

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

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CARLY MICHELLE KURTH, also known as NGUYEN THI LAN, a minor who sues by and through her next friends and adoptive parents, RICHARD C. and MARGARET KURTH, 6428 Cranbrook NE, Albuquerque, New Mexico 87111; phone: (505) 821-2797; and by and through her guardian ad litem, CHARLES R. work and McDERMOTT, WILL & EMERY, Suite 500, 1850 K Street, N.W., Washington, D.C. 20006; phone: (202) 887-8030

New
Civil Action No.
80-3223

Old
Civil Action No.
76-0544-44

Plaintiff

v.

LOCKHEED AIRCRAFT CORPORATION

Defendant and
Third Party Plaintiff

v.

THE UNITED STATES OF AMERICA

Third Party Defendant

Deposition of:

JOHN J. CARROLL

Tuesday, July 26, 1983

Washington, D. C.

ALBERT J. GASDOR
General Stenotype Reporting
(202) 546-6666 (301) 894-9157

Deposition of JOHN J. CARROLL was taken, pursuant to notice, before Albert J. Gasdor, a Notary Public in and for the District of Columbia, commencing at 10:12 a.m., Tuesday, July 26, 1983, in the law offices of Finley, Kumble, Wagner, Heine, Underberg & Casey, 11th Floor, Bender Building, 1120 Connecticut Avenue, N.W., Washington, D. C.

APPEARANCES:

On behalf of the Plaintiff:

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On behalf of Defendant Lockheed:

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I N D E X

Tuesday, July 26, 1983

Washington, D. C.

DEPONENT:

DIRECT

JOHN J. CARROLL

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E X H I B I T S

TRANSCRIPT

EXHIBIT NO.

FOR ID. REFERENCE

DD-2745	Biographical Data [John J. Carroll]	4	4, 5
Plf. 1000-45	Photograph	7,	11
Plf. 1000-46	Photograph	7,	11, 29
Plf. 1000-47	Photograph	8,	11
Plf. 10-C	Photograph	8,	29, 30, 32, 34, 62
Plf. 3510	Photograph	10,	29, 30, 32, 62

1 Whereupon,

2 JOHN J. CARROLL

3 was called as a witness and, having been first duly sworn,
4 was examined and testified as follows:

5 DIRECT EXAMINATION

6 BY MR. ALMY:

7 Q Would you state your full name and address for
8 record, please.

9 A John J. Carroll, [REDACTED] Mount Jackson,
10 Virginia 22842.

11 Q Mr. Carroll, I show you what has been marked as
12 Exhibit DD-2745 and would ask if you can identify that.

13 [Biographical data marked Exhibit DD-2745
14 for identification.]

15 A That is biographical data on myself -- various
16 publications, technical papers, books, manuals, speeches,
17 professional and scientific societies, honors and awards,
18 training and seminars, congressional testimony, profession-
19 al articles, news, and so forth.

20 Q Does that represent the most recent version of
21 that résumé?

22 A Yes, sir.

1 Q This was just produced to us a few moments ago.

2 Is there anything in particular that you can identify on
3 DD-2745 that you believe is particularly relevant to the
4 testimony for which you are being offered today?

5 A Only that it is an update of previously submitted
6 biographical data covering a much later period of time from
7 the earlier one that was submitted.

8 To answer your question, one in particular would
9 have been the currently used National Transportation Safety
10 Board Aircraft Accident Manual.

11 Q Is that listed somewhere on this exhibit?

12 A Yes, sir.

13 Q Would you point out where.

14 A As this package is assembled, it is on the last
15 page under technical papers, manuals, speeches, the third
16 item: "Investigation Manual - Aviation, U. S. NTSB, August 4,
17 1980."

18 Q Is that the most recent investigation manual that
19 the NTSB is using?

20 A That is correct; yes, sir.

21 Q Since you gave testimony in March of 1982 concern-
22 ing the C5A crash, what material have you reviewed concerning

1 the crash?

2 A Since March?

3 Q Since March, 1982.

4 A I can't recall anything

5 viewed in connection with this case at.

6 Q Do you recall whether you reviewed anything.

7 MR. FRICKER: Are you talking about items he may
8 not have seen before or things he may have looked at again.
9 to refresh his recollection?

10 MR. ALMY: Either or both.

11 THE DEPONENT: I was called here yesterday to come
12 here for a deposition, and in the few hours that I had, I
13 reviewed most of the early data that I worked with concern-
14 ing the C5A case.

