

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

TARCOM HEARING
APPEAL FROM MERIT SYSTEM
PROTECTION BOARD

IN THE MATTER OF:

LEROY J. PLETTEN,

Appellant,

-vs-

DEPARTMENT OF THE ARMY,

Appellee.

Transcript of the deposition of EDWIN F.

BRAUN, a witness in the above-entitled cause, taken before
Norma J. Yeager, Notary Public in and for the County of Oakland,
State of Michigan; at 3000 Town Center, Suite 1150, Southfield,
Michigan 48075, on Monday, April 26, 1982, commencing at or about
the hour of 11:55 a.m.

APPEARANCES:

COOPER & COHEN, 3000 Town Center, Suite 1150, Southfield,
Michigan 48075, Appearing on behalf of the Appellant.
BY: STEVEN Z. COHEN, ESQ.

EMILY SEVALD BACON, ESQ., United States Army-Tank Automotive
Command, Detroit Arsenal, Warren, Michigan 48093, Appearing
on behalf of the Appellee.

ALSO PRESENT:

Leroy J. Pletten, Appellant.

1 Southfield, Michigan

2 Monday, April 26, 1982

3 Approximately 11:55 a.m.

4 E D W I N F . B R A U N

5 being first duly sworn, was examined and testified on his
6 oath as follows:

7 EXAMINATION

8 BY MS. BACON:

9 Q Would you give your name for the record, please?

10 A Edwin F. Braun, B-r-a-u-n.

11 Q What is your position at TACOM?

12 A Industrial Hygienist.

13 Q What are your responsibilities?

14 A Well, I help to identify, evaluate and recommend corrective
15 measures for hazards at TACOM and Detroit Arsenal area.

16 Q Health hazard?

17 A Yes, ma'am.

18 Q What is your educational background?

19 A Master's degree in analytical chemistry.

20 Q Do you belong to any associations?

21 A American Industrial Hygiene Association.

22 Q How long have you worked in the field of industrial hygiene?

23 A About 29 years.

24 Q How long have you worked at TACOM?

25 A Five years.

1 Q In general, what are the kinds of things you are asked to
2 test for?

3 A In general, any complaints that might arise in the environ-
4 ment that could possibly be identified as a health hazard.

5 Q Are you acquainted with the appellant in this case,
6 Mr. Pletten?

7 A Yes, I am.

8 Q Can you identify for me in the Agency's Response at Tab 4,
9 can you identify this document dated June 1st, 1979?

10 A Yes, I can. That is my document that I wrote.

11 Q Is that document the result of a study you conducted?

12 A Yes, I was requested to make a study of the work area and
13 working conditions of Leroy Pletten.

14 Q What did your study indicate then?

15 A My study indicated that based on the criteria that I was
16 using, there was adequate air movement per person in the
17 Personnel area where Leroy worked.

18 Q Did you make a recommendation in your report?

19 A Yes, I made recommendation that due to the summer weather
20 conditions, that Leroy was sitting adjacent to an open
21 window and I recommended he be placed closer to the air flow
22 source.

23 Q To the best of your knowledge, was your recommendation
24 complied with?

25 A Yes, it was. He was moved to another area.

1 Q What instrument, or instruments did you use in making your
2 evaluation?

3 A I used a commonly-known instrument called velometer, which
4 measures small amounts of air movement in environmental areas.
5 It is a hot-wire indicator; the air flow can detect a
6 calibrated amount of air and cubic feet per minute.

7 Q Is this test standard in your industry?

8 A Yes, it is an instrument that is calibrated periodically.

9 Q Did you make any subsequent air studies on June 1st -- since
10 June 1st?

11 A Yes, I made several after that over a period over two years.

12 Q In addition to air flow studies, velocity studies, have you
13 made any contaminant studies in Mr. Pletten's work area?

14 A Yes. I attempted to identify some of the constituents that
15 may be involved and carbon monoxide and nitrogen dioxide were
16 two selected most likely to be in condensations that would
17 be measureable.

18 Q These particular contaminants are contained in what?

19 A Cigarette smoke. I was testing for possible adverse effects
20 of cigarette smoke.

21 Q I refer you again to Tab 4, the Agency Response to DF dated
22 5 December 79 and ask if you can identify it?

23 A Yes. That is my letter written to Safety.

24 Q Now, attached to that DF are certain test reports, is that
25 correct?

1 A That is right.

2 Q Did you make that particular test?

3 A Yes, ma'am, I made those tests.

4 Q What instrument did you use on that test?

5 A A Draegermeter. It is a squeeze-bulb detector for detecting
6 small amounts used. The Kitawaga is made in Japan and
7 measures calibrated amounts of air through a previously
8 calibrated tube that detects these contaminants, or suspected
9 contaminants.

10 Q What standard were you using?

11 A I was using the OSHA standards that are mandatory for these
12 contaminants, and also the American Conference of Industrial
13 Hygiene Standards, which are current on an annual basis.

14 Q These standards contain threshold limits for these contami-
15 nants?

16 A Yes. Both these standards contain threshold for nitrogen
17 dioxide and carbon monoxide.

18 Q What does this particular test indicate?

19 A It indicates essentially less than detectable amounts. My
20 results were at the lower level of the tubes that I used
21 indicating that there were concentrations in quantity at the
22 lower limits of this equipment that may or may not have been
23 present down to zero concentrations.

