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MICROWAVE RADIATION HEARING
AT CLEAR, ALASKA

Senate HESS

March 11, 1984
5:30 p.m.

(VERBATIM TESTIMONY)

Attendance: Josephson, P. Moss. Senators V. Fischer, P. Fischer, and R. Halford excused.

001 Josephson: Good afternoon. I am Senator Joe Josephson, the Chairman of the Senate Health, Education and Social Services Committee. On my right is, of course, known to you as your senator, Senator Pappy Moss, who is a member of the committee and who chairs the Senate Committee on Transportation. We are here today because both Senator Moss and my colleague, Senator Fahrenkamp from Fairbanks, asked me to come and join Senator Moss for the purpose of taking testimony concerning the episode here involving possible radiation to workers...radiation injuries to workers. I might just make a preferatory statement or two so that you can get an inkling as to what our particular interests might be.

My knowledge of the incident is very limited. In fact, it would be greater, but our staff with the materials that our aide had compiled, were delayed in Juneau and could not leave Juneau because of weather today, and so we are without staff and without the normal briefing papers that we would have had access to. But, as I understand it, there have been inquiries made, perhaps by Congressman Young or his staff and other officials, and it is not my desire to either retrace that kind of detailed ground for no particular benefit to anybody, nor to intrude at the state level as to what may be some ongoing investigation at the federal level.

I think our interest is a little bit different in focus. First, we have a concern in the committee about public health problems generally and about worker health problems in particular. That was evident in 1983 by the passage by the legislature of the so-called 'Workers Right To Know' bill which dealt with hazardous substances and toxic wastes in the workplace. We are interested in the oversight of state OSHA activities and worker safety activities through the Department of Labor. How well they function, how they can be approved, to what extent appropriation levels may be sufficient or insufficient and the kinds of cooperation that they have given in this case, might be instructive to us. Insofar as the federal role is concerned, there may be opportunities for the legislature to, either formally memorialize the congress or federal agencies or informally work with the Alaska Delegation, and we would be perceptive to your suggestions or comments about those matters. There may, in this case, be some particular questions about state federal relations and preemption on federal onlays which ousts the state

government of jurisdiction, but we may find ways by which changes in state law could approve workers safety.

And then, I might finally say that I am interested in knowing whether, in your judgment, the incident that occurred was an isolated mistake or part of a pattern of hazard that we ought to be attentive to, and I have no information about that as I sit here, but I would be glad to be educated by you. Those are the general purposes for which we are here. When we conclude this, we will determine what other steps to take or to recommend to the legislature and the Governor. In any event, we will report to our colleagues in the Senate who know of this hearing, of course, and the Senate President authorized the subpoena power which we have exercised through the committee. We will have some follow-ups, but I can't tell you what that will be, of course, until I hear testimony. Senator Moss, do you have any preliminary remarks?

101 Moss: Well, just as you said Senator, there is a question as to whether or safety devices or problems have occurred or been bypassed knowingly, and with the concurrence of site management. There seems to appear to be a need to determine whether or not there has been a violation of state health and safety laws. That's what I think we are both looking at, at least I am too, and with that, I would...I would also point out that we are not on a witch hunt. We are definitely not on a witch hunt. Of course, there is a question as to whether or not there is a continuing health hazard for the base workers or citizens adjacent to the base or hazards to any other forms of life. And what are the long term effects of microwave radiation, I don't know. Perhaps maybe we can find out something from this that we have here. Did we have anybody get here from the state OSHA yet?

138 Josephson: What is your name, sir?

140 Eric Short: Eric Short.

141 Moss: Okay. I'm sorry Eric. I couldn't see you back there.

143 Josephson: Mr. Short, if at any point you wish to speak or comment, would you indicate that to me. Do you have a prepared statement you would like to make or would you rather just comment in response to questions or testimony?

148 Short: The department has prepared chronology which reiterates our involvement in the case, so I can read you a copy of that?

151 Josephson: Could you hand that to us now so that we might be able to scan it as we listen to testimony?

160 Moss: (inaudible)

165 Josephson: Alright, and I appreciate that. Mr. Foster?

166 Foster: Yes sir?

167 Josephson: Would you like to come forward and talk to us? You can have a chair here? Good afternoon, Mr. Foster. I understand that you were one of the people who may have been involved in the microwave radiation exposure incident of September 14. I invite you to proceed, in your own narrative way, given the preferatory comments of Sen. Moss and myself indicating what you would like us to know that we may not know concerning this incident, or what your concerns might be.

178 Foster: My primary concern since the accident are actually three fold. The first is that we had been told that accurate radiation information is needed for proper diagnosis and treatment for this injury. To date, we do not have that accurate information. The details have been given to Congressman Young and can to you, if you wish, but you can count on a about a five-your sitting with us to show you technically that the survey was done incorrectly.

189 Moss: Ron, would you kind of explain in layman's language what you mean by that...?

192 Foster: Radiation survey taken on the 22nd of September was used three groups of instruments: one provided by the Clear Air Force Station, which was on sight, one instrument that was shipped from Brooks Air Force Base, and a group of two instruments that were provided by Eielson Air Force Base. The instrument provided by Pellick and the instrument provided by Brooks Air Force Base were used in the actual work area. I noticed the instruments were acting erratically during the survey. I assisted the team and notified our site manager and also our radiation monitor of this. Since then, it has been discovered that not only were the instruments incorrectly calibrated, the Pellick instrument was actually broken. I think that pretty well says it all about our radiation survey.

220 Josephson: So, let me ask this, and I apologize for approaching this in such a naive way, but I am trying to get up to speed as fast as possible. Mr. Foster, after the incident, you began to be concerned about your health, I take it, or began to feel symptoms...

225 Foster: Not immediately...

226 Josephson: Not immediately, but sometime after that. You've consulted medical authorities, have you for diagnosis?

228 Foster: We've seen several physicians, yes.

229 Josephson: And you were told that any advice to you from a medical mans' point of view, a medical persons' point of view, would require accurate radiation information?

232 Foster: That is correct.

233 Josephson: And because of the situation you just described with erratic or broken machinery, that information has not been provided?

236 Foster: To the best of my belief, there has not been a legitimate radiation survey on the track around town.

238 Josephson: Now, if a survey were done today, would it be too late to give you the kind of information that would be diagnostically helpful to your doctors?

241 Foster: The information we've been given is you have immediately short-term effects, which have obviously peaked in all of us, and you also have a long-term chronic effects from radiation exposure. The level...the dosimetry information is critical to long-term diagnosis. This is the information we've been given.

246 Josephson: I understand that, but I mean if you had proper equipment today to monitor, March 11, to monitor radiation in a radiation exposure survey, would it be too long after the incident of September 14 to be helpful or meaningful?

250 Foster: Are you asking can we duplicate the experiment?

251 Josephson: Yes.

252 Foster: Yes we can. We know where the antenna was, we know what the power levels were.

255 Josephson: Have you asked why that has not been done?

256 Foster: Repeatedly.

257 Josephson: Who have you asked?

258 Foster: I've asked the...initially, the management of Federal Electric, I went to the commanding officer of the station. I went to his commanding officer, and ultimately, to General Hardinger, Commander of Space Command. We have gone to state and federal OSHA, several United States congressman and senators and to our state senators. We still do not have that survey redone.

264 Josephson: Do you have any estimate as a technician as to what the cost of doing the survey would be?

266 Foster: No sir, I don't.

267 Josephson: Not only has it not been done, but nobody has explained to you why it has not been done or cannot be done, is that right?

269 Foster: The majority of my attempts within the IT&T and air force barometers or with that group were largely ignored. With my United States congressman and senators, they have met with us at length, in excess of 30 hours now, gathering information and have requested that it be redone. This is also true with state OSHA. I've met with Eric repeatedly over this, and there has been effort, to the best of my knowledge to request that it be redone.

276 Josephson: By the state?

277 Foster: By the federal OSHA out of Seattle. Apparently, the State of Alaska doesn't have a measurement.

279 Josephson: But the state...has the state, whether it has the measurement technology or not, asked that it be done, performed?

281 Foster: That's been indicated to me.

283 Josephson: Now, you indicated that that was the first concern of yours and that you have three concerns. Would you go on to the second concern?

286 Foster: The second concern is that we just never received any legitimate medical attention. We were told we had suffered merely a sunburn after radiation survey that was done incorrectly. As time went on and groups of people began to get more and more sick, the only help we were offered, initially and I am referring to initially after the class 3 physical we took at the dispensary, which was four hours after the accident and a blood test and chest x-ray and ophthalmological...I can't pronounce that word...the following day, an eye examination, we were offered a trip to Brooks Air Force Base. But the parameters of that offer were so unusual, two of us declined. By unusual, I mean we were asked, that we would ask to go in writing, take a leave of absence without pay, and that we would leave without a medical certificate, which the doctor's certificate is required for a leave of absence on the Federal Electric form they tried to get us to sign. I think a quick call to workmen's comp clarifies that isn't the way you handle industrial accidents.

When we did complain to workmen's comp, a set of medical orders did come to us for a routine flight physical. At that point, two of the workers decided not to go to Brooks initially, and several of the others did.

331 Josephson: Would a routine...do you know what a routine flight physical would embrace in terms to looking for the diagnostic or treatment information about your particular exposure?

335 Foster: No sir, I don't. I merely know the workmen's comp people responded that they could not pay benefits to a group of individual that requested a routine flight physical in writing.

339 Josephson: What...can you describe what you or your co-workers experienced as symptoms and when you first began to experience them that lead you to seek medical attention?

342 Foster: The first thing I recall is in my right eye seeing a line that looked like I was looking through a poorly formed piece of glass, which I mentioned to Dr. Martino, which was approximately 10 days after the accident. I also noted difficulty in viewing back-lighted objects, in that they looked like I was viewing them through a piece of silk. A severe onset of headaches began somewhere in that general vicinity. I have a log I kept from my doctors and that exact chronology, I'm not sure. Visual problems were the first problems I had. It caused me to realize that there was going to be some kind of reaction to this accident?