15 BY MR. ALMY:

16 Q Did you review any photographs?

17 A I didn't have any photographs at my disposal, but
18 this morning I looked at several photographs which were the
19 interior of the troop compartment.

20 Q What other photographs did you review this morning,
21 if any?

22 A None.

1 MR. FRICKER: Off the record.

2 [Discussion off the record.]

3 MR. ALMY: Back on the record.

4 BY MR. ALMY:

5 Q You indicated you reviewed some photographs this
6 morning. Do you recall how many?

7 A Five.

8 Q And they were of the interior of the troop compart-
9 ment?

10 A Yes. I believe three were color and two were black
11 and white.

12 Q Do you recall what, if any, identification numbers
13 they had on them?

14 A No, I don't.

15 Q I am going to show you what I believe is Plain-
16 tiff's Exhibit 1000-46 and ask you if that is one of the
17 pictures you reviewed?

18 A That appears to be.

19 Q I show you what I believe is Plaintiff's Exhibit
20 1000-45 and ask you if that is one of the photographs that
21 you reviewed?

22 A Yes, sir. I saw them in an 8 by 10 version.

1 Q I show you what is marked Plaintiff's Exhibit
2 1000-47 and ask you if that is one of the photographs that
3 you reviewed?

4 A Yes, sir.

5 Q I will show you Plaintiff's Exhibit 3510 and ask
6 if that is one of the photographs?

7 A That appears to be, yes.

8 Q And Plaintiff's Exhibit 10-C. Is that the fifth
9 photograph that you reviewed?

10 A Yes, it appears to be, and I see it was two color
11 and three black and white, not the other way around.

12 Q Did you review any other photographs this morning
13 other than the five we have just identified?

14 A No, sir.

15 Q Have you reviewed any other photographs of the
16 interior of the troop compartment?

17 MR. FRICKER: At what point in time?

18 MR. ALMY: At any time.

19 MR. FRICKER: I will object. This man has testified
20 before, and his prior testimony would reflect, during his
21 review of the evidence, he reviewed photographs, but you
22 should still answer the question, Mr. Carroll.

1 THE DEPONENT: I don't recall others at this time.

2 BY MR. ALMY:

3 Q On July 15, 1983, it was proffered that you would
4 testify there were only three photographs of the interior
5 of the troop compartment. Was that an accurate representa-
6 tion of what your testimony would be on July 15, 1983?

7 A On July 15th?

8 Q Ten days ago.

9 A Yes.

10 Q So, ten days ago you believed there were only
11 three photographs of the interior of the troop compartment?

12 A At that time, I would have estimated that I had
13 only seen three that showed the interior -- the seats, the
14 tracks, and that sort of thing.

15 Q When did you discover there were two others?

16 A This morning.

17 Q How did you find out there were two others?

18 A I was shown five photographs.

19 Q Who showed you the photographs?

20 A John.

21 Q That would be Mr. Fricker?

22 A Yes, sir.

1 Which of the five photographs are the two new ones?

2 MR. FRICKER: I object to the form of the question.

3 The word "new" suggests that he had never seen them before
4 today or that they were new in some other sense. I don't
5 think that necessarily follows from his testimony.

6 BY MR. ALMY:

7 Q Would you identify the three photographs which
8 you thought were the only interior photographs of the troop
9 compartment in addition to the two additional ones.

10 MR. FRICKER: I object to the form of the question.

11 It assumes he had in mind three specific photographs and
12 not the other two. If that is the case, fine.

13 THE DEPONENT: Of these three photographs, the
14 only two that I clearly recall having seen would be the two
15 color photographs.

16 BY MR. ALMY:

17 Q For the record, that would be Plaintiff's Exhibit
18 10-C and 3510?

19 A It is so long ago but I recall that I distinctly
20 remember these two you have just identified and possibly
21 another, making a total of three, and which of those three
22 that are here, I just can't recall which I have seen before.

1 There were thousands of photographs and, at the time, I
2 selected a couple that were most indicative of those avail-
3 able to see the interior of the troop compartment; and which
4 of the others I saw, I just can't recall. In fact, I don't
5 know if I ever really did see any of those three.

6 Q When you say any of those three, you are referring
7 to the three black and white photos?

8 A Yes, sir.

9 Q Which are Plaintiff's Exhibits 1000-45, 1000-46
10 and 1000-47.

11 Mr. Carroll, how do you know that those are the
12 only five photographs that have ever been produced of the
13 interior of the troop compartment?