24 Q You brought your files with you? The file reflects a
25 November 21, 1980 memorandum for the record entitled,

1 Ventilation Flow Study. Can you identify that?

2 A Yes. That was a memorandum for the records that I wrote.
3 Mr. Braun's name is signed at the bottom of that letter.

4 Q That reflects the testing used at that time?

5 A Yes, ma'am.

6 Q The record also reflects a memorandum dated 11 June 80.

7 A Right.

8 Q Did you prepare that memorandum?

9 A I did. That was not at the request of Mr. Pletten. It was
10 May Sweeney.

11 Q I direct you to the next DF dated 24 June 80 and ask you if
12 you prepared that?

13 A Yes, I did. I signed it and it was, again, a letter that
14 was sent to Mr. Kator, Leroy's supervisor in Personnel.

15 Q What does that letter reflect?

16 A I don't memorize it that quickly, I have to read it. I
17 identified it as being my letter. It indicates --

18 MR. COHEN: We can let the letter stand on
19 its face. It will be adopted by reference.

20 Q (By Ms. Bacon) I also direct you to the same tab, DF
21 dated October 2, 1980, and ask you if you prepared that?

22 A Yes, I did.

23 MS. BACON: I have no further questions at
24 this time.

25

EXAMINATION

BY MR. COHEN:

Q Mr. Braun, I am going to ask you a series of questions. If you don't understand them, stop me so I don't waste either of our times because it is a confusing topic to me.

Where did you get your Master's degree?

A Wayne State University.

Q What year?

A 1958.

Q Any subsequent courses, sir?

A Yes. I have taken a series of courses all over the country, ventilation courses.

Q Any addition to your graduate degree in 1958? When did you get your undergraduate degree?

A Michigan State, East Lansing, Michigan.

Q What year?

A 1950.

Q Were you in the service during the gap, sir?

A No, prior to my going to college; the Navy.

Q How did your study of air flow, ventilation flow, differ from the study performed by Mr. Lang?

A They may have been slightly different in contents, but in essential ingredients, they were identical.

Q Are you familiar with the reading Mr. Lang received from his test?

1 A Not completely. I understand that he was asked to comment
2 on the ventilation system and he, essentially, got a few
3 figures that were at variance to mine, which is understand-
4 able.

5 Q Why is it understandable?

6 A Well, I am not sure of the method that he used, but he may
7 be taking general samples rather than individual working
8 environment and I am not familiar where he took his reference
9 point.

10 Q Did you communicate between the two of you as to studies?

11 A Oh, yes. I am working with Facilities at the time.

12 Q Does he have specific training in air flow studies as well?

13 A Well, he is Facilities Engineer of the post. I am not
14 familiar with all of his background, but I presume he does.

15 Q You didn't talk shop then about ventilation studies,
16 methodology?

17 A He has several people on his staff that provide input into
18 his report and some of which are experts in the field of
19 ventilation, so I have talked shop with him on several
20 instances about ventilation studies, and essentially his
21 results and my results should be essentially the same.

22 Q A Master's degree of analytical chemistry does not exactly
23 prompt one to go into air studies. How did you happen to
24 go into this work?

25 A I have been in the field for 29 years and I started out by

1 doing lead analysis at Ford Motor Company, and lots of the
2 criteria that exists in the area of toxic ingredients is
3 involved with air studies, and I subsequently took several
4 ventilation courses that qualified me to make such studies.

5 Q Where did you take such studies, sir?

6 A North Carolina University, a ventilation course at East
7 Lansing, Michigan, which is recognized as being one of the
8 best courses in the country.

9 Q When was this taken, sir?

10 A About 1964, the one in North Carolina, and the one in East
11 Lansing, Michigan, was taken prior to that time and I am not
12 sure what date.

13 Q Before 1970 or after?

14 A Before 1970.

15 Q Any updating courses since then?

16 A Yes. I have taken general industrial hygiene courses at the
17 Army level in Aberdeen, Maryland, and they cover ventilation
18 as one of the topics. It is a general industrial hygiene
19 course.

20 Q Have you taken any specific training with regard to cigarette
21 smoking and the effects on the environment?

22 A No, but I have been involved in carbon monoxide exposures,
23 which is one of the ingredients of cigarettes.

24 Q Can you tell me all the ingredients of cigarettes?

25 A No, I cannot.

1 Q Can you tell me the major contents?

2 A By reference I would say nitrogen dioxide and carbon monoxide
3 are the major contents.

4 Q What are the other ones?

5 A I am not sure just what they are. There is many.

6 Q Did you look at all of them before you --

7 A Oh, yes, and there is numerous possible contaminants that
8 might come from cigarettes and I only have a limited amount
9 of equipment available to me. I am not a specialist in
10 cigarette smoking, I am general environmental control and I
11 have a limited amount of sampling equipment to my disposal.
12 That would be a more specialized study.

13 Q If there is something toxic in the air as cigarette deriva-
14 tives, you would not have been able to pick that up with your
15 instruments?

16 A That is true. However, all the references that I have made,
17 and we were in contact with our headquarters, indicating that
18 the two major contents were carbon and nitrogen.

19 Q Those are the two most likely to be in concentrations? You
20 relied on Headquarters to evaluate the circumstances, not
21 your own?

