

JD

207.

243.0

207.

198

T-1

25

Bo

CRIP

BILL

R/L

R/L

R/L

LA 10⁵/₁₆ 10³/₁₆ 10¹/₄ 10¹/₈12 11³/₄UA 13¹/₈ 12¹/₂ 11¹/₂ 11³/₈13¹/₂ 13

Chest 40

37¹/₈40¹/₂ in

42 exp.

Abd- 35

34¹/₄38³/₈Thigh 21⁷/₈ 21¹/₂ 21¹/₄ 21³/₈22⁷/₈ 23³/₄Calf 15⁵/₈ 15⁷/₈ 14⁵/₈ 14⁵/₈16³/₄ 17.0 ?

W.T.

Crip

Bo

L.A. 20

20

Curl- 16 x 25[#]22 x 20[#]35 x 20[#] Elbow outTri Curl 9 x 25[#]26[#] 15 x 20[#]20 x 15[#]

All meas taken in anatomical position

11A = biceps max girth

LA = Arm 3" below humeral condyle, lat.

Chest = girth at nipple level

Abd = at iliac crest level

Thigh = 8" above lat. malleolus

Calf = max girth

	Ⓡ	Bo	Ⓛ	Ⓡ	Crip	Ⓛ	Ⓡ	WT	Ⓛ
LA		11 ⁹ / ₁₆	11 ¹ / ₈		10 ³ / ₈	10 ¹ / ₄		10 ³ / ₄	10 ⁷ / ₈
UA		12 ⁷ / ₈	11 ³ / ₄		11 ¹ / ₂	11 ⁷ / ₈		12 ³ / ₄	12 ³ / ₄
Chest		40 ¹ / ₂	41 ⁷ / ₈		37 ¹ / ₈	39 ¹ / ₈ in		38 ¹ / ₄	40 ¹ / ₄
Abd.		34 ¹⁵ / ₁₆			33 ³ / ₄			36 ¹ / ₄	
Thigh		19⁵/₈ 22 ¹ / ₂	22 ³ / ₁₆		20 ⁷ / ₈	21 ¹ / ₈ 21³/₈		22 ⁷ / ₈	22
Calf		15 ¹ / ₄	15 ⁵ / ₁₆		14 ¹ / ₈	14 ¹ / ₈		16 ³ / ₄	16 ¹ / ₂
LA		10 ⁹ / ₁₆	11 ¹ / ₈		10 ¹ / ₄	10		11 ⁵ / ₈	11 ³ / ₁₆
UA		12 ⁵ / ₈	12 ³ / ₁₆		11 ¹ / ₂	11 ¹ / ₂		12 ¹ / ₂	12 ⁵ / ₈
Chest		Ex 39 ⁹ / ₁₆ in	41 ³ / ₈		36 ⁷ / ₈	38 ⁵ / ₈		37 ³ / ₄	40 ³ / ₈
Abd.		35 ¹ / ₁₆			33 ¹ / ₂			35 ³ / ₄	
Thigh		21 ¹ / ₂	22 ³ / ₄		19 ⁷ / ₈	20 ³ / ₄		21 ³ / ₄	22 ¹ / ₄
Calf		15 ¹ / ₁₆	15 ³ / ₁₆		13 ⁷ / ₈	14 ¹ / ₁₆		16 ¹ / ₂	17

~~256~~ ~~262~~ 263

	Crip		Bo		W.T.	
	R	L	R	L	R	L
LA	10 $\frac{1}{4}$	10 $\frac{1}{16}$	11 $\frac{1}{2}$	11	11 $\frac{1}{2}$	11 $\frac{1}{4}$
UA	11 $\frac{5}{8}$	11 $\frac{3}{8}$	12 $\frac{3}{8}$	12 $\frac{1}{2}$	13 $\frac{1}{8}$	13
Chest	36 $\frac{9}{16}$ ex	38 $\frac{3}{4}$ in	40 $\frac{1}{4}$	41 $\frac{7}{8}$	37 $\frac{3}{4}$	40 $\frac{1}{8}$
Abd.	33 $\frac{3}{4}$		35 $\frac{7}{16}$		35 $\frac{5}{8}$	
Thigh	19 $\frac{7}{8}$	20 $\frac{3}{4}$	21 $\frac{7}{16}$	22 $\frac{15}{16}$	22 $\frac{7}{8}$	21 $\frac{3}{4}$
Calf	13 $\frac{7}{8}$	13 $\frac{15}{16}$	15 $\frac{3}{16}$	15 $\frac{5}{16}$	16 $\frac{1}{2}$	16 $\frac{3}{8}$

226 Bob Ko

Temp- 97.5 oral thermom.