14 A I don't know that.

15 Q Do you know if Carly Kurth, the plaintiff in
16 this case, was located in the troop compartment?

17 A No, sir.

18 Q Do you know how many children died in the troop
19 compartment?

20 A No, sir.

21 Q Do you know where they were located, if any?

22 A When the aircraft left Saigon, a number of infants

1 were paired up in the passenger seats, and, outside of that,
2 I could not identify where any one particular individual
3 was.

4 Q What autopsies have you reviewed concerning the
5 C5A?

6 I don't believe I ever saw any complete autopsy on any-
7 one, but there was some autopsy data, and I would have to
8 guess that it had to do with adults or crew members. At this
9 time, I can't recall. That was two years ago or more that
10 I looked at some of that kind of data.

11 Q Why would you have to guess that it had to do with
12 the deaths of the adult crew members?

13 A Because I don't recall specifically any post mortem
14 medical data concerning infants or children.

15 Q I understand it is going to be your testimony that
16 the investigators in the C5A accident made a detailed photo-
17 graphic record of the interior of the troop compartment;
18 is that correct?

19 A Based on my experience, this would have had to
20 have been done in the case of a major aircraft accident of
21 this dimension.

22 Q You are a co-author of the Handbook for Aircraft

1 Accident Investigators cooperating in crash injury research;

2 is that correct?

3 A Yes, sir.

4 Q Do you know the date of that particular handbook?

5 A It would have been about 1961 or 1962 after I left
6 crash injury research. I was the principal author when I
7 was out there, and it was published at a later date and
8 it carried me as a co-author.

9 Q Based on my reading of that -- and correct me if
10 I am wrong -- that detailed photographic record of the in-
11 terior of a plane's superstructure is done for the purpose
12 of showing injury-causing factors. I believe that is your
13 language.

14 A And design accommodations that lend toward the
15 prevention of injury as well as design deficiencies which
16 lead to unnecessary injuries and death.

17 You have to realize, too, that this manual was
18 written for investigators investigating light plane accidents
19 and not necessarily the large passenger-carrying transport
20 type aircraft, although the principles would not be different.

21 Q So, basically, the purpose is to show the struc-
22 tural factors or whatever other things you can photograph

1 inside the structure of the aircraft that might cause injury
2 to the occupants?

3 A Inside and out, both.

4 Q But, obviously, for the interior photographs, it
5 would show the interior of the aircraft and what caused the
6 injuries, the injury-causing factors?

7 A Not exclusively. Injuries can be sustained as
8 a result of external design factors in the aircraft as well
9 as the interior, and that is explained in there in the five
10 basic ways in which people can be injured or killed in air-
11 craft accidents. That has to do with the crash worthiness
12 of the structure, the restraint systems and restraint of
13 interior objects, the energy absorption characteristics of
14 the interior structures, the environmental factors inside
15 and outside the aircraft and, finally, the post-crash fac-
16 tors that have to do with emergency escape after survival
17 of an impact.

18 Q Specifically, how do you know that such detailed
19 photography of the interior of the troop compartment was
20 made in the C5A crash?

21 A There are really a multitude of reasons connected,
22 and that is the earliest training of both military and civil

1 aircraft accident investigation authorities and individuals,
2 aircraft accident investigators that require not only that
3 this be done at the scene of the accident but also requires
4 that provision for having this done be made ahead of time
5 with a pre-accident plan in anticipation of investigating
6 an aircraft accident.

7 Q What did the pre-accident plan have to do with
8 the C5A crash?

9 A I never saw the pre-accident plan for the C5A in
10 Saigon or anything connected with this operation. But all
11 of the teachings at Southern California and National Air-
12 craft Accident Investigation School for the civil side and
13 throughout the Army, the Navy, and the Air Force, it is
14 spelled out in guides and outlines for the production of
15 carrying out a pre-accident plan that every accident investi-
16 gator will have a camera and film for taking pictures day
17 and night, and that provision be made for a "professional
18 photographer" to be available at the earliest initial notifi-
19 cation of an accident to go even with the rescue personnel
20 to document and photograph the scene of the accident, the
21 fatalities, even the rescue and escape operations.

22 Q What particular Air Force documents substantiate

1 or outlines that this type of photography be taken in an
2 Air Force investigation?

3 A Offhand, I can't identify those by title or number.

4 There are a number of documents available including the
5 course curricula for the Aviation Safety Officers Courses
6 at the University of Southern California.