350 Josephson: Had you had anything like that before?

351 Foster: No sir.

352 Josephson: What other kinds of symptoms did you develop?

354 Foster: I have since developed what is known as (sic) Lear Sign, I believe, which is a severe electric shock feeling. Sometimes it knocks my legs physically out from under me. It feels like you are backing into electric wires. It happens in an unpredictable fashion. I have been told my right eye is ruptured internally in several planes. I'm not aware of that, but it reminds me of when I saw that crack in my eye.

360 Josephson: How old are you, Mr. Foster?

361 Foster: Thirty-six.

365 Josephson: Alright, we will go ahead. What was your third concern? You might tell us that.

368 Foster: My third concern is that there has never been an honest accident investigation as to the cause of the radiation incident at Clear Air Force Base. The report filed with the State of Alaska is riddled with errors, half truths, and out right lies.

374 Josephson: Who is the author of that report?

375 Foster: Federal Electric, my employer.

378 Josephson: You are here in response to a subpoena issued by this committee, is that right?

379 Foster: Yes sir.

380 Josephson: Did anyone at any time attempt to discourage you from testifying?

382 Foster: No sir.

383 Josephson: In terms of the question as to whether there was an honest accident investigation, you say the report was erroneous. Let me see. Mr. Short, do you have...is there a copy of the report that was submitted with you?

386 Short: Yes.

387 Josephson: Is that available to us, or...

388 Short: Yes.

389 Josephson: Alright. Have you determined...has state OSHA determined if the report is accurate or inaccurate?

391 Short: We have gathered data from statements from the employees and we have also obtained reports from public services, and we have compared and contrasted them.

394 Josephson: Do you find discrepancies between the accounts of what happened?

396 Short: There are some questions.

398 Josephson: Alright, we will come back to you on that. Mr. Foster, do you have anything else you want to add at this time...to your statement? We have not determined, as I indicated earlier, what our role should be and how deeply we should pursue the matter, but we may want to talk to you again, if you are available. It may be subsequent tonight, but I appreciate your coming forward. Let me see if Senator Moss has any questions.

409 Moss: Some of the witnesses...sooner or later, I would like somebody to kind of describe just what happened that day.

411 Josephson: Thank you Senator. I think that is a good idea. Could you, as a predicate to all of this, explain what you were doing and, as Senator Moss cautioned, try to make it easy for even senators to understand...what you were doing and what, what you experienced on the 14th of September.

420 Foster: Okay, on the day of the accident, we took the radar down in the morning. During a routine inspection at the superstructure that holds the antenna together, we discovered several cracks in the metal. A medillogical

analysis team had been sent up from McCullum Air Force Base to monitor the work. Two welders were sent up, myself and Ed Forsling, which worked on the track and radar, were sent up to assist these men. During the course of that day, routine maintenance on the substructure of the antenna was taking place.

431 Josephson: And then what happened?

434 Foster: At approximately...are you talking from our viewpoint as the victims....

436 Josephson: Yes.

438 Foster: ...not technically downstairs?

439 Josephson: No, no, from your viewpoint.

411 Foster: At the actual time of the accident, I don't have a fix because no one was really looking at their watch to know. But I was looking for some bolts that we had dropped when removing a hatch, and in the course of looking for these small bolts, I discovered a large about 1 1/2 inch bolt that holds some coax sections together. So I was, at the time of the accident, looking through the hole that big bolt had fallen out of. The welders were working and apparently noticed erratic arcs and so you will have to ask them. The two McCullum people were inspecting the screen. Carl Kepler was up on the screen, and as I climbed up and sat on the coax, he mentioned to me his flashlight was hot and that it had been glowing. At the time, I kinda thought he was kidding me; I thought he was putting me on. I told him I'd never heard of a radiation field strong enough to light a lamp like that. He mentioned the switch was off, and then Bill Emmings mentioned that his was doing it too. I still was not quite sure whether to believe this man or not and I was still looking for my bolt. So I mention, well 'why don't we go down and have the radiation monitor check this out'. And at that time, we left the antenna and when we got down stairs confirmed that the tracker had, in fact, been turned on.

479 Josephson: Now, isn't there supposedly some time of bell safe device or equipment to prevent that happening while the antenna is under repair?

482 Foster: Yes sir, there is.

484 Josephson: And what...again, if it is understandable to describe it, what is that device suppose to consist of?

486 Foster: A series of five keys, each one interlocks a little bit more the radar. By a little bit more, I mean both the high voltage that allows the transmitters to operate and progressively locks out the ability of the motors and pumps to start to prevent physical antenna movement. As each key is used, it is turned and held captive where it can't be removed to

restart the system. At the last stage or the fifth key allows actual entrance into the radar when the system is completely set down. Should that key be removed, the last of the actual interlock keys, it sets off a (inaudible)...which is a loud bell within the radar to warn you that someone has the keys physically in their possession.

498 Josephson: How long have you been at this installation?

499 Foster: Four years.

501 Josephson: Has any reported experience like that occurred prior to September 14?

503 Foster: Incidents involving the radar where people may have been exposed?

505 Josephson: Yes, sir.

506 Foster: Yes, sir.

507 Josephson: I don't expect that you will necessarily have personal knowledge of those incidents, but what do you understand to have occurred in that period, in the four year period?

510 Foster: O.e, one incident occurred prior to me coming to work here. The sight radiation monitor was working on the roof of the building with some painters as a monitor, and they pointed the antenna over at them. They were exposed for a duration of time, I'm not sure. In the three months leading up to the accident, which would be July and August, in each of those two months, we had incidents wherein personnel were either...were put into positions where they could have been exposed to RF radiation.

515 Josephson: Are you talking about July, August of 83?

517 Foster: Yes.

518 Josephson: When you say put into position where they might have been, what happened?

520 Foster: In the one case, a group of workers were put out to work in front of the large screens without being properly cleared by the radiation monitor, which no report was filed on that. That was in July and August. The supervisor of the civil engineers who is supposed to insure that the men were safe on the antenna through our control procedures, allowed himself to be locked in the radome as we were bringing the radar back on line. Then, of course in September itself, the six of us were radiated.

529 Josephson: Do you work under a collective bargaining agreement through a labor organization?

531 Foster: Yes sir, I do.

532 Josephson: What union are you affiliated with?

533 Foster: Teamsters, 959.

534 Josephson: Has the union attempted to ascertain what occurred for the nature of the radiation exposure or otherwise pursued this matter as a grievance in the collective bargaining agreement, to your knowledge?

537 Foster: They have...I don't believe it is within their preview to pursue the radiation incident, per say exposure level. At present, they are involving themselves, to a deeper degree, in helping resolve the safety issues. I felt the start was somewhat slow. Now, I won't get into exactly why. Maybe we had a communication problem. At present, they do seem to be coming more and more involved in resolving this.

544 Josephson: So far as your aware, the hazard of microwave radiation exposure at Clear Air Force Base would be restricted to employees on site as opposed to dependents and civilians in the neighboring community. Is that right?

548 Foster: I would think so.

551 Josephson: Do you have any other questions?

553 Moss: I would just like to know something about the interlock deal. Why did it...how did it happened? I can't understand why the safety lock didn't work.

557 Foster: On the day of the accident, we were following a written directive which outlined control of access to the radome, which is considered a hazardous area, and also describes the way the interlock system keys will be used. That particular document bypasses the majority of our interlock system and allowed this incident to happen.

555 Moss: In other words, it was bypassed.

566 Foster: Yes sir, following written directive.

568 Josephson: I'm not sure I understand that. You mean that it was a conscious decision to bypass the system by somebody?

570 Foster: Whether the party that issued the directive was fully aware of how the interlocks functioned or not, I can't say. I'm not them. That they succeeded to producing the document that defeated out interlock system, that is a reality.

575 Josephson: Was the directive emanating from the air force or from the contractor?

577 Foster: From the contractor.

579 Josephson: Was there any doubt that, that the people responsible for the order that resulted in the bypass of the interlock, knew that you and your colleagues were working as you working at that time? In other words, could they have been ignorant of the fact that someone was working with the antenna at that time?

585 Foster: No sir, they knew. We were dispatched up there by our supervisor.

588 Josephson: How many employees at Clear worked for the contractor, Pellick Services, Inc.?

590 Foster: I...

592 Josephson: I mean is it 50, or 100, or 200...do you have any idea?

594 Foster: It certainly must be in the several hundreds, but I'm not certain. I'm actually not sure how many employees are involved out there.

596 Josephson: Sen. Moss?

598 Moss: After the accident, how soon was it before your superiors were notified that you felt that you had an injury?

601 Foster: They were notified by our team leader within five minutes of our realization that we had, in fact, been in front of the radar when it was energized.

604 Moss: What occurred then?

606 Foster: Approximately 20 minutes later, the tech site manager instructed us to go back up on the antenna and reassemble it, and in fact, asked us to complete the welding work.

609 Moss: What's the tech site manager's name?

610 Foster: That is Mr. Eugene Macken.

611 Moss: Eugene Macken? Who is Tom Miller?

613 Foster: Tom Miller is the site safety man for Federal Electric.

615 Moss: Does he have anything to do with making sure that you have proper safety taken care of in this particular incident?

617 Foster: That is his responsibility, but he rarely, if ever, comes into the tracker area.

629 Moss: Has a long sight investigation been made in reference to this accident? I would just like to know who was involved in it.

633 Foster: Immediately after the accident, the parties involved were asked to make a brief unofficial statement. It wasn't even required to be signed. That is the only contact we had with any member of the air force or with IT&T regarding this accident investigation. The only realistic investigation we've had at any fashion since then was when and through state OSHA with Mr. Eric Short.

639 Moss: That's all I have right now, Mr. Chairman.

642 Josephson: Alright, thank you very much. I would like to maybe invite Mr. Short to come in, kinda out of order here, if that is alright with the other witnesses. Now that we've had...we have others to hear from, but I think at this time, Sen. Moss, it might be...

646 Moss: ...it might be the proper thing, yes.

654 Josephson: Mr. Short, what is your position with the state office of Occupational Safety and Health?

658 Short: Industrial hygienist.

659 Josephson: And are you based in Fairbanke?

661 Short: Anchorage.

662 Josephson: Anchorage. I understand that there, at least at last report, your office had issued a penalty and citation to the contractor who had contested that, and there are either negotiations pending or the possibility of formal administrative hearings on that matter, is that correct?