22 A Yes.

23 Q You didn't do an independent study to find out what is
24 involved in cigarette smoking?

25 A No, I did not.

1 Q Did you refer to the Surgeon General of the United States?

2 A Yes, the Assistant Surgeon General, Dr. Kopechne.

3 Q Mr. Braun, I am referred by my client to a memorandum of
4 February 20, 1980, that is written by you to Ms. Evelyn
5 Bertram. Are you familiar with that?

6 A If my name is on it. I wrote several.

7 Q Let me see if it is in the record before I start referring
8 you to it.

9 Let me show this to you. I am going to mark
10 this proposed Appellant's 2, but I would like you to identify
11 it. Your name appears on the back of that document, sir?

12 A Yes, sir.

13 Q You wrote it in conjunction with Dr. Holt?

14 A Yes, sir.

15 Q Now let me cite to you -- first of all, I move for admission
16 for proposed Appellant's 2 as Appellant's 2.

17 MS. BACON: I have no objection.

18 Q (By Mr. Cohen) Mr. Braun, I indicate for your knowledge at
19 the top where there are slashes, that indicates who wrote it?

20 A Yes, it does.

21 Q You just testified that Headquarters pointed out those two
22 particular elements of cigarette smoke were the most apparent
23 and most likely to be in concentration, yet in that statement,
24 Paragraph 4, "Carbon monoxide and nitrogen dioxide gases were
25 tested during this evaluation because these possible

1 contaminants have been identified as extremely minute
2 quantities during the secondary evaluation of tobacco smoke
3 by the American Lung Association." Isn't that at variance
4 with what you just told me that they are most likely to be
5 in concentration?

6 A It is secondary inhalation, not direct. I am still saying
7 not direct, and carbons are still primary contaminants, but
8 in minute quantities.

9 Q They are most likely to be in concentration?

10 A Yes.

11 Q Did they give you a list from the American Lung Association?

12 A Yes. I have read literature from Leroy Pletten, who provided
13 literature from the American Lung Association concerning
14 possible hazard material contained in cigarette smoke.

15 Q In your testifying, you testified here in the record that on
16 December 5, 1979, you did investigations of Building 230?

17 A Right.

18 Q At those times they did not have the new buildings up, is
19 that correct?

20 A That is correct, sir.

21 Q Have you subsequently done studies in those new buildings
22 as to ventilation, carbon monoxide, nitrogen dioxide testing?

23 A No, I have not.

24 Q Have you been directed to, or suggested to do some by
25 anybody?

1 A I have been requested to make air studies of 229 and I did
2 some air studies, two air studies in Building 229 to date,
3 but they are brand new buildings. They have been there about
4 a year. I subsequently will.

5 Q You will?

6 A Oh, yes, eventually.

7 Q How often do you do these studies?

8 A I do them as requested, not on a periodic basis.

9 Q You don't --

10 A Only when we suspect concentrations in excess of those levels
11 that are provided.

12 Q How would you suspect such a thing especially if it is an
13 odorless and colorless gas?

14 A On the basis of complaints after previous results that have
15 obtained.

16 Q Do you get a regular update from Mr. Lang with regard to his
17 test results on a bi-yearly basis?

18 A I am in these buildings periodically and he brings in
19 contractors for adjusting the ventilation in these two
20 buildings and I am apprised of what they are doing.

21 Q Did he tell you about his flow studies?

22 A Yes.

23 Q How often does he do them?

24 A As required.

25 Q He does not do them on a regular schedule?

A No. If everything is working fine, he may not do them for

1 quite a while.

2 Q Would it surprise you Mr. Lang testified he did them twice
3 yearly because of regulations?

4 A Not at all.

5 Q Mr. Braun, in your 5 December memo, Part 3, referring to your
6 conclusion, if you didn't test other gases, other carbon
7 monoxide and nitrogen oxide, how can you make conclusions as
8 to all possible hazardous gases?

9 A Based on the fact Headquarters informed me these are the two
10 most likely to be in significant concentrations, and there
11 had been relative concentration of other gas, that would be
12 in the same area of toxicity, the same general area of
13 toxicity and it would be most likely we would get, if there
14 was a preponderance of cigarette smoke in the area, we would
15 get high carbon monoxide first and results of concentration
16 could also be high.

17 Q It would be, Mr. Braun, results of specific carbon monoxide
18 and nitrogen dioxide gases were shown, and it is presumed
19 all possible hazardous gases are ruled out?

20 A I agree.

21 Q If you had more sophisticated testing equipment, you could
22 certainly have given a better review of those?

23 A Right.

24 Q Have you investigated for Command the effects of some types
25 of gases even though not in large quantities as to toxicity?

1 A Not directly, no.

2 Q Why not?

3 A Because I rely on expertise in this area and I have many
4 things to do besides just check for ventilation. I have
5 noise, physical hazards as well as chemical hazards and if
6 I investigated completely everything I came in contact with,
7 I would be forever investigating and not doing any applicable
8 work.

9 Q What time of day did you take your studies in Building 230
10 and Building 200 as referenced in Data Sheet 1?

11 A At the time it indicates.

12 Q It doesn't indicate.

13 A It doesn't indicate?

14 Q No, sir. 5 December 79 report says you performed them during
15 the day, but I don't know what time of day.

16 A My office is located at the extreme opposite end of the
17 reservation compared to this office, so most likely it would
18 be mid-morning or mid-afternoon. I am not sure which.