Head + neck - Normal 3 nodes

Eyes - Normal lids + conjunctiva - EOM normal good light reflex
~~sl. lacrimation~~

Ears - Ext. + canal normal $\bar{c}$ mod. amt. cerumen. T.M. + Vals. unremark.

Eyes - Normal lids, conjunct, EOM light reflex and retinae

Nose - Normal ext., sl. crusting, sl. yellow mucoid disch. in $\textcircled{L}$ nares
~~which was~~ whose mucosa was sl. swollen - $\textcircled{R}$ nares ess. normal

Mouth + Throat - light whitish furring of tongue - normal oropharynx $\bar{c}$ injection or mucos

Chest - Normal resp. movements and sounds

Heart - Normal sinus arrhythmia - normal sounds - M. could be heard today over most of precordium esp. A. area. Gr I low freq. pan-sys - Flat

Neuro - Wrist + biceps reflex unchanged

Integument - beard growing, few tiny pustules on back

Impression - Normal exam. unchanged from 221

220

1 M 55 1

Bobko -

98.2

Head + Neck - No occipital or cervical nodes ~~+~~ 3-4 mm. (L)
submandib.

Eyes - full range of motion, equal light reflex, lids + conjunctiva
normal - discs flat, no appreciable change in Aa ~~to~~ Vv. retina normal
? less red than 1 wk ago

Ears - Ext. unremarkable - Ant. wall left ext. canal sl. inj. T.M.
unremarkable. no injection

Nose - Ext. normal - (L) int. nares had normal mucosa color - slight
crusting near orifice - (R) mucosa normal color - slightly mod.
swollen, $\bar{c}$ small amt. whitish ~~exudate~~ drainage - much less
swelling + inj. than on entry or 1 wk ago

Mouth + throat - tongue had moderate whitish coating
some increase in plaques on teeth - gingiva normal - pillar
+ oro-pharyngeal area slightly injected.

Chest -

Lungs - normal movement of cage + to percussion ~ 5 cm -
breath sounds normal except ? sl. rale like sounds
in bronchial area

Heart - sl. sinus arrhythmia - normal sounds 5 mm - + normally
split 2^o sounds

Abd. - normal sounds

Neuro - strength, reflexes + sensitivity normal -
biceps not elicited

Integument - growing beard, few ~~to~~ small 2-3 mm pustules
 $\bar{c}$ discrete margins on back and shoulders - less than on
entry

Imp. - Normal exam - Improvement in nasal congestion

213

The usual changes of hoarseness, inability to whistle and quitness were present on entry however the feeling of slight dissociation was absent. In spite of rigid external stoicism there was increased nervous tone apparent esp. in the Cdr. Gas problems increased over the first two days & a plateau of more or less constant flatulency in all crew members by each evening. SPT had one acute episode of cramps and gas after a meal including pea soup but this did not recur on subsequent eating of pea soup. New electrode adhesive rings are causing reactions in all subjects esp. in the axillary areas. There is no blistering or infection but some skin maceration. Humidity has not been a problem except some drying of anterior nares. PLT was given nasal emollient which has helped. CDR has had a typical allergic rxn. to the electrodes in the EEG cap & wheals and reddening ensuing and generalized head ache on two out of three attempts to wear it. A brief Px yesterday showed some possible increase in pustules on PLT's back, disappearance of previous cervical nodes, reduction in congestion of nasal mucosa & slight injection of oro-pharynx. There was mucopurulent drainage ^{over} the anterior meatus area - Cdr. had two diffusely swollen $1 \times 2\frac{1}{2}$ cm. cervical nodes at the angles of the jaw and an injected oropharynx. It appeared that retinas of both were redder than previous exams but nothing else definite. On chest exams there was a marked difficulty in percussion for the notes could not be heard either from reduced sound transmission or from masking low frequency noise. There was a similar reduction in auscultatory sounds though less marked. The previous murmur could not be definitely heard.

226 - 0145

Ba - Temp - 97.5

L nares

follicles on neck

m -

Crip - 98.2

L shoulder L max - L sub mand -

L-No

B-250 97.4

R ear

noses neg

L nares

C - 98.7

Px 235

Bobko Temp 97.5

Head and neck - No occipital, cervical or sub. mand. nodes - normal ROM and ~~tone~~ tone - growing beard -

Eyes - Normal palpebrae and conjunctivae - full ROM LOM, normal light reflex - discs normal & retinae paler than orig. exam. possibly ~~increased~~ A.V. & ↓ Vv. size increased

Ears ~~None~~ Ext. and int. canals T.M. unremarkable - T.M. moved on Vals.