670 Short: Yes.

672 Josephson: ...And the size of the penalty was to be \$840, is that correct?

674 Short: Yes.

675 Josephson: How is that penalty calibrated or arrive at?

677 Short: There is an objective system which is used to determine penalties. It depends on the number of employees that are exposed, how frequently they are exposed, what the extent of their exposure is, if it is daily exposure, or accidental or incidental in nature. Also the degree of

injury that may be expected from that exposure, and actually, each category is rated on a 1 to 8 scale and then those factors are averaged together. Then, the seriousness of the...the classification of the citation is taken into consideration and other factors, other stress factors which may have contributed to the incident are taken into consideration, but it is an objective system which attempts to take into consideration all those factors and come up with a mathematical average which we then apply to a table to.

689 Josephson: Taking that into account, what would I infer from \$840 that it was regarded as a one time incident with potentially little damage or that it was a serious incident. Can you help me with that?

695 Short: The nature of the citation was considered serious. It was classified as a serious violation. There were actually two violations. One involved the lockout procedures and the other citation involved the overexposure itself. There are other adjustment factors which are applied. There are factors which are related to the size of the company which are taken into consideration. A company with ten or few employees may receive 40% off the final determined amount, between 10 and 25, 30 percent, between 25 and 50. In this case, there was no reduction based on the size of the company. I can allude to those figures what it involves...that there were federal civilian employees which we technically don't have jurisdiction over in the state. There were about seven employees that we can say were exposed, or that we had data sufficient stating that they were exposed. We know that two of those were federal civilian employees and the others were Pellick Services employees. We had four Pellick Service employees exposed, two federal civilian employees exposed. There were two others which, whose exposures at this time we cannot determine if they exceeded the recommended exposure limits. The other factor that was taken into consideration was that this was not a daily eight hour exposure situation that the company is aware of. It was an action. It was an incident where it was not a daily eight hour a day exposure. It was an incident that the company was not intentionally involved in exposing the employees to the condition. There are other factors that I can supply you more details on that, if you care.

748 Josephson: Yes, that would be fine. I am asking the question because you might consider me here as a lawyer dropping down from the moon into a strange land. In my own practical experience would be that a \$840...that contesting the \$840 penalty will probably costs thousands and thousand of dollars, and I'm wondering why the contractor does that. For example, if...would the payment of the penalty, under your regulations, constitute an admission for purposes of any civil action?

759 Short: That is a possibility.

766 Josephson: It was mentioned that the state may not have the access to the type of equipment that would allow for exposure measurements to be taken under your office's own jurisdiction. Is that...is that true and if

is that a problem that the legislature ought to consider or the department ought to consider?

770 Short: No. We have a radiation exposure assessment instrument. At the time we became aware of the incident, and since that time, that instrument is at the manufacturers for calibration. We are obligated to periodically calibrate our instruments for legal sufficiency of any measurements that we take with those instruments. That instrument was not available to us, and we also felt that federal OSHA did have a microwave radiation, or a radio frequently radiation actually at their disposal in the form of a (inaudible). He was a member of the health response team which is, in fact, intended to respond to these types of emergencies. It is not uncommon for a state program to ask for specific expertise if it is obtainable through the federal health response team.

788 Josephson: Have you had adequate cooperation from the federal government in terms of access to the base and access to the data that the air force might have?

793 Short: Yes. Some of their reports were not produced immediately. I'm somewhat sympathetic with the amount of time it can take to produce reports. We did wait for some time to get actual written descriptions of the air force's assessment. Before we actually got the written reports, I was in contact with the air force personnel who performed the survey and I was given information in the form of field notes concerning the measurement of information that they had obtained. But that was outside of their total incident report that they later produced and supplied to us.

801 Josephson: Let me go through your chronology. That may be the best way to elicit the information that will help clarify this. First of all, the office became aware of the September 14 microwave radiation exposure incident with the forwarding of a worker's compensation report of occupational injury from the Worker's Compensation Division. On September 26, 1983...let me ask first of all, in this situation, assuming that the employer was given notification of the incident, would the employer have an obligation to notify your office of the event before the processing of the worker's compensation report?

910 Short: It is my understanding that under current statutes, the employer is obligated to notify our office of an accident if it involves the overnight hospitalization of five or more employees, which in this case it didn't occur.

814 Josephson: I see. And is that...do you know if that provision is standard throughout the nation or is a provision which the legislature could change to require reporting, earlier reporting in situations like this?

818 Short: I believe it is a current federal standard and in order for a state program to operate where federal law exist, our law have to be at

least as stringent as the federal standards. We can set laws which are more strict than the federal standards.

820 Josephson: See, this is a possible area for legislative action if we feel it is justified. Then, your office inquired of Pellick Services, Inc. on September 28 about the extent of injury and whether or not hospitalization occurred. By the way, were any of these employees hospitalized overnight, do you know?

824 Short: I am not aware of any overnight hospitalization of any employees, except that which occurred when they were sent for physical, and indicated that they (inaudible)...there was not to my knowledge any overnight hospitalization.

828 Josephson: Did Pellick Services respond to your inquiry of September 29 concerning the degree of exposure?

830 Short: We were given some details. Our initial inquiries were made over the telephone and we did indicate that we would be pursuing an investigation of our own at that point. We have not yet received any notification from any of the affected employees. We had not received any complaints from the employees until October 24.

835 Josephson: The air force...as I understand it, the measurements were taken by air force bioenvironmental engineers on September 22 and on October 25, which would be 33 days later, you received notification from the air force that its radiation exposure survey would be made available to your department when its report had been completed. Would that be, would there be any reason, to your knowledge, why the report of the September 22 measurements would not be available within that 33 day period?

841 Short: I was told that because certain aspects of the report may contain confidential information about the incident itself and the frequencies and some of (inaudible)...I was told that the report would have to be reviewed by air force personnel in California, and certain portions of that report may have to be omitted because of their confidential nature before it could be given to the state. So I was told that the reports had to be reviewed before it could be released, and certain persons in the air force would determine what portions of that report we could see and what portions we could not see.

847 Josephson: Have you seen the report?

848 Short: Yes.

849 Josephson: When was that made available to you?

850 Short: (pause) I'm not sure if it is in this chronology, but it did become available to us sometime in December. I can't figure the exact date.

852 Josephson: And I take it that some portion of the report were excised or cut out or blacked over for security reasons.

854 Short: I'm not sure just what portions of the initial report, if any, were actually cut. I was given some information before we received the final report pertaining to some of the field measurements that were taken, and that was primarily what our primary interest was in, was what exposure measurements they had come up with.

860 Josephson: Well, Mr. Foster testified that the September 22 measurements were not valid. Do you concur with that or not concur?

862 Short: There are some legitimate questions about the validity of the survey that was performed by the air force.

864 Josephson: Because of what reasons?

865 Short: Some of the switches that were utilized on the instrument and there are some questions about the extent of the calibration of the instrument. We did receive calibration documents. I have copies here of calibration documents on those instruments and there is some question about to what extent the calibration of the instruments at one frequency could be expected to be considered an adequate calibration for the frequencies being tested. There were other objections to the survey.

871 Josephson: Okay, I don't want to be an alarmist here. I think that would be very destructive to just come in and do that, but as a layperson, I would be concerned if appropriate medical care was not made timely to workers because of a lack of good medical history concerning the event. I don't know whether these measurements are of a nature, and you probably don't either, that a...(end of Side A, Tape I)

Side B, Tape I

001 Josephson: ...verbal and written request for a redoing of the exposure measurement. What, if any, justification is given for not having accomplished that by this time?

004 Short: Initially, our first request...on November 1, we verbally requested that Federal OSHA to provide personnel and equipment to assist in an exposure evaluation of Clear Air Force Base. I, in fact, talked to a person who would do that survey and we, in fact, was beginning to make arrangements to meet in Fairbanks and come to Clear to attempt to redo that survey. He was advised by one of his...by a person in regents in Federal OSHA who would determine whether he could go or not, but he was told that Federal OSHA would wait for the air force report and review them before they would redo the survey.

014 Josephson: Those reports became available to December and now it is the middle of March. Do you know why they, assuming there was a legitimate reason for Federal OSHA to do nothing until the air force reports were finalized, now that they have been finalized, do you know....this is not a cross examination of you. I'm simply trying to find out what the reason might be. Why they wouldn't have done in it January or February.

020 Short: Well, I would prefer not to answer that question on behalf of those persons. I have some ideas on that subject. They were aware that we had written a citation to Pellick Services based on the air force data which was considered potentially erroneously low. Their potentially erroneously low measurements were sufficiently high to merit the issuance of a citation. Noore was contesting that the measurements were erroneously high. We saw the measurements as at a minimum that they showed that an overexposure had occurred.

029 Josephson: In other words, the nature of the mechanical error or technical error would be bias towards an overly low report as opposed to an overly high report.

033 Short: Yes.

034 Josephson: Now, you...assuming that the federal authorities would not participate and would not honor your office's request to perform the measurements again, you have, if I understood you, you have the technical capability when your own equipment is on line to do it yourself. Is that true? Did I understand that correctly?

041 Short: I would...I do not have a lot of experience in radio frequency measurement. I could use the instrument and take a survey. I would feel more comfortable with a person with a, with more credentials in that specific field to take those measurements because of the controversial nature of the measurements.

049 Josephson: Alright, now Mr...I asked this question of Mr. Foster and I'll ask it of you. If the tests were done tomorrow, would they be instructive as to the radiation level on September 14, 1983 or are we beyond the time limit as any use in it anymore?

054 Short: The incident...if the power levels were known, it would be very informative. In fact, I am currently aware of the possibility that Federal OSHA will, in fact, send a person up to redo these measurements.

058 Josephson: They've indicated that they may now perform them?

059 Short: Yes.

063 Josephson: Senator Moss, do you have any questions?

064 Moss: No. All my questions have been answered.

065 Josephson: Just a moment please, while I review your statement.

070 Josephson: Let me this. Without an admission by the contractor that the matters raised in your citation are correct, and I understand that they are resisting that, do you know if, without prejudice to whatever their position may be, they have instituted the changes in procedure which your office found should be made, with regard to lock out procedures and so forth?