19 Q Mid-morning or mid-afternoon?

20 A Ten o'clock and 2:00, to 2:30.

21 Q Is flex time in operation at TACOM?

22 A Yes, it is.

23 Q Are most people gone at 2:30?

24 A Most people are there at 2:30.

25 Q Concentrations. Now, it says you took your sample on the

1 first floor near All50. Is that in the hallway?

2 A 200 is a bullpen versus private office area and when I say
3 near All50, I mean directly outside as the most easily
4 identifiable location, but it may or may not be a hallway.

5 Q In other words, it may or may not?

6 A It is a bullpen area.

7 Q Not a work area?

8 A It is adjacent; it is a bullpen area.

9 Q Either the study was taken relatively close to people working
10 or it was taken out in the hallway where they aren't working.
11 Which would it have been?

12 A Most likely at the working stage and that was it.

13 Q But you are not sure?

14 A I am not sure, not from the way I have identified it here.

15 Q It has been a long time.

16 A It has been a long time.

17 Q How many square feet are there in Building 230?

18 A An awful lot of square feet.

19 Q If I were to suggest 250,000 square feet as testified by
20 Mr. Lang this morning, would that be accurate?

21 A I really could not say offhand. There is three floors and
22 I really have no idea of what -- it is a large building is
23 what I would like to testify to.

24 Q Real large?

25 A Real large, a very large one.

1 Q If that is the case, isn't taking one test in one location
2 in it indicative of the nature of the overall -- various
3 nature of the overall Command?
4 A 230 will vary -- it may not be indicative of the entire
5 building.
6 Q There may be parts that are worse and parts that are better?
7 A Right.
8 Q At least theoretically and scientifically, you would have
9 more thorough results if you had taken a series of random
10 tests, is that correct?
11 A Not necessarily because Building 230 has a series of heating
12 and ventilating systems that is probably peculiar to that
13 structure.
14 Q What do you mean by that, a series of heating and ventilating
15 systems?
16 A It has at least six different area heating and ventilating
17 systems.
18 Q Six?
19 A Six. At least six.
20 Q Well, aren't some of them outmoded, sir?
21 A Yes, sir.
22 Q Building 230 is a very hot place in the summertime?
23 A A very hot place in the summertime and a very cool place at
24 certain instances in the wintertime.
25 Q Air in the summertime tends to get stagnant and stagnant air

1 is hell sometimes?

2 A It is hell sometimes, you may use that.

3 Q Air does not circulate very well in 230 in the summer?

4 A Depending on how the summer situation is set up, it may not.

5 Q That is why they have some fans in Building 230?

6 A We have more fans in 230 than most places; that is exactly
7 why.

8 Q And that being the case, the conclusion -- that is, Mr. Lang
9 came to me this morning and said we have capacity of 90
10 percent circulation does not necessarily mean that is what
11 is getting circulated?

12 A That perhaps is true.

13 Q In your experience and your knowledge of that area, do they
14 get maximum capacity in that building?

15 A Yes, but on very, very warm days we find we are heating up
16 the building, not cooling it down. As during the time I was
17 doing my tests, it so happens some of the hot air intakes
18 were shut down in order to prevent the ambients air from
19 becoming excessively hot.

20 Q What about these dampers? Are they adjusted periodically?

21 A Dampers are adjusted periodically for winter and summer
22 conditions.

23 Q And are they basically kept at a constant though?

24 A Yes. In fact, during most of the time we were attempting to
25 put these dampers on a computer readout, so they would have

1 passive and active modes to them, and it was an initial
2 effort during the period that we were involved in an
3 initial effort by me. The computer did not exactly program
4 it properly.

5 Q Would it be safe to say, then, that the building's air
6 circulation system needed some regulation and work?

7 A Yes, it would be.

8 Q And it was not always responsive to the needs of the working
9 force because of its age?

10 A I would say not always responsive to the working force
11 because of its existence and not necessarily its age. Some-
12 times it didn't work; the possibility exists some of the
13 fans were not in operation.

14 Q The statement that maximum was achieved on a regular basis
15 would be kind of questionable?

16 A Well, I would say it was working more than it was not working,
17 so on a regular basis depends on how you want to interpret
18 regular.

19 Q Will you accept 50 percent?

20 A Yes, I will accept 50 percent.

21 Q About 75 percent --

22 A That is very, very questionable.

23 Q Did you follow such general standards when you were
24 ventilating air?

25 A I sure did.

1 Q And guidance from Headquarters?

2 A Yes.

3 Q And Assistant Surgeon General?

4 A Yes, he made visits.

5 Q Are you familiar with the new Surgeon General's studies done

6 with regard to smoking?

7 A I read the reports in the newspaper.

8 Q The conclusions were --

9 A That they possibly could be dilatory as to your health.

10 Q Being in the same room with smokers could be bad stuff?

11 A Possibly.

12 Q Has the Command made any type of request to you to change

13 that or make certain studies as to those findings?

14 A Yes, sir.

15 Q They have?

16 A We are constantly updating our ventilation system.

17 Q At the time this was going on with Mr. Pletten and requests

18 about the area he could work, are there any areas now more

19 clean than before?