7 Q What do the Air Force regulations require?

8 A That an investigation be conducted.

9 Q Do they give any more specific guidance?

10 A There is a lot of detailed information. I have
11 read the Air Force orders and what underlies the accomplish-
12 ment of that accident investigation that is required by regu-
13 lation lies in the background, training and curricula for
14 those personnel who are involved in the investigation.

15 Q What specific facts or details can you point to
16 that tell you or confirm to you that, in fact, detailed
17 photographs of the interior of the troop compartment were,
18 in fact, taken?

19 A Well, I reviewed an enormous number of photographs,
20 a thousand or more, perhaps, and it is just utterly amazing
21 that of all the photographs that were taken, only a handful,
22 perhaps five or so, were taken inside the troop compartment;

1 and of those five that we looked at this morning, none are
2 in the detail or the nature of that prescribed for document-
3 ing the aftermath of a major air tragedy.

4 Q In other words, documenting the injury-causing
5 factors?

6 A Or even more details of the interior of the air-
7 craft that had been occupied.

8 Q When you say even more detailed, what do you mean
9 by that?

10 A Better documentation of the initial condition and
11 the dismantling and removal. These are the kinds of photo-
12 graphs that are always taken particularly in a major air-
13 craft accident investigation and particularly where multiple
14 fatalities are involved. It is prescribed by all of the
15 training and curricula for all of those involved in accident
16 investigation. It is a standard procedure, and it is more
17 than a standard procedure in a major accident such as this.
18 It is demanded and required, and, for that reason, I can
19 only conclude that any such photographs that were taken have
20 just not been made available or lost or destroyed or some-
21 how just did not come before the proceedings in the post-
22 accident investigation era.

1 Q You don't have any evidence that they were, in
2 fact, taken?

3 MR. FRICKER: By that, do you mean photographs
4 taken rather than taken or stolen, or something like that?

5 BY MR. ALMY:

6 Q As a photograph would be taken.

7 A It has been impossible in my experience to find
8 an accident in which thousands of photographs are made and
9 none of them include those important things such as the in-
10 terior of the aircraft that would have to do with crash in-
11 jury investigation or interior design.

12 Q When you say crash injury investigation or interior
13 design, what do you mean by interior design?

14 A That covers a multitude of factors relating to
15 those five factors that I pointed out earlier, including
16 the emergency escape facilities, exit marking, lighting,
17 the tie-down of the seats in the aircraft, the mode of fail-
18 ure from seat attachments to the floor, tracks or attach-
19 ments, the interior-facing surfaces of the aircraft, the
20 overhead liners, the oxygen masks. Even these five photo-
21 graphs here don't show any of the oxygen masks.

22 I believe one photograph shows seat upholstery

1 on the seats, and the others were taken after the upholstery
2 had been removed, but no detailed photographs of the indi-
3 vidual seats or their attachments or restraint systems or
4 emergency escape provisions.

5 Q All these factors then relate to the prevention
6 of injury or death of the passengers; is that correct?

7 A Yes, sir.

8 Q You are also going to testify apparently that
9 there are no photographs of the damage to the interior walls
10 and floor of the troop compartment; is that correct?

11 A In the detail that would normally be accomplished,
12 that is right.

13 Q But are you saying there are no photographs of
14 that or there are not as many as you think there should be?

15 A The five photographs that I looked at today are
16 insufficient in detail to represent what would be expected
17 to be photographed inside any occupiable area of any air-
18 craft after an accident.

19 Q What damages to the floor and walls were they sup-
20 posed to take pictures of?

21 A Basically, their post-accident condition, noting
22 both the occurrence of structural failure and energy

1 transmission or the absence of such damaged evidence which
2 could verify or confirm to a design engineer whether the
3 structures are adequate or inadequate.

4 Q Adequate or inadequate for what?

5 A Injury prevention.

6 Q I gather there should have been photographs of
7 damage to the seats and mounting?

8 A That is correct.

9 Q Is that for the same purpose?

10 A Essentially, yes.

11 Q Do you have any knowledge that any of the seats
12 were damaged?

13 A Only what can be observed in those few photographs
14 that we had this morning.

15 Q Do they suggest that any of the seats were damaged?

16 A They are insufficient to identify any specific
17 details of insufficiencies in energy absorption design or
18 restraint. There are no pictures of any seat belts or any
19 cushions or whether the seats themselves failed in their
20 tracks or failed structurally within themselves, or whether
21 any of the restraint attachments may have failed.

22 Q So, as far as you know, there was no damage to

1 the seats?