076 Short: I have been instructed not to discuss those matters which are currently in the legal process of being subject to a review board hearing. I could answer that if I (inaudible)... We are currently reviewing what abatement measures would be adequate with the employer and affected employees, and a proposal has been drawn up which will be sent to the employer. If they cannot accept the terms of that proposal, it is likely that the case would proceed to the review board hearing. Essentially, the last paragraph of this chronology reiterates our current position.

089 Josephson: I'm not sure I am inferring correctly, but I infer that there has been a change and that it's still being discussed with the employer and the employer still insists that the procedures were adequate, and that if you don't get compliance or admissions or payment or penalty or all of the above, I don't know what the combination would be, you may have a hearing.

094 Short: Yes, that's right.

096 Josephson: Senator Moss?

097 Moss: I've got one question. Maybe it will help me out some. Can present workmen's comp rules cover this type of an accident. In other words, these fellows are out of work for a while or whatever. Under the present rules as you understand them, would they cover them for this type of an accident?

103 Short: I don't work for that division. There are some complicated questions which I don't feel competent to answer concerning what workmen's compensation would or would not cover concerning the physicals or time off work or whatever.

107 Josephson: Let me, if I may Senator, ask this. You've talked about this in most of our colloquy has been about the accuracy of the information, the testing, and the level of cooperation you received. Mr. Foster's second contention was as to inadequacy of medical attention. Is that within the jurisdiction of your office to find out if adequate medical attention was provided?

112 Short: Under our current radio frequency standard, there is no provision for physicals to be given to employees if they are exposed to radio

frequency radiation. We do have such provisions in some standards. In fact, there are elaborate requirements which even dictate the contents of physicals for exposure to some substances. But we have adopted most of the federal rules which have...currently have no physical requirement under radio frequency exposure standard. There is no general requirement to provide physicals that are affected by workplace exposures to types of hazardous substances. We do have requirements under the asbestos standard and the lead standard and some other standards involving cancer-causing chemicals, which require physical and dictate the contents of the physicals.

122 Josephson: Given the legislature's policy statement last year in favor of right to know in the workplace, it seems to me that we may want, either by rule or by law, to clarify the right of workers who had been exposed to radio frequency...potential radio frequency injury. This idea that they should know accurately what the exposure was would be philosophically consistent with knowing what the toxic waste hazardous substance was. I mean that may be asking you....

129 Short: I completely agree with that, yes.

131 Josephson: With your expertise in this field, let me ask you, if the symptoms which Mr. Foster related to us would be consistent to what the literature says would be a sequel to radio frequency exposure?

136 Short: I don't feel competent to answer questions about medical symptoms in relation to exposure to, since at this time in particular, we are not sure exactly what that exposure was.

140 Josephson: His third contention was that there had not been an honest accident investigation, but I don't think he meant to relate this to your office. But to the efforts of the employer, have you...do your regulations provide for sanctions against employers if they do not make an honest accident investigation after the incident occurs?

148 Short: I am not aware of any requirements that our division would have pertaining to accident investigation. The workmen's compensation division may have something along that line.

152 Josephson: I mean in assuring workers safety, in addition to looking at the event that led to the injury, it would probably be appropriate for either us or the department to impose a duty of the employer to meet certain criteria for accident investigation as a general safety precaution.

156 Short: That would be an innovative and progressive type of legislation.

160 Moss: I was just going to comment. I don't want to speculate, but when you say that out of this that we have been into here should come from changes in the regulations to cover this type of an accident, it would allow

you to become more involved in it and your operations. We've got it for asbestos, we've got it for other (inaudible)...spelled out specifically. I am just wondering if it would be necessary for us to put a regulation or a law out that would create a regulation. It would give these people a quicker chance to take care of their problems and compensation and so forth.

171 Josephson: I came here not knowing much about this and I'm not an expert yet. I'm somewhat skeptical about the role of the state government in this matter. At least prospectively, and it won't help necessarily these particular workers, I see a variety of things that the state legislature probably ought to consider doing that we discussed, in terms of information, accident reporting, and that type of thing at least.

180 Moss: (inaudible)

182 Josephson: Do you have anything else to say that you think might help us?

184 Short: Is that a question?

186 Josephson: Not unless you want to comment. I'm not....

188 Short: Well, I could comment on that. We have the capability, we have the legislative capability to make standard which exceed federal standards. However, I would question whether we have...whether we are trying to have the research capability to produce the kind of information that would be required to document those kinds of change in the standards. Currently, in order for Federal OSHA to change any of these standards, there is quite an elaborate process that they have to go through. Federal OSHA has, at its disposal, national research institutes which study these problems and which propose and promulgate changes in standards. The state does not currently have or fund any type of research group which would be....If we were to try to change the standard, I don't know who would actually write that proposal. We are supposed to do inspections. It is doubtful that we actually have inspections, criteria for high inspections we are desired to perform on a yearly basis. I doubt that I would be taken out of the field to write proposals for changes in standards and I don't know who would do that or who would fund them or who these people would be.

207 Josephson: By the way, approximately, if you know, how many Alaskan workers do you think would be working in an industry where this type of hazard exists? I'm not talking about the system that was used, but in the nature of industry where there could conceivably be microwave radiation exposure?

211 Short: I don't know...

212 Josephson: I mean, I....

214 Short: I doubt it's a very large group. There are...that would be discoverable.

216 Josephson: Could you, could your department discover that for us and tell us whether we are talking a magnitude of 20 or 50 or 100 or 200 Alaskan workers?

219 Short: There is...I don't know if we have real good data because of the business situation changing so rapidly, as to how many people are employed in specific industries. There is some general data to that effect, but it is updated by the...there is a division in the building that is involved with assessing members of people in certain employment statuses. I am not real familiar with their data.

225 Josephson: Okay, we have a lot of things to look into when we get back to Juneau. Thank you, Mr. Short. If you'll stand by, we'll proceed then to....

228 (Unknown speaker): May I ask him a question?

229 Josephson: Pardon me?

230 (Unknown speaker): May I ask him a question?

232 Josephson: Well, we are not really going to do it that way...I will recognize you for one question, but we have to proceed? Will you identify yourself?

236 Bill (?): My name is Bill (inaudible). I'm one of the people here in the community. Have they ever been fined before for an accident? Not necessarily an accident, but have (inaudible)...been fined before due to investigation by the state for (inaudible)?

243 Short: I know we have done inspections there before that did not relate to radio frequency exposures. It related to other types of exposures that were involved with that type. I don't know if there were actually fines issued but I could find out. We keep all our cases on microfilm so it is discoverable information. I could find that out for you.

250 Bill (?): Do they cooperate with you when you do investigative (inaudible)....?

253 Short: During...this is the only investigation that I have been involved with with (inaudible)...Services.

255 Bill (?): (inaudible)

257 Short: When I went to the site, I received cooperation. There was...I waited sometime for data and information, but part of that was due to

air force related and some of their incidents. They did provide us with the documents that we requested and they were cooperative with me when I was at the site.

255 Josephson: Thank you. Mr. Jessop? Good afternoon. Mr. Jessop, I will invite you to proceed in the same spirit that Mr. Foster did in terms of telling us anything that you feel would be helpful to us.

266 John Jessop: Well, if you could give me an idea of what you would like me to...

269 Josephson: Well, I take it that you were one of the workers. Did Mr. Foster...just to move through this as quickly as possible, Mr. Foster's recount of what happened on September 14 is consistent with your own recollection right?

273 Jessop: Right.

275 Josephson: And then, following that, when did you begin to feel that you might have...not just from knowing what happened, but from physical sense, when you began to feel ill or bothered symptomatically?

279 Jessop: That following day when we were taken to Fairbanks Memorial Hospital.

281 Josephson: Who took you to the hospital?

282 Jessop: One of our drivers from the base. We were all taken together in a company bus, air force bus.

285 Josephson: Were you feeling ill at that time?

286 Jessop: I felt a little...kinda a little nauseated on the way, but I didn't really relate it to that accident.

289 Josephson: Okay, and when you got to the hospital, what...were test administered to you?

290 Jessop: Yes. They done an eye exam and blood tests, x-rays.

292 Josephson: What doctor, by name, would have been in charge of that procedure?

294 Jessop: I don't know if there was any doctor persay that was in charge. There were several doctors, a Dr. Carol, a Dr. Fischer, a Dr. Duramus, and a Dr. Martino that was assigned to us at the hospital.

298 Josephson: Did...as a result of that experience in the hospital, were you told that you had any illness?

299 Jessop: No. We weren't told. Those doctors told us, everyone of them told us that they didn't know anything about RF radiation. They freely admitted that to us. They knew nothing about it.

303 Josephson: Did you...were you also offered to go out to Brooks for a more substantial examination?

305 Jessop: Yes, I was. I refused to go.

307 Josephson: For what reason?

308 Jessop: Because circumstances surrounding the investigation, the survey, and the attitude that the air force people and the company had during our meetings of September 22 and 23 and 26. We were being flim flamed in those meetings and lied to and, at the time...time to go to Brooks, Mr. Foster chose not to go because they were sending us down on false pretenses, we felt.

315 Josephson: Well, you say you were flim flamed and lied to, and in order to allow us to appreciate that, could you be more specific as to what was said and what you felt was erroneous?

319 Jessop: There was some very legitimate questions brought up by Mr. Foster at those meetings and those people avoided him, went around his questions. They talked about their dog Fido and little pink rabbits and all kinds of things, and they didn't approach this thing in any legitimate fashion after an accident.

325 Josephson: Now what changes, if any, have you noticed in your own physical condition since September 14?

329 Jessop: I'm very tired. I don't eat right, I don't sleep right. I have some horrible headaches I have had every since shortly after the accident. We never received any kind of legitimate treatment, medical treatment due to this accident.

