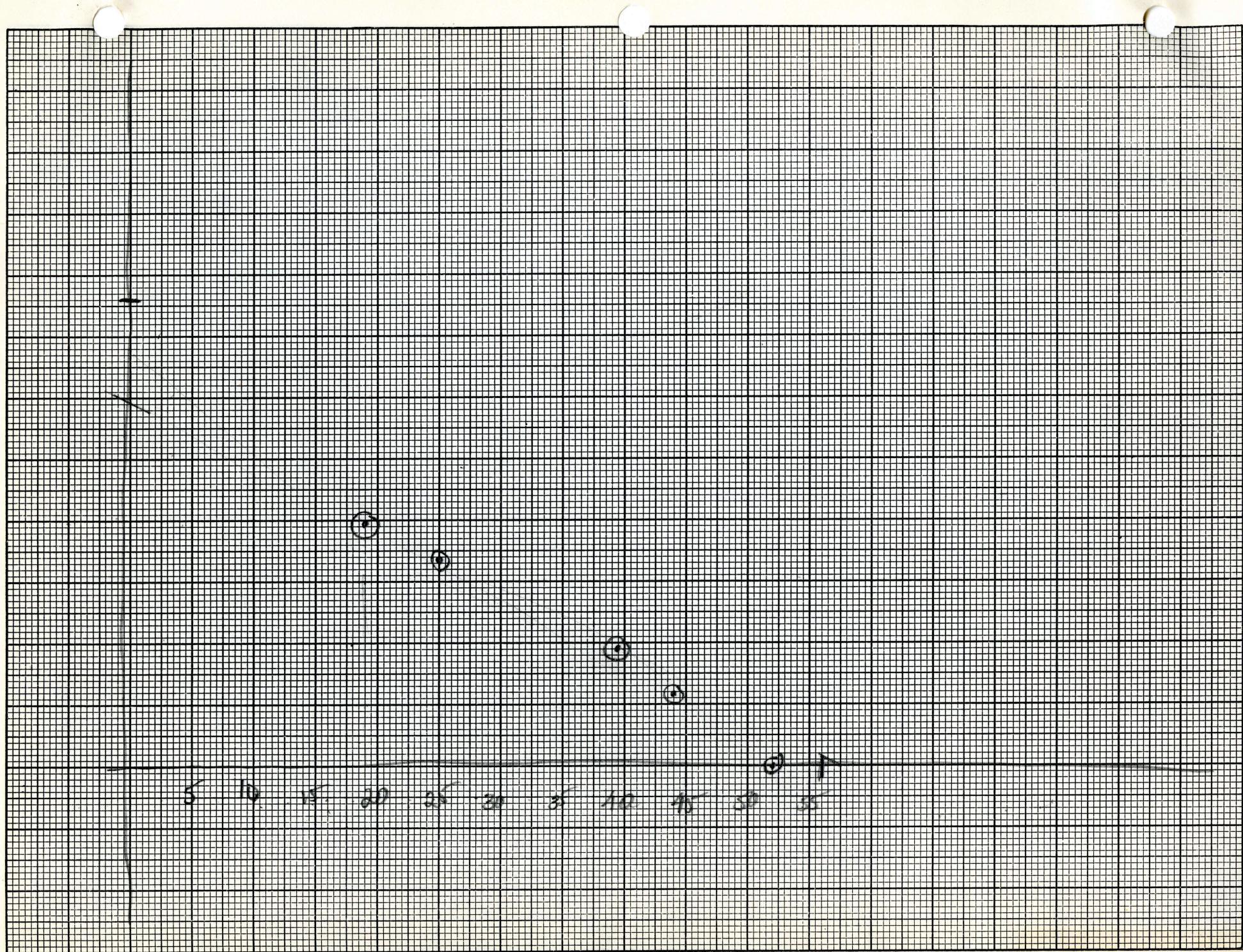
FCOD Concurrence _____

SKYLAB PROGRAM OFFICE CONTACT:

1. Category		DISCREPANCY REPORT/MATERIAL REVIEW RECORD NASA - MANNED SPACECRAFT CENTER					PAGE <u>1</u> OF <u>1</u>	
2. Article Name <u>DD</u> <u>IMSS</u>		3. Drawing Number		4. Serial/Lot Number		5. RECORD NUMBER IDR <u>15260256</u> DR/MRR <u>122.31347</u>		
6. Contractor's Name		7. Contractor's Drawing Number		8. Contractor's Serial Number		12. Next Higher Assy.		
9. Supplier's Name		10. Supplier's Drawing Number		11. Supplier's Serial No.		18. System		
13. REF. Document No.		14. Spacecraft		15. Fault		16. Funct.		17. Cause/Origin
18. System		19. Disposition						
DISCREPANCY <u>GMT 15:20:00</u>								
<u>CROWN REPORTS THEY NEED MORE LOCATIONS FOR LIGHT MOUNTING ON IMSS WORKS.</u>								
<u>TABLE</u>								
20. Initiator's Signature <u>[Signature]</u>		21. Stamp Number <u>29M</u>		22. Organization and Location of Initiator <u>NASA-OR Bldg 7</u>		23. Date <u>8-2-72</u>		
DISPOSITION								
24. MRB Action Required? ☒ YES ☐ NO		25. Replacement Part Number <u>—</u>		26. Retest Required ☐ Yes ☒ No		27. Retest Accept Date <u>—</u>		28. FIAR Number
29. MRB Decision ☒ USE "AS IS" ☐ REPAIR ☐ REWORK ☐ SCRAP		INSTRUCTIONS <u>ASSIGNED TO Charles Chassey</u> <u>John May 8/2/72</u>						QC STAMP CONT. IN NASA
<u>IMSS P.E. HAS HAD LIGHTING MEASUREMENTS TAKEN ON THE IMSS INCUBATOR WORK STATION PLATFORM AND THE RESULTS IS AN AVERAGE OF 4 FT-CANDLES ILLUMINATION LEVEL. PORTABLE SPOT LIGHTS ARE AVAILABLE IN SKYLAB TO PROVIDE ADDITIONAL LIGHTING</u>								
<u>C.E. Chassey 8/17/72</u>								
<u>DE NOTE POSSIBLE SKYLAB IMPACT ARE</u>								
				30. DATE <u>8-17-72</u> FINAL ACCEPTANCE				
MRB APPROVAL SIGNATURES								
31. System Engineer (Contractor)		DATE		32. System Engineer (NASA) <u>C.E. Chassey</u>		DATE <u>8/17/72</u>		
33. Quality Control Rep (Contractor)		DATE		34. Quality Control Rep. (NASA) <u>[Signature]</u>		DATE		
35. Program Office Rep. (Office Code)		DATE		36. Quality Engineer (NASA) <u>A. A. McCampbell, NDS</u>		DATE <u>8/17/72</u>		

Category		DISCREPANCY REPORT/MATERIAL REVIEW RECORD					PAGE ____ OF ____	
NASA - MANNED SPACECRAFT CENTER								
1. Article Name: EC		3. Drawing Number		4. Serial Lot Number		5. RECORD NUMBER		
2. Article Name: Facility Chamber		7. Contractor's Drawing Number		8. Contractor's Serial Number		IDR 12230253		
6. Contractor's Name		10. Supplier's Drawing Number		11. Supplier's Serial No.		DR/MRR 12231372		
9. Supplier's Name		15. Fault		16. Funct.		17. Cause/Origin		
13. REF. Document No.		14. Spacecraft		18. System		19. Disposition		
DISCREPANCY 600T 01:39:00								
CREW COMMENT. POOR LIGHTING, ROOM AND WORKING SPACE. ADDITIONAL INFO: CREW COMMENTED ON 8/4/72 THAT THE LIGHTING IS A SKYLAB PROBLEM, IN THAT LIGHT IS INSUFFICIENT FOR CLOSE UP WORK. Logged 8/4/72								
20. Initiator's Signature		21. Stamp Number		22. Organization and Location of Initiator		23. Date		
<i>[Signature]</i>		29M		MDA-CR 01067		8-3-72		
DISPOSITION								
24. MRB Action Required?		25. Replacement Part Number		26. Retest Required		27. Retest Accept Date		
☒ YES ☒ NO				☐ Yes ☒ No				
29. MRB Decision		INSTRUCTIONS						
☐ USE "AS IS" ☐ REPAIR ☐ REWORK ☐ SCRAP		Assigned to John Denny 8-3-72 S.K. Lewis Charles D. Wheelwright / CD3 RMR SKYLAB ILLUMINATION CBI SPEC 3.7 FIC. GENERAL, 20 FIC. FOR CLOSE WORK. FOR CLOSE WORK PORTABLE LIGHTS ARE TO BE USED FOR INCREASING LIGHT LEVEL WHEN CLOSE WORK REQUIRES HIGHER LEVEL. THERE ARE THREE PORTABLE LIGHTS ON FIT. VEHICLE. SMEAT CREW DID NOT USE PORTABLE LIGHTS. THE LIGHT LEVELS ARE LOW - MARGINAL - FIT CREWS HAVE ACCEPTED PRESENT LEVELS AND WILL USE PORTABLE LIGHTS WHEN NEEDED. IN FLT VEC. A DIFFERENT AREA THAN THAT WHICH OCCURRED IN SMEAT MAY BE LOW. THIS IS BECAUSE SMEAT GEOMETRY IS DIFFERENT THEN FIC VEHICLE. CD Wheelwright						
		QC STAMP						
		CONT. NASA						
		8/8						
		30. DATE 8-18-72 FINAL ACCEPTANCE						
MRB APPROVAL SIGNATURES								
31. System Engineer (Contractor)		DATE		32. System Engineer (NASA)		DATE		
				<i>[Signature]</i>		8/18/72		
33. Quality Control Rep. (Contractor)		DATE		34. Quality Control Rep. (NASA)		DATE		
35. Program Office Rep. (Office Code)		DATE		36. Quality Engineer (NASA)		DATE		
				<i>[Signature]</i>		8/18/72		