2 MR. FRICKER: That is a broader question. Are you
3 asking now from any source or are you still referring to
4 evidence from the photographs?

5 MR. ALMY: From any source. That is what I initially
6 asked him.

7 THE DEPONENT: Could you read that back, please.

8 [The pending question was read by the reporter.]

9 THE DEPONENT: So far as I know, there should have
10 been documentation as to what type of damage or to what
11 extent damage may have been incurred.

12 There is other evidence in those photographs of
13 other factors; but with insufficient data to review, there
14 is no way to answer whether or what kind of damage was sus-
15 tained by those seats or what failures may have occurred.

16 BY MR. ALMY:

17 Q Again, your concern about the failure of the seats
18 was to prevent injury in the future; is that correct?

19 A Primarily, yes.

20 Q Are photographs the only thing you rely on in mak-
21 ing determinations concerning failure of the seats or mount-
22 ings, or anything else, for that matter?

1 A You would expect that there would be writ.

2 tailed damage descriptions by investigators who were looking
3 at the human factors or the crash safety or crash worthiness
4 aspects in the investigation. But, essentially, each photo-
5 graph is worth many, many times more few words that can be
6 written about seat belt attachment failures or seat attach-
7 ment failures to the structure. These are in all cases that
8 I know of essentially documented through photography; and,
9 in the case of Air Force accident investigations, most often
10 by a person qualified to do this, an aeromedical type, a
11 flight surgeon who would be connected with the aircraft acci-
12 dent investigation group.

13 Q Would you take pictures then of seats that were
14 undamaged?

15 A Yes, sir.

16 Q You would take pictures of all of the seats?

17 A Yes, sir.

18 Q A close-up of each seat?

19 A And several views from top, bottom, all sides.

20 This would be inside the aircraft, additionally, because
21 there is usually a restricted amount of space to work in
22 inside the wreckage. Afterwards, these seats would be taken

1 out and reassembled in a mockup form and putting them in
2 relative position and photographed again to be sure you have
3 any damage detail illustrated through the photographic docu-
4 mentation that may not have been available inside the air-
5 craft.

6 Q Do they do that in every crash investigation?

7 A Yes.

8 Q Are you referring to military or civilian inves-
9 tigations?

10 A It is done in both.

11 Q Was it done in the C5A case?

12 A I can only say it certainly should have been.

13 Q A moment ago, you were talking about the condition
14 of the seats, the photographs, some with the upholstery on
15 and some off. You were talking about the initial condition
16 of the seats. Is that significant?

17 A To me it is significant in that it shows a time
18 lapse between the time the earlier photographs were taken
19 and the later ones. That is all. Other than that, they are
20 insufficient.

21 Q I show you a page from your Handbook for Aircraft
22 Accident Investigators. There is a portion of it underlined.

1 Would you read that underlined portion.

2 MR. FRICKER: Outloud.

3 THE DEPONENT: "Take photographs before the wreck-
4 age is moved."

5 BY MR. ALMY:

6 Q Why is that underlined?

7 A That is an attempt to assure that the details
8 which were available at the initial site of the crash should
9 be documented as soon as possible, because they could con-
10 ceivably be lost if that wreckage was disturbed, allowing
11 the investigator, perhaps, to miss particular details that
12 contributed to injury prevention or details that contributed
13 to injury causation.

14 MR. FRICKER: Before you ask the next question,
15 for the record, let's get a page reference, if we can.

16 The phrase that Mr. Carroll was just asked to read
17 appears at an unnumbered page that begins at the top "Section
18 2, photographic recording of the crash." He was asked to
19 read from the second sentence of the second paragraph on
20 that page.

21 BY MR. ALMY:

22 Q You are going to testify apparently that there

1 are no close-up photographs of any structure of the troop
2 compartment; is that correct?

3 A That there are not any?

4 Q I believe so. Is that correct?

5 A Well, I don't know if you consider those five we
6 looked at to be close-ups or not close-ups, but they are
7 not in the detail that would have to have been accomplished
8 in order to do an investigation here.

9 Q Is your testimony going to be there are no close-
10 ups of the structure of the troop compartment?

11 A Yes. I would consider those photographs to be over-
12 all not close-ups.

13 MR. BAGNI: Let the record show Mr. Fricker has
14 placed the plaintiff's pretrial brief before the witness
15 which indicates the proffer of the witness' testimony.