334 Josephson: Are you under a doctors care at this time?

336 Jessop: Yes, I am.

338 Josephson: Who is that?

340 Jessop: A doctor that we are seeing in Anchorage at Providence Hospital.

342 Josephson: Who is that?

343 Jessop: Dr. Sternhagen.

344 Josephson: He's the cancer specialist?

345 Jessop: Um hum. He's the only doctor that has treated us with any dignity at all.

347 Josephson: Yes, I know him. He's a fine man. Has he diagnosed your condition?

349 Jessop: No. He freely admits that he doesn't know what this stuff does to people other than in his cancer treatment.

352 Josephson: Sir, has he indicated to you...Is he also treating Mr. Foster too?

354 Jessop: Yes.

355 Josephson: Now, has he indicated to you whether, if he had the data that was not forthcoming, or was arguably not forthcoming in the measurements of September 22, that that would help him diagnose your cases?

359 Jessop: He feels that that data is very pertinent to our medical treatment in the future with legitimate doctors that we plan to see that may be able to treat us.

363 Josephson: This is (inaudible)... to, I suppose to a bill we have, Senator Moss, on requiring information about Agent Orange exposure for veterans as a basis for downstream medical treatment, medical history treatment.

369 Moss: I think they have been plagued with the same problem that these gentlemen have.

371 Jessop: Well, without knowing the legitimate data, you can't really base anything on what they find. Nobody will listen to us.

373 Josephson: Now, Mr. Short indicates that Federal OSHA has finally, or at last has said that it will recapitulate those measurements. That will be helpful to you.

376 Jessop: You bet. That's number one.

378 Josephson: Now, Mr. Foster complained in three areas having to do with the question of medical attention which you've mentioned, the inaccuracy or alleged inaccuracy of radiation information and the failure to conduct an honest accident investigation, to quote his testimony. Are those your complaints also?

384 Jessop: You bet. One hundred percent.

386 Josephson: Okay, is there anything else that you would like us to know or anything else that's on your mind that hasn't been brought out yet?

388 *Jessop: No, not necessarily. I think we need...we definitely need an honest investigation of this.*

390 *Josephson: Okay, and you're here under subpoena also?*

391 *Jessop: Yes sir.*

392 *Josephson: Has anybody tried to induce you not to appear?*

393 *Jessop: Wouldn't do any good.*

395 *Josephson: Senator Moss, do you have any questions?*

397 *Moss: One question I might have. Maybe its an opinion. Do you feel that long extended periods of microwave action on people or perhaps animals or anything like that will have an effect on you?*

401 *Jessop: I'm not an...I'm not an expert in any fashion of the word, but I would certainly think so. From what I've been through, I'd feel sorry for anything that got in the way.*

407 *Josephson: Are you...are your medical bills being treated, being paid through worker's compensation or how are they being paid?*

409 *Jessop: Well, not very good. I just received another bill from the x-ray department of the hospital just yesterday, that hasn't been paid. We're not being taken care of properly at all on this. When we go somewhere or when they send us somewhere, workmen's comp pays for our time off work but they do not pay for our medical bills. They've never paid to these glasses since this accident.*

414 *Josephson: Have your eyes changed since the accident?*

415 *Jessop: Very much.*

419 *Josephson: Do you have...you have filed...Mr. Foster did, if I'm correct in this. Have you filed through the worker's compensation board? Are you one of those who reported an occupational injury?*

422 *Jessop: I sure did.*

424 *Josephson: Has there been an hearing yet before the worker's compensation board?*

425 *Jessop: No there hasn't.*

427 *Josephson: Is it your statement that some medical bills are paid by the employer and others are ignored? Is that what's going on?*

430 Jessop: No, I didn't say by the employer. I said by workmen's comp which is...

432 Josephson: Well, the employer's carrier.

434 Jessop: Yeah, the carrier. To my knowledge, they haven't paid any of the medical bills.

435 Josephson: On what basis have they not paid?

436 Jessop: I have no idea.

438 Josephson: Is that your experience also, Mr. Foster?

439 Foster: Yes sir. We have been bogged down on this also in lost wages. Were in the same problem there.

441 Josephson: Well now, you indicated that the worker's comp pays for your lost wages.

443 Jessop: When we are not working...when we were sent down to Brooks, the time that I was in the hospital, they paid, they paid my time. To my knowledge, they have not paid anything on the doctor bills.

446 Josephson: Is that consistent to what your experience is or not?

447 Foster: I'm still receiving bills; some of them paid back in December, I can think of off the top of my head.

450 Josephson: Has the employer or the employer's insurance company indicated to you, MR. Jessop, that this medial treatment you are getting is unnecessary?

453 Jessop: No, they haven't said that. They (inaudible)...

456 Josephson: Have they required you to report to doctors of their choice for examination?

458 Jessop: I just happen to have a letter here from the insurance carrier. You are welcome to keep that. I will get some more of them; I have many copies of them. I'm proud of that one. That particular letter is a letter that was sent to me cutting me off from workmen's compensation benefits because I refused to go see a rat doctor. By that, I mean a doctor that does does study. He is a bioelectrical magnetical engineer doing research on rats. And I refused to go be examined by him and, consequently, I was cut off. I have never, to this day, received a letter changing that.

465 Josephson: In this letter from the employer's, apparently the employer's insurance carrier dated October 24, 1983, you are advised that Mr.

Foster had asked that the adjuster locate a position to evaluate you and Mr. Foster. The adjuster says that she works for IT&T/Pellick Services and contacted them, and the only physician they knew of not affiliated with the air force and who received training for radiation treatment with Dr. Ghandi at the University of Utah....

472 Jessop: He's a Ph.D., not an M.D...

474 Josephson: I see.

475 Jessop: I don't wish to trust my health with somebody who's not a medical doctor. They can say anything they want.

478 Josephson: And I...let me go on. She says that she was willing to contact Dr. Ghandi and find out if he would evaluate you and Mr. Foster or review your medical records and advise the carrier if further examination was necessary, and you declined to accept that on the basis that she was an agent for the IT&T/Pellick Services. Is that correct?

483 Jessop: Um hum.

485 Josephson: Therefore, quoting 'therefore at this time I do not see that I can offer any additional services that would be covered under the Worker's Compensation Act at this time.' So, how many times have you been to Anchorage to see Dr. Sternhagen?

490 Jessop: I've been once since the first time.

491 Josephson: A couple times?

492 Jessop: Just a week ago. They paid for that trip.

493 Josephson: They paid for the trip?

494 Jessop: Yup. They paid for the plane ticket.

496 Josephson: So you have this...(inaudible)...where the employer pays for your travel to the doctor and gives you compensation through the workers compensation system when you see a doctor, but is not paying the doctor bills. Is that right?

501 Jessop: Right. It's a helluva mess, isn't it?

503 Josephson: I can see them saying, 'we're not going to do any of that because we don't think your sick', but I can't see them doing part of it and not all of it.

507 Jessop: We can't either. It's something beyond our feeble minds.

510 Josephson: I was asking you, have they directed you to go to a doctor of their choice for evaluation?

512 Jessop: Yes they have.

513 Josephson: Who was that?

514 Jessop: That was a Dr. Becker in San Francisco. We had even talked to him. He indicated to us that he didn't want to see us because of the publicity that this thing had received, and we received letters back from the workmen's comp carrier stating that he did not wish to see us.

520 Josephson: Have they sent you to anyone else or asked you to see...?

521 Jessop: No.

523 Josephson: In your worker's compensation proceedings, are you and Mr. Foster represented by counsel?

524 Jessop: No, we are not?

525 Josephson: Any more questions? Do you have anything to add? If not, thank you very much.

528 Josephson: Mr. Forsling? Thank you for being with us, Mr. Forsling. You were one of the eight...

530 Ed Forsling: Yes.

532 Josephson: ...Alright. And, did you experience, or believe you experienced physical symptoms following September 14.

533 Forsling: Yes. Immediately after he had knocked the antenna, I was very hot and sweating and my eyes were burning a little bit. I told the team leader that I was hot and didn't feel right and I felt that I ought to go into the medic room. He went in to see the site manager who was acting supervisor, and come back and told us we had to go back up. From what I've learned since this accident, we've lost pretty pertinent data there because when the body gets highly overheated, the blood pressure goes up, the heart rate goes up and the temperature, of course, goes up. Some of us still had, after four hours, high blood pressure, high temperature after the body had four hours to try to cool itself.

544 Josephson: Did the employer...had the employer given you any training as to what to look for in case of overexposure? What symptoms to look for?

546 Forsling: No, sir. We did come across a document there on the sight, 161-9 air force (inaudible)...should be contacted immediately. And it says that you should evaluation (sic) dosimetry within 30 days from there. We were aware of this because when we went down to the medic's office, we asked him how did he know what to look for. They said that (inaudible)...that they had called Brooks. Apparently, they were aware of that documentation there on the sight too.

557 Josephson: Did you decline to go to Brooks along with the other gentlemen?

559 Forsling: No sir, I was hurting pretty bad at the time. I just hoped for the best.

561 Josephson: When you say your hurting pretty bad, what do you mean?

562 Forsling: I was suffering a lot of pain.

563 Josephson: Where?

564 Forsling: To my back, to my joint, joints, and I was having headaches. I had swelling in my ankles that had come about immediately which apparently, according to some documentation, is a symptom. But the only thing I suffered following the accident was that a couple of days later, I started to get the tingling sensation, the eye tick, and there's a...I had lost the hearing twice in my left ear. On time for almost three hours, I had a complete lost of feeling on my left side and...(inaudible)

570 Josephson: Are you being treated by a physician?

572 Forsling: Yes, I'm seeing Dr. Sternhagen and he's the guy that's going to various doctors in town here....

575 Josephson: In Fairbanks?

577 Forsling: ...for evaluation and to keep on monitoring. He said it was out of his expertise and one of the reasons he's referring us out was that he thought that dosimetry was important and he thought we should hang in there too.

582 Josephson: He thought what was important?

583 Forsling: Um, dosimetry and (inaudible). Most of the medical research data that I've looked at directly relates it to damage and long-term.

586 Josephson: So in addition to the physical symptoms you have obviously, there is a mental overhang of what will happen 5, 10, 20 years down the road.

590 Forsling: Well, we were kinda informed that, really, at the first meeting by Col. Dallas. He kinda went through some medical documentation (inaudible). He started with sunburn and got into some very pretty severe cases.