Mouth Nose and Throat - slight whitish furring of tongue - teeth margins clean - pharynx and oropharynx unremarkable - no draining Slight crusting of nose and slight clear drainage R otherwise unremarkable and markedly improved over entry.

Chest - Lungs - good respiratory movement, normal excursion of lungs - normal breath sound - questionable hint of rale like sounds over R & L post. have previously noted the same -

Heart. Percussed normal size. Sounds normal ex. Grade I low pitched pansyst. @ heard at apex and aortic areas - *

Neuro - biceps reflex neg - normal knee and ankle reflexes - normal touch, Babinski, Romberg - no tremor or drift of outstretched hands -

Integument - unremarkable and virtually clear of pustules on entry - one isolated tiny pustule & ~1 cm. red area on R shoulder

* marked sinus? arrhythmia & ? coupling of long & short intervals

(over)

Px 235

Crippen - Dial T °F

Essentially no change from last px - ex. resolution
of folliculitis.

Px - 250

Babba - Temp. Or. 97.6°F

Head and Neck - No occipital, cervical or sub-mandibular nodes, barely palpable thyroid, full strength ROM & tonus - growing beard

Eyes - Normal palpebrae - conjunctivae slightly injected, full ROM & EOM, normal light reflex - discs are rather diffuse and blend slowly into retinae - no evidence of elevation or cupping - A.V. ratio appears slightly less than 1:1 -

Ears - Left canal had several free pieces of dry wax otherwise unremarkable; R canal was normal but distal portion posteriorly was injected & possible injection of post. TM. normal valsalva -

Nose, mouth and throat - tongue was clear - no plaque formation visible, gingivae normal as was throat - no inj. or drainage - mod. whitish-yellow mucous @ nares & ? injection of mucosa - @ int. nares unremarkable

Chest -

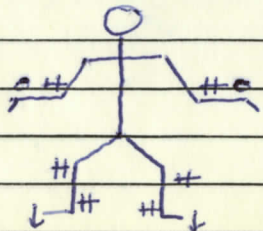
Lungs: Full, equal expansion - no dullness, normal breath sounds -

Heart - no visible or palp. PMI - no change in areas of dullness. Slight sinus arrhythmia - sounds normal ex. 6th pansys. m- previously noted -

Abdomen - liver edges hard to delineate by percussion & palp - no masses or tenderness - active bowel sounds

Musculo-skeletal - no changes noted in skeletal system - normal strength in neck shoulders arms & legs - See also measurements -

Neuro - normal sense of light touch in extremities trunk & face - normal finger to nose, no tremor of hands & fingers



Integument - normal color and texture - occasional small ~~pimple~~ pustule on back - small excoriations on legs - still clearer than on entry -

251 - Today the (R) ext. canal was cleaned and there was only ~~a~~ slightly ~~more~~ injected on the post. wall that was clearing and which did not involve the T.M.

192 - Dry Run

Bo's tongue was covered w black 'fur'

On pk Cripps turbinates were inj. + swollen + Bo's swollen + pale R & whitish drainage -

Immediately on entry things seemed slightly distant and somewhat detached - also confused easily on minor points but no decrement on general specific performance - Although any subjective effects were denied by other crewmen a slight air of confusion appeared present, especially . This effect disappeared in 2-3 hrs. There appears to be a marked reduction in respiratory ~~rate~~ and cardiac rates - Unfortunately no normal resp. rates are avail.

193 Slept poorly - asleep quickly after reading but waked by comm. + frequently awakened by noises + frequent (4-5) small urinations Felt well on awakening - Sound level which was very depressed (~10 db) yesterday sounds normal - can't whistle - voices pitched lower and hoarse - Only slight dryness noted - Boh Crippens HR seated was 94 + Resp 19 - Heart rates seem lower + resp. in LBNP definitely lower yesterday - On exercise program Crip had 56 seated + Ear piece 85 at 1 min had 76 + 85 - Went to 225 W + then dropped to 30 W - 118 vs 125 load again went to 220 + HR + dropped out at 130 HR to 30 W. No resp rate on ergom - 10 min

195/0011	Calf		HR	BP	Res	Seated
	L	R				
B	15 3/8	15 5/16	76	138/85		
C			61	115/80		
T	16 7/8	16 7/8	80	119/80		after ergom

M-17

235 -

Cr

102 - Day Run - 501

B₀ 97.6°F

98.4

226 Crippen
Temp - 98.2

Head + Neck - Normal $\bar{3}$ palp. nodes

Eyes - Normal lids, conjunctivae, EOM, retinæ + pupillary reflex
bluish discolor. sub orbital.