20 A Yes, there are.

21 Q Have they been identified for the Command and Mr. Pletten?

22 A They have been identified for the Command, but I am not

23 familiar with the fact they have been identified to

24 Mr. Pletten.

25 Q What are those, sir?

1 A Two buildings, 229 and 231, and quite a few repair
2 been made to the 230 area.

3 Q Would you say that Buildings 229 and 231 are reasonably free
4 of contamination?

5 A I would.

6 Q And have regulations regarding cigarette smoke and smoking
7 in those buildings been outlined?

8 A Yes, they have.

9 Q Have they been updated, sir? Are they more restrictive?

10 A No, they have not been restricted. They are just the same
11 as they were initially, that we are providing adequate air
12 changes per person.

13 Q Has Command, to your knowledge, asked you to make a better
14 environment for Mr. Pletten as opposed to finding one?

15 A Not to my knowledge, simply because we don't have -- I don't
16 have the necessary criteria to make a better environment for
17 Mr. Pletten.

18 Q What do you mean by that, sir?

19 A Most of my results were essentially negative in the areas
20 that Mr. Pletten worked in, indicating that they were
21 probably as good, or better, than most -- many other areas
22 of the Command, so I considered him working in the Personnel
23 Office to be a good area to start with.

24 Q Isolating Mr. Pletten in the Personnel Office, and any
25 similarly situated office in the new building, are those

1 better than the new building Personnel Offices in terms of
2 air?

3 A Most of the large military buildings that we have at
4 Detroit Arsenal are built for area bullpen-type operations
5 rather than an isolated office area. I consider ventilation
6 better in an open area than isolated areas.

7 Q Did you review the Surgeon General's standards versus OSHA
8 standards?

9 A I am not completely familiar with the Surgeon General's
10 standards. They were published in the paper, I understand,
11 and I received the HEW -- Health, Education and Welfare --
12 standards and I am familiar with those. The latest ones I
13 am not familiar with.

14 Q Let's assume for argument's sake, hypothetically there are
15 four parts per million that are contaminants. Is that ball-
16 park, generally, for the Command?

17 A No, it isn't ballpark and it isn't general. It could exist,
18 yes.

19 Q How difficult is it to go from any amount per million to
20 zero? What is involved? Is it possible to do that?

21 A You have to have a gas Chromatograph analysis to start with,
22 which is about a \$20,000.00 piece of equipment strictly in
23 a specialized laboratory setup that we have at Aberdeen, and
24 we need a , what we call a carbon strain type of absorption
25 column. When you are going for that small amount, you have

1 to absorb through several tubes because you were not sure of
2 your efficiency at those low concentrations, and you have a
3 single tube backed up by another tube, sometimes three or
4 four tubes, which takes longer. It is carbon strained to
5 obscure these carbon concentrations.

6 Q If you have any parts per million at Tank Command, would gas
7 chromatography show you how to find what it is to eliminate
8 them entirely?

9 A No, I would not have the necessary collecting equipment.
10 They have the necessary analytical equipment to analyze them,
11 but many of them involve cryogenic techniques to where we
12 freeze out the small amounts. They use the cryogenic
13 technique and it is a very expensive collecting media.

14 Q But aside from the collection of information, let's assume I
15 am in this room and it is closed off and I wanted to get the
16 air free of contaminants. What would I do?

17 A You would have to have a 99 and 99 hundredths percent filter
18 that all the air would be absorbed through and then you would
19 be 99 and 99 hundredths percent sure that all of the contami-
20 nants were out of here.

21 Q Are there some filters that are available?

22 A Yes.

23 Q Are they expensive things?

24 A Very expensive, extremely expensive and difficult to operate.

25 Q There are such things?

1 A We have them in clean rooms in our missile work.

2 Q And they are being used in the government?

3 A They are being used in the government, yes.

4 Q I presume as precursors to that you would have banned
5 smoking in the area?

6 A Definitely.

7 Q But you can make some areas of the Command theater cleaner?

8 A Right.

9 Q Command requested a study through your office for such a --

10 A Most of the criteria for a clean room are based on partial
11 count and they base their filter efficiency on the number of
12 particles, dust particles coming through. However, it has
13 very little, or nothing to do with any contaminants from
14 cigarette smoke.

15 Q But Command could establish such a room and have done so?

16 A Yes.

17 Q Where have they done so?

18 A At 16 Mile Road; it was in the missile business. And we have
19 also done it in the -- some of it at TACOM.

20 Q May I suggest Data Processing?

21 A It's a possibility. At Data Processing they have made an
22 attempt at providing more or less humidity control, which is
23 something entirely different rather than contaminant control.

24 Q But there are places where they have got it?

25 A Yes.

1 Q If there was a ban on smoking, would you need such a clean
2 room environment to establish limitations of smoke contami-
3 nants?

4 A In most of the information that I have been able to find,
5 most of the contamination comes from bringing in dirt from
6 the outside on your shoes.

7 Q Now, you have read Army Regulation 1-8 regarding smoking?

8 A Yes, sir.

9 Q Are you familiar with it?

10 A Yes, sir.

11 Q What would it take to remove smoke or ban smoke any place in
12 the Tank Command, to eliminate smoke?

13 A There are smoke eaters, and other things to do that. They
14 are basically electrostatic preceptor principle.

15 Q Did you recommend they purchase that?

16 A No, I did not.

17 Q Why not?

18 A Because they had been known to give off ozone gas particularly
19 when they are not maintained properly, which is very difficult
20 maintenance of these -- this equipment is very difficult.