596 Josephson: Can you speak up? I'm being signaled that you're not getting...

599 Forsling: Then he started telling us that we had sunburn symptoms...or similar to sunburn. It was pretty hard to believe when you're hit with (inaudible)

604 Josephson: Did you join in making an application, or a report of injury to the worker's compensation program like Mr. Foster suggested?

607 Forsling: Yes.

609 Josephson: Alright. Are your medical bills being paid by the carrier for Pellick Services, Inc?

611 Forsling: No sir. I have a copy of a letter. I was first told that centrology report would be enough. Apparently, it wasn't.

614 Josephson: A letter from whom?

616 Forsling: I have a copy of a letter that they had sent one of the doctors asking....related to the accident.

620 Josephson: So, what may be going on is that they take, at least officially, they take the position that the three of you who were all showing symptoms may be ill for reasons having nothing to do with what occurred on September 14.

625 Forsling: I can't really answer that because it pays some and some they don't. How they can relay them, I don't know.

629 Josephson: Are you a member of Teamsters 959 also?

630 Forsling: Yes sir.

632 Josephson: Senator Moss?

634 Moss: Yes. I just wanted to ask Mr. Forsling, how long have you been wearing glasses?

636 Forsling: I've never worn them until about 30 days after this accident. About 40 days. I still didn't require glasses when I was at Brooks. Now my eyes aren't in focus. I got a mark through one of the lenses, I guess and the other stuff, I couldn't understand on the report.

641 Josephson: Now, of the three of you, you are the only one who went to Brooks?

643 Forsling: Of us three, yes.

645 Josephson: And what did Brooks...what did they tell you at Brooks?

647 Forsling: None of them would talk to me. I couldn't get one word out of them?

649 Josephson: You mean there is medical information there that you don't know what it means?

652 Forsling: I was assigned the position the first day. I told them what pains and aches and swelling and various symptoms, and after the first day or so, he'd gone TDY and I was never able to talk to him. When I did ask a question or two through the various specialists they sent me to, I didn't get any acknowledgement and...

659 Josephson: Excuse me. You have Alaska physicians now. Have they tried to get medical data out of Brooks on your case?

663 Forsling: Yes sir. I...it took me three months to get my medical records out of them.

665 Josephson: Brooks did send your medical records?

666 Forsling: Finally, yes sir.

668 Josephson: Alright. Have you seen those records?

669 Forsling: Yes sir.

670 Josephson: What diagnosis if any was made of Brooks?

672 Forsling: Well...

673 Josephson: I know you're not a medical doctor, but you probably discussed them with your physician.

676 Forsling: It shows I'm 100% healthy almost.

678 Josephson: I see. So they say you are in great shape?

679 Forsling: Yes sir.

681 Josephson: Do you have those with you by any chance? Copies of those medical records?

684 Forsling: I have them at home. I can bring them in later. Why don't I send it to you.

687 Josephson: How long were you down there?

689 Forsling: Eight days. From October 11th through the 19th.

691 Josephson: Well, when you saw you were in great shape according to Brooks, did that make you feel better?

693 Forsling: Yes sir, but I was still having pains and I still had swelling and I...my eyes still weren't affecting me then. It seemed like my eyes started changing three or four days after I left Brooks. '

697 Josephson: So they never had an opportunity to consider that problem?

700 Forsling: On their report, there were lots of comments injected on the report that I didn't agree with at all.

703 Josephson: About what occurred there or what your history was or what your....

707 Forsling: They injected in a couple of places they said that I said things that I hadn't said. That was on the comment section.

710 Moss: (inaudible)

712 Josephson: Any other questions?

714 Moss: I just wanted to make sure we got that in about his eyes, because...who's your optometrist?

720 Forsling: Dr. Derimese is the ophthalmologist.

722 Moss: Did he actually...he said you needed glasses then? Have you had more than one change? I think Mr. Jessop's had two sets of glasses.

726 Forsling: Well, he told me that my eyes were changing pretty rapidly and he was going to wait until it stabilizes a little more before I get another pair.

730 Moss: Do he have any idea why they were changing so rapidly?

733 Forsling: Well, he's never seen...I don't think he's ever had an RF radiation patient before this. It's probably putting a doctor on a spot if he hasn't seen it before, you don't address it.

736 Moss: Well, I don't know. I'm beginning to think somebody ought to be on the spot about the whole thing.

740 Josephson: Do you have anything else you would like to add?

743 Forsling: Just that it is hard to get anyone to listen to us for a long time.

746 Josephson: Well, you've gotten pretty good cooperation, as I understand it, from Congressman Young's office and...

749 Moss:we're listening...

750 Josephson: ...and we're here, of course. But how about the state Department of Labor people. They haven't been responsive to you have they?

754 Forsling: Yes sir, I thought they were very responsive up to the hearings.

756 Josephson: Up to the hearings?

758 Forsling: Well, after I'd heard what the proposals were, which I guess they've changed since then when I read the papers, I didn't agree with at all.

761 Josephson: What do you mean, their resolution of the matter with administratively...

764 Forsling: Well, what Mr. Jorgensen had said in the paper.

767 Josephson: What was that?

768 Forsling: Well, for one thing what had been done was an abatement, and basically nothing had been done. At our hearing, it was brought up, I brought up the fact that the safety problem still existed and noone seemed to disagree with it, but yet it (inaudible)...settle for an abatement of what had been done.

778 Moss: I want to inject a question right here, Mr. Chairman. Does this interlock problem, is it still a potential safety hazard now?

781 Forsling: Yes sir, they have not been corrected.

783 Moss: It has not been corrected. Why hasn't it been corrected?

786 Forsling: There has been attempts. They have done two things, but it's changed the....I wouldn't know how to explain it to you.

789 Moss: In other words, it has not been corrected. The problem that created you all's accident has not been corrected?

792 Forsling: Well there's still...there's still problems.

796 Josephson: I think that was indicated earlier and that it is still being negotiated.

804 Forsling: We have a...the union's gotten us a meeting with the company...(End of Side B, Tape I)

TAPE II, SIDE A

001 Josephson: I think I have no other questions. Thanks you very much. Are there other persons here who wish to testify on this matter or who feel that they can add anything that....

005 Foster: I will add one thing, if I might.

008 Moss: If you will come over so we can (inaudible)....

011 Foster: I just wanted to point out that in January of this year, John Jessop and myself did go to Brooks air force base when it was offered as a medical requirement by IT&T, and offered us a lettered form under standard workers compensation. At that time, we did travel to Brooks air force base. There seems to be a shroud of mystery as to whether or not this incident produced injury. I don't wish this reprinted, but you may read it. It is my medical records. This stuff does hurt people. There seems to be considerable debate there over and over, does radiation hurt people. The answer is yes. That is really all I have to add. You're free to read those or reproduce them.

023 Moss: (inaudible)....for example, when you said, what is your condition now? How long have you been wearing glasses? I don't think I asked you that question.

027 Foster: The majority of my life. It's a long term....

029 Moss: Have you had to changed glasses since this accident?

031 Foster: Yes sir, twice.

033 Moss: Do you have the same problems with your eyes that we've heard testified to before from the other gentlemen?

035 Foster: I've had visual hallucinations, difficulty focusing, difficulty reading back-lighted objects.

038 Moss: Did you ever have that happen to you before the fact?

040 Foster: No, sir.

043 Josephson: I'm interested to know, I mean I can't really assess this unless I were to see Mr. Forsling's report, but why they diagnosed you as suffering ill effects from excessive exposure to radio frequency radiation level and why they would not...why they would tell you that you are in 100% shape. I don't understand that.

051 Foster: It is part of this incredible situation we find ourselves in. The entire incident since it happened has filled our lives with double talk. We haven't had a straight answer in six months.

057 Josephson: Go ahead.

058 Moss: No, you go ahead. I'm just going to ask one thing. Why you were down there, did you run across anybody else that had heard of any other people having the same type of problem...accident?

062 Foster: When we went to Brooks Air Force Base, it was indicated to us that there was a great deal of medical expertise available at that station. That is why IT&T made a medical requirement of the trip. When we actually got down there, I actually only spoke to one physician that had ever even seen an RF injury. The expertise they quote, when you are talking military circles, is over at the office of environmental and health laboratories, and that's where they do their radiation research on rats. They don't have a cadre of physicians there that are experienced in dealing with human exposure problems. Or if they do, they weren't available when John Jessop and myself were there.

084 Moss: Now, what happens to the rats? Do you know?

086 Foster: When they are exposed to radiation?

087 Moss: Yeah.

088 Foster: Judging from what we've read and just speaking with people, it causes it to exhibit a considerable number of abnormalities, behavioral changes, immune change, neurological changes, visual changes. We have a great deal of medical information we've sent around and got, part of it originating from the military, which we are certainly willing to make available to you.

100 Josephson: The only thing I've noticed is....do you mind if I read this out loud?

102 Foster: I would prefer you did not. It's private information there.

105 Josephson: I can say...I can say, I think, that they are cautious in their discussion of cause and effect relationships.

110 Foster: Yes, very much so.

113 Josephson: Thank you very much.

115 Foster: We'll need those back.

116 Josephson: Yes, sure. Does anyone else have any information that they would like to add? Your name is?

123 Mark Johnson: Mark Johnson.

125 Josephson: Mr. Johnson.

127 Johnson: You questioned Mr. Short on what could the legislature do as far as accidents of this nature in the future. And you asked how many people worked in this type of industry, etc. We have, you know, within the teamsters, we represent a large majority of people throughout the state that are involved in this type of work environment, or similar. I would estimate that we, without putting a pencil to it, we represent probably 700 employees who are subject to this type of radiation, not only here at Clear....Pardon?

138 Moss: Statewide?

139 Johnson: Statewide. I would have to put a pencil to it to give you the exact figure, but that's a top of the head guess.

142 Josephson: How many did you say?

144 Johnson: I am guessing in the neighborhood of 700. Not only here at Clear, but at the remotes sites throughout Western Alaska, all the employees that work for Alascom who are subject to some sort of exposure to radiation. Since there is not a lot in the regulations to the various state agencies or state agencies, and a lot is unknown about it, I would think that maybe the legislature ought to look at putting something in there. I don't know what would be required. I could probably make some suggestions to you after a little bit of research.