Ears - Ext. normal - @ ext. canal injected post. + wet - @ mod. inj -
T.M. normal

Nose - Ess. normal

Mouth and Throat - Normal

Chest - Normal - Mm - of last wk. ~~not~~ questionably present.

Neuro - Wrist + biceps reflexes unchanged

Integument - 4-5 pustules $\bar{2}$ red base on @ scapular area -
several eroded pustules around follicles @ submental area
~~and~~ somewhat confluent $\sim 1 \times 1$ cm - @ maxillary "
area has 6-8 pustules which appeared today. former area
of acne ~~between~~ on forehead has ess. cleared.

Imp. folliculitis, will get culture tomorrow and have subj.
use phisohex and avoid picking at it.

227 Remarkable clearing of lesions overnight so much
that culture did not seem worth while - will observe -

221

Crippen - T-98.04

BP - seated R 119/80/55
125/75

L 110/75/
121/83

Head & Neck - No occipital ~~nodes~~ or cervical nodes, (R) sub-mandib node ~ $1\frac{1}{2} \times \frac{1}{2}$ cm. movable - normal thyroid - has ~~no~~ 1 cm erosion around follicle, on (L) sub-mand. area -

Eyes - Normal lids, conjunctivae, full RDM & light reflex - normal discs & retinæ & AaVv - slight increase in color thought to be present on 1st exam, not present -

Ears - Ext. unremarkable, (R) pos. canal mod. injected, T.M. & Vals. norm.

Nose - Ext. norm., sl. crusting around orifices, sl. amt. serous drainage ess. normal mucosa

Mouth & throat - slight injection of oro-pharynx. other wise unrem.

Chest - Normal respiratory movements & sounds -

Heart - Normal bradycardia - PMI not appreciated detected -

Sounds normal $\bar{e}$ inspiratory splitting - ? pansystolic rumble or mm - heard in A. area & over most of precordium

Abd. - Normal sounds

Neuro - Equal bilat. reflexes in biceps & patella & heel, normal somatic sensitivity -

Integument - few pustules on back - Infected follicle (L) mental area -

7.11#

Impression - Normal exam, unchanged -

Px. 250

Crippen Temp. 98.2° oral, Day 250

Head and neck - no cervical or occipital nodes - small draining

R submand node - normal thyroid - several old areas of folliculitis in beard ^{under} chin

Eyes - palpebrae normal - slight conjunctival injection - ROM

LOM and pupillary reflex normal - normal discs + retinas

? increased A.V.

Ears - Exteris, external canal + TM unremarkable - normal movement on Vals.

Nose, mouth and throat - slight crusting around nares or otherwise unremarkable - lower lips abraded from drying + cracking - healing - no plaques or discolorations of teeth - gingiva normal - throat slightly injected but no drainage

Chest L. ^{lungs} normal ~~apex~~ respiratory movements - no dullness and normal sounds -

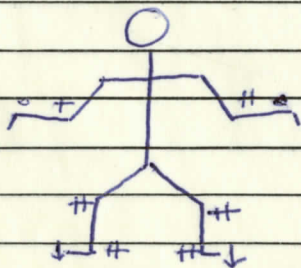
Heart - no vis. or palp. PMI - normal borders of dullness

N.S.R. - normal sounds 3 mm - wide physiologic splitting of 2° sounds

Abdomen - no dullness or masses - liver percussed within normal limits - active bowel sounds -

Musculo skeletal - see also girth measurements - normal strength in neck arms + legs - spinous process T-12 ? projected slightly - not tender or swollen -

Neuro - Sens - normal to light touch over face + extremities normal finger to nose - no hand tremor



Integument - few pustules across shoulders - growing beard -

Subj. has shown ↑ vascular reactivity in skin since entry ^{red} mottling of back and marked rubor after normal pressures

Rather striking dermatographia has been present over back since first noted a few days after entry -
(over)

250

Subject had drying and chapping of lips last wk. & was given ~~nasal~~ nasal emollient (iodinated oil + eucalyptol) & apparent resolution - Also had a small rash of localized pustules on shoulders which were untreated and are also resolving -

Starts contingency urine collection and will get clean catch just prior -

260 For the past wk - ^{subj.} ~~pt.~~ has had recurrence of folliculitis & marked pustule formation and red base of up to 1 cm - One on R upper lip and 1-2 along chin margin. He claims this is regular occurrence and did not want R or culture (other than Phisobex) (suspect strep.) and there has been slow resolution of lesions but there is still one smaller pustule on lip. No Sx.