21 Q Who first told you about government regulations regarding
22 smoking?

23 A Safety brought it up as a published document at TARCOM, but
24 I worked with a man down at Cape Canaveral, Florida, who is
25 Assistant Surgeon General to Dr. Martin Brewster (sic) and --

1 Q Did Mr. Pletten give you any guidance with the Department of
2 Defense regulations?

3 A Yes, he did.

4 Q Was anything provided on the -- by the Tank Command to aid
5 you in your investigation?

6 A Army Regulation 1-8 and DOD Regulation, which was -- we have
7 used that prior to Army regulations about it.

8 Q Removal of the smoke, would it not be possible at this time?

9 A We don't have proper technology at this point to do it in a
10 manner that would be economically feasible at this time.

11 Q Even for small areas?

12 A Possibly for small areas we could with our 99.9 percent
13 filter for small areas, and that would economically possible.
14 We more or less would like to do it all over or not at all.

15 Q Even owing to the difficulties of one individual?

16 A Yes, sir, that is correct, sir.

17 Q At this point technologically, the only effective way to get
18 rid of cigarette smoke is to ban it.

19 A I would say so, or dilution by having 10 air changes per
20 hour per person.

21 Q What does that mean?

22 A Ten cubic feet of air movement per person employed. Effect
23 a normal dilution factor that has a -- it dilutes it,
24 assuming that he is breathing less than one CFM per person.
25 It dilutes it 10 times each time the air is recirculated.

1 Q Truthfully, Mr. Braun, in 230, were people getting 10 cubic
2 feet at all times?

3 A For the record I would say not at all times, but generally
4 speaking they were getting it.

5 Q You feel they were, but you say generally speaking?

6 A It varies, sir, with time.

7 Q I am sure, but I presume, then, you mean they are getting it
8 more than they are not getting it?

9 A They are getting it more than they are not getting it.

10 Q If you had to give me a percent, how much percent of the time
11 were they getting the 10 cubic feet in 230?

12 A I would have to restrict myself to a certain time period.

13 Q The last time Mr. Pletten was there.

14 A The last time Mr. Pletten was there, I would say it was in
15 the area of 70 to 90 percent.

16 Q That is a wide range, sir.

17 A No, it is just that way. It varies in 230.

18 Q How would it vary in the new building?

19 A It would be far more constant, close to 100 percent.

20 Q Did you consider the synergistic aspect of smoke during your
21 study, that substance in relation to each other?

22 A Yes, we did.

23 Q What was the result of that study?

24 A That they were not fully under.

25 Q How so?

1 A That the possibility of synergistic effect exists
2 recommended further study particularly regarding the
3 secondary effects of cigarette smoking.

4 Q Has that been followed up?

5 A I am not aware of whether it is being followed up or not, but
6 in evidence from the newspaper, reading from the Surgeon
7 General, I would say it is being followed up.

8 Q Based on that, have you made recommendations to higher
9 command as to re-evaluation of their smoking policy?

10 A No. I still consider Army Regulation 1-8 to be sufficiently
11 a guidance document to provide for the new findings from
12 secondary, whenever they are made available to me.

13 Q Let's talk 1-8 because that is a topic close to my heart.
14 I just happen to have a copy sitting here, Agency Exhibit 18.
15 What is your understanding of the rules regarding smoking
16 in occupied buildings?

17 A My understanding is that we are to consider smoking in an
18 occupied building as a valid complaint.

19 Q In other words, let me see if I can categorize this by a
20 brief reading of the regulation. It is the right of an
21 individual to an environment free of contamination, granted?

22 A Yes.

23 Q And I point to Section 2a on the first page, which says,
24 "DA recognizes the rights of individuals to smoke in such
25 buildings, provided such action does not endanger life or

1 property, cause discomfort or unreasonable annoyance to
2 non-smokers." Is that a qualified right, sir?

3 A That is a qualified right.

4 Q Who is the person or persons that determines whether or not
5 discomfort or unreasonable annoyance is occurring?

6 A It would be Mr. Braun, the Industrial Hygienist would be the
7 person to make that determination.

8 Q Not Mr. Pletten?

9 A And any employee, yes, but assuming that he decided not to
10 accept that provision and decided it was unreasonable to his
11 comfort and annoyance.

12 Q So it is a subjective analysis by the employee perhaps?

13 A Yes.

14 Q Not for Mr. Braun to decide for everybody's health? May I
15 say this, the Industrial Hygienist makes a general appraisal
16 for everyone subject to contradiction?

17 A Yes. Well, we have a system of calling myself in when we
18 have a complaint, or somebody feels that they have an area
19 causing discomfort to them. That is my job at TACOM.

20 Q Just giving a topical reading, wouldn't it be the Army says
21 everybody has a right to smoke unless somebody complains and
22 then you don't have a right to smoke?

23 A In general areas that don't have adequate ventilation, I
24 would say that would be true.

25 Q Did you read over the USACARA report on Mr. Button?

1 A I'm sorry, I didn't. USACARA report?

2 Q Those were the grievance reports from prior actions involving

3 Mr. Button.

4 A That is what those are. I read them over, yes.

5 Q Where the recommendations to Command as to what actions they

6 should take were made?