153 Josephson: Well, it seems to me that, from a point of view of prospective remedies and prospective remedies are not really remedies at all, but it may be helpful. There may be more items that we'll consider when we play this testimony back. First, there is the principle of the right of the worker to know what the worker has been exposed to. As I said, that principle...the legislature has affirmed that principle in the more standard areas of hazardous and toxic substance exposure, and more recently in the Agent Orange situation where I believe we have the bill requiring positions to keep a central reporting on such cases so that down stream can know what the

history was. And, by the way, that may be something else we may consider here so that any future physician will know what the exposure was. Second thing that occurs to me is the issue of the duty of the employer to report. It should not be, in my judgment, a function of whether the employee took the initiative to file a workers compensation claim. The third area is the need for, not only the right of the worker to know, but an accurate testing method that has to be in place and has to be available. That seems to have been something of a problem here. Fourth possible area is in the administration of the workers compensation law itself because we have some confusion here about the cause and effect. It may be that we can deal with that by creating presumptions.

For example, we have a bill in the legislature now that says that a firefighter who develops certain symptoms, you know lung diseases and this kind of thing, will be presumed to have incurred them in the course of his firefighting career so that the burden is not on the worker to show the cause and effect; it is on the employer or the employer's carrier to rebutt the natural presumption. By the same token, this is a case that is sort of classic. If you have a group of employees who all show sudden symptoms such as the visual problems we heard, and all had the same exposure levels, perhaps, and again this is not something that effects the people who were exposed on September 14, but at least prospectively in the future, it would be the employer's burden to disprove...to come up with some explanation as to why all would have the same symptoms, rather than put it on the employer, employee, I mean, to show the cause and effect relationship. Those are some of the things I think we might want to look at. Yes ma'm?

238 (Lady Speaker): (inaudible)...working around a health hazard, that they also have knowledgeable documents on record that it seems human beings suffered from this type of accident...(inaudible)

249 Josephson: I have no information as to how many physicians in the United States there may be who would be expert, but I think it is a good suggestion that whoever they are, wherever they are, there shouldn't be any guessing about it. We ought to know where they are, and there ought to be a roster of them, and those are the people who ought to be consulted.

255 Foster: In some of our research, at a request from the employees to find the best doctors throughout the country who might know something about radiation, the name that keeps coming up is Brooks, where we individuals went. At this case, you tend to shy away from that because of the allegations that the air force is attempting to maybe not give the whole story. But there are several other places that we came upon. In fact, that is exactly why we came upon Dr. Sternhagen. He was recommended by...through our health and welfare people. They had contacted several people throughout the country, and it all seemed to focus back to Dr. Sternhagen, although he did not know that much. He was probably the most familiar and the closest to us.

269 Josephson: Are you the local BA for 4959?

271 Foster: Yes, I am.

273 Josephson: Do you have anything else you would like to add?

274 Foster: No sir.

275 Josephson: Thank you. Does anyone else wish to testify?

278 (Male Speaker): I think it was the Teamsters that drew these gentlemen to Anchorage. The Teamsters is the one who found the doctor for these gentlemen, and to my knowledge, they are willing to take his recommendation claim any piace in the world.

285 Josephson: Well, thank you. I appreciate everyone's participation and especially Senator Moss's suggestion that we do this. I think it does suggest some areas for legislation and also oversight of our administration and has been very helpful to me. Thank you very much.

294 Moss: Yes, thanks a lot.

END OF HEARING

April 16

Joe, Vic, Rick, Pappy, Paul

513 400 - pupil transportation

Steve Hale - DOE

Bruce Batelko - Law

Dept of law encouraged DOE to do this
bill. Kinai lawsuit over contract
succeeding 3 years.

Hope to have lower costs for trans-
portation with longer contracts.

Possibility for abuse. Dept. requires
at least 3 proposals for each bid.

Each district contracts separately

513 542 - microwave in the workplace

Robert Landau - Dept of Labor.

support bill

Sec 1-5 good - ed training for
safety programs will aid in preventing
by accidents. Notification can help
Dept. assure corrective action.

Sec 5(b) - cite dept. reg

Sec 4 - OSHA form 20 not appropriate

SECTIONAL ANALYSIS OF SB 542 - AN ACT RELATING TO MICROWAVE EXPOSURE IN THE WORKPLACE BY THE SENATE HESS COMMITTEE

THIS BILL AMENDS THE DEPARTMENT OF LABOR STATUTES RELATING TO THE PREVENTION OF ACCIDENT AND HEALTH HAZARDS WHICH INCLUDES THE "WORKER RIGHT TO KNOW" LEGISLATION PASSED IN 1983.

- SECTION 1 requires that an accident involving microwave exposure which results in the hospitalization or death of any employee must be reported to the Department of Labor
- SECTION 2 Requires that employee safety education programs on exposure to hazardous and toxic substances include microwave radiation.
- SECTION 3 Requires that information on microwave exposure be made available on posters to be distributed by the department for posting in the workplace.
- SECTION 4 Requires that an employer must display information on microwave exposure if that hazardous substance is used in the workplace.
- SECTION 5 Defines microwave exposure as exceeding the level of intensity defined by Federal standards.
- SECTION 6 Amends the Workers' Compensation statute regarding presumptions to include microwave radiation exposure incidents.

29 C.F.R.

Paragraph in §§ 1908.4, 1908.7, and 1908.8, with conditions placed on the following:

management structure; enforcement; numerical limitation; health objective; percentage of qualified personnel.

of a plan for upgrading; qualifications; consent of consultation.

information to employers; services provided and

participation in on-

protection require-

ment of written report to

and evaluation proce-

ment shall also include the State's anticipated under the agreement, format required by the Secretary.

sample agreement. A copy is available for informational Offices of the Secretary and Health Administration, U.S. Department

of requests. The State may, within a reasonable period of time concerning its request. If a request is denied, the State will be informed in writing. Persons supporting the request may be notified. The agreement is negotiable. Additional conditions may be added at a later time if the Secretary is satisfactorily satisfied. Appropriations are not required. The agreement may be amended by the Secretary. The agreement may be terminated by the Secretary. The agreement may be renewed by the Secretary.

Either party may terminate the agreement under this section by written notice to

§ 1908.10 Exclusions.

An agreement under this part will not restrict in any manner the authority and responsibility of the Assistant Secretary under sections 8, 9, 10, 13, and 17 of the Act, or any corresponding State authority.

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Subject Index for 29 CFR 1910—Occupational Safety and Health Standards.

AUTHORITY: Secs. 6(a), 8(g), 84 Stat. 1593, 1598; 29 U.S.C. 655, 657, unless otherwise noted.

SOURCE: 39 FR 23502, June 27, 1974, unless otherwise noted.

y employer shall maintain the same units used in paragraph (b) of this section dix B to 10 CFR Part 20.

losure to former employee of employee's record. (1) At it of a former employee an shall furnish to the employ- of the employee's exposure n as shown in records main- the employer pursuant to (n)(1) of this section. Such ll be furnished within 30 i the time the request is l shall cover each calendar f the individual's employ- living exposure to radiation esser period as may be re- y the employee. The report include the results of any is and analysis of radioac- ial deposited in the body of yee. The report shall be in nd contain the following : "You should preserve this future reference."

nic Energy Commission li- EC contractors operating 's and facilities—AEC Agree- e licensees or registrants. (1) oyer who possesses or uses aterial, byproduct material, nuclear material, as defined omic Energy Act of 1954, as under a license issued by the ergy Commission and in ac- with the requirements of 10 20 shall be deemed to be in e with the requirements of n with respect to such pos- use.

contractors operating AEC d facilities: Any employer sses or uses source material, material, special nuclear or other radiation sources contract with the Atomic ommission for the operation ants and facilities and in ac- with the standards, proced- other requirements for rotection established by the on for such contract pursu- Atomic Energy Act of 1954 ed (42 U.S.C. 2011 et seq.), deemed to be in compliance requirements of this section ect to such possession and

(3) AEC-agreement State licensees or registrants:

(i) *Atomic Energy Act sources.* Any employer who possesses or uses source material, byproduct material, or special nuclear material, as defined in the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), and has either registered such sources with, or is operating under a license issued by, a State which has an agreement in effect with the Atomic Energy Commission pursuant to section 274(b) (42 U.S.C. 2021(b)) of the Atomic Energy Act of 1954, as amended, and in accordance with the requirements of that State's laws and regulations shall be deemed to be in compliance with the radiation requirements of this section, insofar as his possession and use of such material is concerned, unless the Secretary of Labor, after conference with the Atomic Energy Commission, shall determine that the State's program for control of these radiation sources is incompatible with the requirements of this section. Such agreements currently are in effect only in the States of Alabama, Arkansas, California, Kansas, Kentucky, Florida, Mississippi, New Hampshire, New York, North Carolina, Texas, Tennessee, Oregon, Idaho, Arizona, Colorado, Louisiana, Nebraska, Washington, Maryland, North Dakota, South Carolina, and Georgia.

(ii) *Other sources.* Any employer who possesses or uses radiation sources other than source material, byproduct material, or special nuclear material, as defined in the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), and has either registered such sources with, or is operating under a license issued by a State which has an agreement in effect with the Atomic Energy Commission pursuant to section 274(b) (42 U.S.C. 2021(b)) of the Atomic Energy Act of 1954, as amended, and in accordance with the requirements of that State's laws and regulations shall be deemed to be in compliance with the radiation requirements of this section, insofar as his possession and use of such material is concerned, provided the State's program for control of these radiation sources is the subject of a currently effective determination by the Assistant

Secretary of Labor that such program is compatible with the requirements of this section. Such determinations currently are in effect only in the States of Alabama, Arkansas, California, Kansas, Kentucky, Florida, Mississippi, New Hampshire, New York, North Carolina, Texas, Tennessee, Oregon, Idaho, Arizona, Colorado, Louisiana, Nebraska, Washington, Maryland, North Dakota, South Carolina, and Georgia.