232
216
16

FULL PACKAGE
TISSUES

$9\frac{1}{2} \times 8 = 76"$
 $9\frac{1}{2} \times 5 = 47\frac{1}{2}"$

WIPES (20.631578)
(41.26315789)

EVENING
216

EVENING
225

EVENING
225

0130 226

AF

AFTER BREAKFAST

1430 232

AFTER DINNER

0035 246

EMPTY WIPES 160.4

FACE PIECE 6.15

WIPES
739(4 1/2

700 (068) 1 1/4 (Full)

737 6 3/8

814 (076) 1/2

814 (074) 2 7/8

902 (077) 1"

908 (065) 1"

914 (066) 1" = 1021
TISSUES 26 1/2 49 1/2

TISSUES
737 4 1/4

84 (005) 2 3/4

902 (004) 1 1/4

908 (007) 1 1/4

94 (017) 1 3/4 = 1413.26

47 1/2 11 1/4 36 1/2

13 1/2 3.9

206

FULL

9 1/2 EMPTY

9 1/2 EMPTY

9

1"

1"

2" 36 1/2

6 3/8

3 1/4

1 1/8

1"

1"

13

$8\frac{1}{2}$

$39\frac{1}{2}$

$76 - 36\frac{1}{2}$

$47\frac{1}{2} - 13 = 34\frac{1}{2}$

9 1/2 EMPTY

9 1/2 EMPTY

2 3/4

9 1/2 EMPTY

5"

1"

1"

4 1/2 42 3/4

3 1/4

130

685

$33\frac{1}{4}$

$76 - 42\frac{3}{4}$

EMPTY 9 1/2

EMPTY 9 1/2

4 3/8

9 1/2

7 1/4

6 1/4

1 1/4

EMPTY 9 1/2 53 7/8

3

19

$76 - 57$

EMPTY 9 1/2

EMPTY 9 1/2

4 1/4

EMPTY 9 1/2

7 1/4

8 3/4

6 1/4

EMPTY 9 1/2 65 1/2

11 1/2

11 1/2

76 - 64 1/2

28 JUN

28 JUN

0

29 JUN

30 JUN

0

1 JUL

2 JUL

385

3 JUL

2609

4 JUL

5 JUL

923

6 JUL

7 JUL

1474

8 JUL

9 JUL

3407

10 JUL

15

11 JUL

12 JUL

552

16 JUL

1099

17 JUL

4305

18 JUL

19 JUL

1821

20 JUL

23 JUL

24 JUL

26 JUL

27 JUL

28 JUL

30 JUL

31 JUL

1 AUG

2 AUG

3 AUG

4 AUG

5 AUG

6 AUG