7 A Yes.

8 Q You are familiar with them?

9 A I am familiar with several. I am not sure of all of them,

10 but several. I would say the majority I have read.

11 Q Are you familiar with USACARA's seeming insistence that

12 Mr. Pletten is the only one who can decide he is being

13 annoyed or discomforted?

14 A I am familiar with that allegation, yes.

15 Q Is that guidance you now have from the Command as to how you

16 interpret 1-8?

17 A No, I have had several people that complained and I answered

18 complaints -- I have 5,000 people at the Tank Arsenal besides

19 Mr. Pletten and anybody in the whole Command has ability to

20 complain.

21 Q I understand, but if the complaint is made and it is supported

22 by medical evidence to any degree, which Mr. Pletten's seem

23 to be, isn't it the duty of the Command and hygienist to

24 direct smoking be stopped around them?

25 A Yes, sir. And it is the duty of the Command to identify the

1 amounts of air movement in the area, which regulations
2 provide, as an alternate to non-smoking in the area.

3 Q So your interpretation of 1-8 is, if somebody screams and
4 yells about smoking, as long as you are giving them 10 cubic
5 feet, you don't care how much they yell?

6 A ~~Within reason~~ with identifiable contaminants, yes.

7 Q That is the way Command instructed you to interpret it?

8 A That is the way I, as an industrial hygienist, interpreted
9 this use of regulations as a guide.

10 Q If the Surgeon General has recently decided, or published an
11 opinion as to the synergistic relationship with cigarette
12 smoke as being a hazard to individuals, and so identified,
13 have you directed the Command to implement new regulations
14 with regard to smoking so as to avoid that harm?

15 MS. BACON: I object to the question as
16 phrased. Are you making a hypothet, or do you report on the
17 Surgeon General for Mr. Braun?

18 Q (By Mr. Cohen) He said he had read over the Surgeon
19 General's report and was generally familiar with its contents.

20 A I would not be the visiting officer involved. We would refer
21 the problem over to the health and -- HEW Department as
22 more specific to their mission.

23 Q Has it been done in that fashion, to your knowledge?

24 A To my knowledge, it has been referred to Headquarters and
25 they look into it.

1 Q If they came down with a ban on smoking, that would take
2 care of Mr. Pletten's problem?
3 A Sure would.
4 Q It's still pending?
5 A It's still pending.
6 Q If we got a decision from higher headquarters in the next
7 couple of weeks, we may not have had to come here at all?
8 A That is correct.
9 Q Actions of Command may have been repetitious in view of what
10 may happen from higher command?
11 A There is no information I have week from week what higher
12 command will make at any instance, so I could not know.
13 Q We have testimony here that they try and do everything
14 before they fire a man because of medical disqualification.
15 Is that the case?
16 A Yes.
17 Q Obviously we don't know if they had to do that in this
18 action now in view of your statement what higher headquarters
19 is considering.
20 A It is possible. They can always -- local arsenal can always
21 be overruled by Command, yes.
22 Q What is the number one health hazard around the plant in
23 your opinion as Hygienist?
24 A Noise.
25 Q What is number two?

1 A Number two, I am not sure.

2 Q Could be any number of things?

3 A Could be any number of things.

4 Q Did you investigate a complaint regarding drafts and air with
5 regard to Mary Ellen Duke?

6 A Yes, I did.

7 Q Did you investigate a complaint about smoke and air with
8 regard to Evelyn Bertram at one time?

9 A I can't remember.

10 Q If I were -- I will tell you this: Mrs. Bertram testified
11 she filed a Worker's Comp claim at one time because her
12 co-worker was smoking cigars and caused her conjunctivitis.
13 Were you involved in that investigation?

14 A I was not apprised of Evelyn Bertram's specific complaint.

15 Q You investigated?

16 A Must have been handled by local supervision.

17 Q And you know of May Lonnie Sweeney?

18 A Yes.

19 Q I will tell you for the record I represent the estate of
20 May Lonnie Sweeney. Mrs. Sweeney is deceased. She was a
21 mytro -- she had Lou Gehrig's disease. She has recently
22 passed on. What was the nature of the complaints at the
23 time for Mrs. Sweeney?

24 A I am really not -- I know I investigated some of the environ-
25 ment that May Sweeney worked in, but I am not totally

1 familiar -- I have a letter here I wrote and signed on
2 11 June 80 regarding a complaint of poor ventilation and
3 stagnant air, Building 230. Her location is one floor above
4 the Personnel Office where Leroy worked.

5 Q Will they ever be able to make the building where
6 Mr. Pletten worked, into a top-notch air ventilation area,
7 so it complies with the regulations? Is it physically
8 possible to get that building to work properly?

9 A Internally possible. Just add a few air conditioning coils;
10 it would all be over. There would be no need for any further
11 cases of this type if we had air conditioning in 230.

12 Q How much would that cost?

13 A Today's market? Far more than what it originally would have
14 cost. I don't know if that is an answer or not.

15 Q Is it prohibitive economically?

16 A It is not prohibitive economically.

17 Q Has it been discussed by Command?

18 A Over and over and over again.

19 Q And you keep on recommending it, I'm sure.

20 A I'm sure I do.

21 Q When you stated in your 24 June memo that you visited
22 Room 207W and no health hazard existed at that location and
23 that this area would be satisfactory for Mr. Pletten to work
24 in, did you have knowledge of the medical information at that
25 time?