263

Px - Crippen

Integument - a few scattered pustules $\bar{c}$ red bases, isolated, over ~~shoulder~~ shoulder + scapular area - almost confluent. Folliculitis in mental area $\bar{c}$ scattered resolving pustules in beard along mandibular regions. (R) Upper lip still has red area but no apparent infection - lips are not chapped today - two tiny submandib. nodes

Cardio-Vasc. - dermatographia is markedly reduced and subj. reports less itch on pressure points - ? sys. mm. again present Gr I -

Oral - lower (L) molar has $\sim$ 1 mm. brown spot which appears to be early caries.

Ears - ext. canal

Remainder of head, neck, chest + neuro were unchanged from last week -

Bobko -

Nose - left nares obstructed $\bar{c}$ small amount whitish mucous and moderately swollen mucosa -

Cardio-vasc. $\bar{c}$ 1 mm - present today along (L) sternal border

Remainder of head, neck, chest + neuro ess. unchanged from last px -

Electrode paste patch tests.

253 - Transverse sections of electrode pads with & without paste were taped $\bar{c}$ elastoplast coverings $\bar{c}$ slight pressure bi-frontally to Crippen and Bobko. These were taped just below the hair line at 0130 -

No sx. were noted until 1645 when Crippen complained of a steady generalized H.A. This followed ergometer exercise $\bar{c}$ moderate sweating and ~~after~~ wearing a snoopy cap. There was no stinging burning or localized R.A. ex. slight tenderness. On exam a swelling was noted ^{extending from} ~~beneath~~ the paste pads, subcutaneous, firm and extending ~~to~~ mesially & inferiorly.

It was worn until 1845 when H.A. prompted removal $\bar{c}$ the dry pad also. Swelling had increased to $3\frac{1}{2}$ cm. $\times$ $2\frac{1}{2}$ cm. $\times$ several (~ 7.8 mm) mm. thick. Area was not discolored, firm and slightly tender. Only the med. frontal ~~area~~ was affected. There were slight ~~pressure~~ marking from the electrode pressure ~~on~~ ~~the~~ the swollen side.

Dry electrode site had only a slight depression & no other signs -



30 mins. later there was slight erythema in the site area and little change in swelling but improvement of H.A.

2 hrs. later only ~~moderate~~ slight swelling remained and H.A. had cleared -

254 - Bobko's test patches were removed 46 hrs after application to forehead just below hairline - they had been secured $\bar{c}$ elastoplast possibly $\bar{c}$ excessive pressure for the dry electrode had produced a 3-4 mm - depression $\bar{c}$? elevation of depression margins around dry electrode and slightly less around the wet. Other than slight erythema under the taped area there were no other signs and no sx. Last evening while wearing the snoopy had a mild H.A. was noted but this cleared.

Personal observations

H. Thornton

253- Last night's use of 2° M 133 unit produced less reaction than previously.

260. During the increased temperature run (~238.7) athlete's foot increased rapidly on D foot - several fissures - tenderness and slight bleeding but no tenderness, swelling or rubor - Ventral and medial surfaces of 3, 4 + 5 toes. This has responded slowly to TINACTIN q D. No fissures at this time but flaking on Lat. Ant. sole and some maceration of toes.

There has been tendency to cramps, particularly gastroc's., when stretching, for the past 4-5 weeks. Lytes have remained normal.

Approx. 10 days after start of test had Sx. of pulpitis of D upper ant. molar which subsided - avoidance of chewing or food on that side. There has been occasional recurrence of Sx. There are also one or more sensitive spots on R side now - some sens. to candy.

For the past 3 days there have been several firm pustules - little pus formation and firm base along D cheek and forehead. Suspect infection on pillow possibly from nasal scaling - Using Phisohex.

261. Facial pustules are clearing. Cultures were taken from the pillow and pustule and both grew a gram pos. cocci ~~in pure culture~~ only and the colonies and microscopic characteristics appeared identical to the organism in Bob's urine sample. Still get Ferguson to positively identify it and also took nasal swab tonight.

Notes on IMSS:

Missing: light, tongue blades

should put all items together i.e. tongue blades

Pollitzer bag - small olive - no eff press

Percussion - marked decrease in audible notes, possible adaptation effects $\bar{c}$ increased tonal perception - able to percuss borders easily

Auscultation - marked decrease in level, apparent lowering of frequencies - bell is very low in freq. - breath sounds unchanged ex. $\downarrow$ amplitude + harsh quality over bronchial areas - whispered sounds poorly transmitted