OMB CONTROL No. 1218-0010, paragraph (n). (46 FR 62845, Dec. 29, 1981)

(Secs. 4(b)(2), 8(b) and 8(c), 84 Stat. 1592, 1593, 1596, 29 U.S.C. 653, 655, 657; Secretary of Labor's Order No. 8-76 (41 FR 25059); 29 CFR Part 1911)

(39 FR 23502, June 27, 1974, as amended at 43 FR 49746, Oct. 24, 1978; 43 FR 51759, Nov. 7, 1978; 46 FR 62845, Dec. 29, 1981)

§ 1910.97 Nonionizing radiation.

(a) *Electromagnetic radiation—(1) Definitions applicable to this paragraph.* (i) The term "electromagnetic radiation" is restricted to that portion of the spectrum commonly defined as the radio frequency region, which for the purpose of this specification shall include the microwave frequency region.

(ii) *Partial body irradiation.* Pertains to the case in which part of the body is exposed to the incident electromagnetic energy.

(iii) *Radiation protection guide.* Radiation level which should not be exceeded without careful consideration of the reasons for doing so.

(iv) The word "symbol" as used in this specification refers to the overall design, shape, and coloring of the rf radiation sign shown in figure G-11.

(v) *Whole body irradiation.* Pertains to the case in which the entire body is exposed to the incident electromagnetic energy or in which the cross section of the body is smaller than the cross section of the incident radiation beam.

(2) *Radiation protection guide.* (i) For normal environmental conditions and for incident electromagnetic energy of frequencies from 10 MHz to 100 GHz, the radiation protection guide is 10 mW/cm.² (milliwatt per square centimeter) as averaged over

any possible 0.1-hour period. This means the following:

Power density: 10 mW./cm.² for periods of 0.1-hour or more.

Energy density: 1 mW.-hr./cm.² (milliwatt hour per square centimeter) during any 0.1-hour period.

This guide applies whether the radiation is continuous or intermittent.

(ii) These formulated recommendations pertain to both whole body irradiation and partial body irradiation. Partial body irradiation must be included since it has been shown that some parts of the human body (e.g., eyes, testicles) may be harmed if exposed to incident radiation levels significantly in excess of the recommended levels.

(3) *Warning symbol.* (i) The warning symbol for radio frequency radiation

hazards shall consist of a red isosceles triangle above an inverted black isosceles triangle, separated and outlined by an aluminum color border. The words "Warning—Radio-Frequency Radiation Hazard" shall appear in the upper triangle. See figure G-11.

(ii) American National Standard Safety Color Code for Marking Physical Hazards and the Identification of Certain Equipment, Z53.1-1953, shall be used for color specification. All lettering and the border shall be of aluminum color.

(iii) The inclusion and choice of warning information or precautionary instructions is at the discretion of the user. If such information is included it shall appear in the lower triangle of the warning symbol.

It consists of a red isosceles triangle with an inverted black isosceles triangle, separated and outlined in aluminum color border. The "Warning—Radio-Frequency Radiation Hazard" shall appear in the upper triangle. See figure G-11.

American National Standard Code for Marking Physiological and the Identification of Equipment, Z53.1-1953, shall specify color specification. All lettering border shall be of aluminum color.

The inclusion and choice of information or precautionary information is at the discretion of the manufacturer. Information is included in the lower triangle of the symbol.



1. Place handling and mounting instructions on reverse side.
2. $D =$ Scaling unit.
3. Lettering: Ratio of letter height to thickness of letter lines.

Upper triangle	:	5 to 1	Large
			6 to 1 Medium
Lower triangle	:	4 to 1	Small
			6 to 1 Medium
4. Symbol is square, triangles are right-angle isosceles.

Figure G-11
Radio-Frequency Radiation Hazard Warning Symbol

(4) *Scope.* This section applies to all radiations originating from radio stations, radar equipment, and other possible sources of electromagnetic radi-

ation such as used for communication, radio navigation, and industrial and scientific purposes. This section does not apply to the deliberate exposure

of patients by, or under the direction of, practitioners of the healing arts.

§ 1910.98 Effective dates.

(a) The provisions of this Subpart G shall become effective on August 27, 1971, except as provided in the remaining paragraphs of this section.

(b) The following provisions shall become effective on February 15, 1972:

§ 1910.94 (a)(2)(iii), (a)(3), (a)(4), (b), (c)(2), (c)(3), (c)(4), (c)(5), (c)(6)(i), (c)(6)(ii), (d)(1)(ii), (d)(3), (d)(4), (d)(5), and (d)(7).

(c) Notwithstanding anything in paragraph (a), (b), or (d) of this section, any provision in any other section of this subpart which contains in itself a specific effective date or time limitation shall become effective on such date or shall apply in accordance with such limitation.

(d) Notwithstanding anything in paragraph (a) of this section, if any standard in 41 CFR Part 50-204, other than a national consensus standard incorporated by reference in § 50-204.2(a)(1), is or becomes applicable at any time to any employment and place of employment, by virtue of the Walsh-Healey Public Contracts Act, or the Service Contract Act of 1965, or the National Foundation on Arts and Humanities Act of 1965, any corresponding established Federal standard in this Subpart G which is derived from 41 CFR Part 50-204 shall also become effective, and shall be applicable to such employment and place of employment, on the same date.

§ 1910.99 Sources of standards.

Section	Source
1910.94(a).....	ANSI Z9.4-1968, Ventilation and Safe Practices of Abrasive Blasting Operations.
1910.94(b).....	ANSI Z43.1-1968, Ventilation Control of Grinding, Polishing, and Buffing Operations.
1910.94(c).....	ANSI Z9.3-1970, Safety Code for the Design, Construction and Ventilation of Spray Finishing Operations.
1910.94(d).....	ANSI Z9.1-1969, Safety Code for Ventilation and Operation of Open-Surface Tanks.
1910.95.....	41 CFR 50-204.10.
1910.96 (a) through (e) and (g) through (i).	41 CFR 50-204.20.

Section	Source
1910.96(f).....	ANSI N2.3-1967, Immediate Evacuation Signal for Use in Industrial Installations Where Radiation Exposure May Occur.
1910.97.....	ANSI C95.1-1966, Safety Level of Electromagnetic Radiation with Respect to Personnel and American National Standards Institute C95.2-1966, Radio Frequency Radiation Hazard and Warning Signal.

[39 FR 23502, June 27, 1974, as amended at 40 FR 23073, May 28, 1975; 47 FR 25323, June 11, 1982]

§ 1910.100 Standards organizations.

Specific standards of the following organizations have been referenced in this subpart. Copies of the standards may be obtained from the issuing organization.

American Conference of Governmental Industrial Hygienists, 1014 Broadway, Cincinnati, OH 45202.

American National Standards Institute, 1430 Broadway, New York, NY 10018.

National Fire Protection Association, 470 Atlantic Avenue, Boston, Massachusetts 02210.

[39 FR 23502, June 27, 1974, as amended at 40 FR 18426, Apr. 28, 1975]

Subpart H—Hazardous Materials

§ 1910.101 Compressed gases (general requirements*).

(a) *Inspection of compressed gas cylinders.* Each employer shall determine that compressed gas cylinders under his control are in a safe condition to the extent that this can be determined by visual inspection. Visual and other inspections shall be conducted as prescribed in the Hazardous Materials Regulations of the Department of Transportation (49 CFR Parts 171-179 and 14 CFR Part 103). Where those regulations are not applicable, visual and other inspections shall be conducted in accordance with Compressed Gas Association Pamphlets C-6-1968 and C-8-1962.

(b) *Compressed gases.* The in-plant handling, storage, and utilization of all compressed gases in cylinders, portable tanks, rail tankcars, or motor vehicle cargo tanks shall be in accordance with Compressed Gas Association Pamphlet P-1-1965.

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Alaska Health Project

417 West Eighth Avenue — P. O. Box 10-1037, Anchorage, Alaska 99510 — (907) 276-2864

April 13, 1984

MEMORANDUM

TO: Senator Josephson

FROM: Alaska Health Project

SUBJECT RE: Senate Bill #542, An Act Relating to Microwave Radiation
in the Workplace

Alaska Health Project appreciates the opportunity to comment in support of SB 542. Employees and employers should be made aware of potential exposures to microwave radiation in the workplace.

After reviewing the proposed legislation, we wish to present the following comments:

1. Page 2, Line 1 should also include, with photographs of all materials, products, and equipment before charges are made.

Photographs would be an easy method to ensure that the accident could be reconstructed in the event that these items have to be moved or altered.

2. Page 3, Line 17 should be deleted to read, established as the radiation protection guide by the American Conference of Governmental Industrial Hygienists, (ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment, 1983-1984).

ACGIH was organized in 1938 by a group of governmental industrial hygienists. Currently, the organization has over 2600 members. The organization is devoted to ensuring the health and safety of employees. It is recognized internationally having contributed substantially to establishment of safe standards in the workplace.

Use of ACGIH Standards will afford greater protection to Alaskan workers and employers potentially exposed to microwave radiation.

3. The introduction of SB 542 indicates one of the major gaps in the recently adopted Worker Right-To-Know Law SB 79. SB 79 does not cover physical agents such as noise, ionizing radiation, microwave radiation, heat, cold. SB 542 seeks to amend at least part of this loophole.

While we strongly support SB 542, we also urge the legislature not to limit SB 542 to microwave radiation. We suggest that SB 542 be amended to include all potentially harmful physical agents in the workplace.

MEMORANDUM

TO: Senator Josephson

April 13, 1984

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By doing so, we fill the gaps apparent in SB 79 and we avoid the need for additional legislation in the future.

We are available to discuss our comment at any time. Thank you for the opportunity to comments on SB 542.

Jackie McClintock - Workers Comp

Sec 6 - rebuttable presumptions.

Existing language already provides sufficient protection. Claims from Clear were never denied as contradicted. Problem w/ getting info from physicians, as of April 11 had not gotten M.D. reports on these cases.

Employer has burden of proof. They have 2 yrs. from date of knowledge to file.

Sec 6 is redundant.

Can see problems - making special presumption for special job classes may weaken the presumption for other workers. No requests for hearings.

SB 445 - Child Abuse

Carl Haretzki - Dept. of Law/Crim. Div.

47.17.010 requires named professionals to report to DHS suspected child abuse or neglect (form) Criminal penalty.