1 A Yes, I had an air study; without identifying the data sheet
2 to determine that 207W had air cooling fans in the area and
3 they had sufficient air movement.

4 Q Then you went on to say ventilation in all office areas in
5 Building 230 is identical?

6 A Yes.

7 Q Is that the case?

8 A It is designed to be identical, but does not always work
9 identical.

10 Q A more proper statement would be designed to be identical
11 and anywhere, 70 to 90 percent of the time you comply with
12 the regulation, that statement from the health and regulation
13 point of view, the building would not have been acceptable
14 for Mr. Pletten to work in?

15 A I am not in a position to determine exactly the building's
16 ability to accommodate Mr. Pletten at any one time because
17 they have as many as six or seven different environmental
18 conditions existing at one time, so I had to resurvey the
19 building each day.

20 Q Interestingly enough, I looked at your 2 October letter and
21 it indicates the computer room is the only section that is
22 a no-smoking area section from a fire prevention and
23 classified protection viewpoint only, and that is why you
24 didn't make studies there?

25 A No.

1 Q First of all, I think it would be interesting if you took
2 studies there and found it was the same as everywhere else.
3 The question is: Why did they ban smoking in those areas
4 and did you have anything to do with the ban?

5 A I had nothing to do with it and they banned smoking in the
6 area simply because of the fact it was an environmentally-
7 controlled area as to the cooling effect and it was a
8 recirculation fan that existed in that small room. We looked
9 to maintain 50 percent humidity. If you allowed any outside
10 air to come in, we would enhance the dilution factors and
11 then it would not be environmentally controlled anymore, so
12 that is why we banned smoking in the Key punch Room, which
13 was separate, and it was an administrative decision not made
14 from the Department of Health necessarily.

15 Q How long have you worked for the Command, 29 years?

16 A No, no. Five years. Twenty-nine years in the business.

17 Q Now -- all right. Mr. Braun, from your personal standpoint,
18 based on your expertise, would it then seem that Command has
19 made a decision to control smoking for the benefit of a
20 machine where they will not ban smoking for the benefit of an
21 individual?

22 A Very definitely.

23 Q Why would that be, why would they value a computer, if you
24 have any ideas, more than the health of one individual and
25 his ability to work?

1 A It has nothing to do with health; it is humidity control.
2 We are trying to control that area for 50 percent humidity,
3 we don't get rusting on the computer contacts, so we treat
4 the machine, in a sense, probably, a little better than our
5 humans. That is probably very true.

6 Q You find that puzzling?

7 A I do.

8 Q If it was your ship to run, sir, and I know it is not, would
9 you run it in that fashion?

10 A No, sir, I would put my personnel in a higher priority than
11 machines.

12 MR. COHEN: I have no further questions.

13 RE-EXAMINATION

14 BY MS. BACON:

15 Q You stated in your testimony during cross-examination that
16 you have appealed to higher headquarters. Who have you
17 appealed to?

18 A Surgeon General. We forwarded our material. I don't know
19 whether it is appealed. I don't think I used that word. We
20 forwarded our information to get some direction from the
21 Surgeon General.

22 Q How long ago did you do that?

23 A It was right at the initial time that we were dealing with
24 this particular case.

25 Q Would it be 1979?

1 A Yes.

2 Q And you have not received anything back from the Surgeon
3 General?

4 A I have seen Dr. Kopechne. He made a visit to this reserva-
5 tion. It was a publicly-stated decision he was to come here
6 with an expert from TACOM Headquarters and was to investigate
7 the smoking problems at TACOM.

8 Q After they were here and investigated, did they issue any
9 directive to you to ban smoking?

10 A None whatsoever. We received no further directives from
11 Headquarters.

12 MS. BACON: I have no further questions.

13 MR. COHEN: Nothing further.

14 Let me ask the last question.

15 Then he did not give you any further directive
16 after he investigated here?

17 THE WITNESS: I never got any further direc-
18 tions from him specifically.

19 RE-EXAMINATION

20 BY MR. COHEN:

21 Q He didn't tell you to ban smoking?

22 A No.

23 Q The only thing you next heard he came out with this report
24 that talked about synergistic problems that said you may be
25 in danger if you sit in the same room?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A This is TARCOM I am talking about.

Q Have you asked guidance from the Surgeon General as to what to do?

A I presumably reach Dr. Kopecne, which is my normal line of communication. I don't refer things directly to the Surgeon General, he does.

Q Are they evaluating the policy on smoking?

A I understand it is one of the prime concerns of the Army today.

Q They will be issuing a decision some time in the future though?

A I don't know.

MR. COHEN: No further questions.

(1:00 p.m.)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

STATE OF MICHIGAN)
COUNTY OF OAKLAND)

ss

I, Norma J. Yeager, Notary Public in and for the above county and state, do hereby certify that the foregoing deposition was taken before me at the time and place hereinbefore set forth; that the witness was duly sworn by me to testify to the truth, the whole truth and nothing but the truth; that the foregoing questions and answers were duly recorded by me in stenotype and later reduced to typewritten form under my supervision; and that the foregoing is a full, true and correct transcription of my stenotype notes.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal at Southfield, Michigan this 10th day of May 1982.

Norma J. Yeager

Norma J. Yeager (CSR0015)
Notary Public
Oakland County, Michigan
My Commission Expires: 7-19-83