16 BY MR. ALMY:

17 Q Have you read that proffer concerning your testi-
18 mony, Mr. Carroll?

19 A Yes, sir.

20 Q When did you read that?

21 A Today.

22 Q Had you ever seen it before then?

1 A No, sir.

2 Q Is it also your testimony there are no photographs
3 detailing the troop compartment walls or floors?

4 A That there are no photographs?

5 Q Detailing troop compartment walls or floors.

6 A Detailing them, that is correct.

7 Q In particular, what are you looking for in taking
8 detailed pictures of the walls and floors?

9 A Damage details.

10 Q What relevance do the damage details have to the
11 surviving children?

12 A It would be important to anyone connected with
13 reviewing an aircraft accident investigation report in
14 detail for the purpose of determining the crash safety
15 aspects of the structure and its interior components to know
16 several things, including what damage occurred under what
17 circumstances of crash force application.

18 The three elements involved here are the relation-
19 ship of the damage and the dynamics of the crash, and the
20 injuries that were sustained and putting these all into per-
21 spective.

22 Q How is that relevant to the children who did not

1 sustain any apparent injuries?

2 A I would have to answer this way: if the aircraft
3 went through an enormous crash sequence with enormous crash
4 forces and no one was injured, this would be very important
5 for design engineers to know, to see that they have reached
6 the ultimate in passenger protection. If some were injured
7 and some were not, this makes it particularly important to
8 identify the particular mode of injury, the injury causation
9 factors, and to be able to determine whether or not any in-
10 sufficiencies existed in any areas in which design improve-
11 ments could be made.

12 Q Your handbook, I believe, suggests that an inves-
13 tigator should identify the location of each passenger as
14 to a particular seat or location. Is that important to do?

15 A Yes, sir.

16 Q Why is that?

17 A A number of reasons, really. If you don't know
18 where the occupant was located in the aircraft, there is
19 no way you can establish any pattern of common injury causa-
20 tion. There may be environmental factors in one section of
21 the aircraft, for instance a galley where objects become
22 free-flying missiles that cause injuries.

1 Unless you can reconstruct the nature in which
2 the disintegration took place and know which of these
3 articles may have flown, and then know where the people were
4 associated with this, it makes it impossible to determine
5 whether this is, in fact, a hazardous feature that should
6 be looked into for improvement for protection against injury,
7 and also to relate any specific restraint or seat failures
8 to the occupant of that seat during the crash sequence.

9 Q It is my understanding then that it is important
10 to know the location since in various areas of the troop
11 compartment, the various people would be subject to a differ-
12 ent environment, different potential injury-causing environ-
13 ment?

14 A Possibly, yes.

15 Q You have been proffered to offer testimony that
16 there are no photographs of color changes on fabric, metal
17 or other materials. What color changes on the fabric are
18 you referring to?

19 MR. FRICKER: I object to the form of the question.
20 That is not what the proffer states. The proffer states,
21 "a nonrecording accurately of the color changes evident
22 on fabric, metal or other materials within the troop

1 compartment which would show the presence of carbon deposits
2 left from smoke and fire."

3 BY MR. ALMY:

4 Q What color changes were inaccurately recorded?

5 A In particular, the upholstery on the seats and
6 the cabin liner material.

7 There is some heat blistering that shows clearly
8 in one of the five photographs that we looked at this morn-
9 ing, and it would be important to record the nature of the
10 interior damage to determine to what degree fire, smoke and
11 soot may have been deposited inside that occupiable area.

12 Q What color changes were inaccurately recorded?

13 A I would say there is only one photograph available,
14 and its only real value is to show that there was heat, fire
15 and soot damage; and there should have been more detailed
16 photographs that had been taken available to document the
17 extent throughout the occupiable area to which this exposure
18 had been experienced.

19 Q Is this photograph you are referring to Plaintiff's
20 Exhibit 10-C, which I am showing to you now?

21 A 10-C and 1000-46 and to some extent 3510.

22 Q What color changes are inaccurately recorded?

1 MR. FRICKER: I will object to the form of the ques-
2 tion on the following basis: of the five photographs being
3 displayed to the witness, only two show color. Of those two,
4 only one shows fabric on the seats. The proffered testimony
5 is that none record accurately the color changes evident
6 on fabric.

7 MR. ALMY: Metal or other materials.

8 MR. FRICKER: And it is a disjunctive. To the extent
9 that a single color photograph of fabric does not permit
10 the determination of the accuracy of the color, then I think
11 your question is objectionable because you are changing the
12 word from accurate to inaccurate.

13 BY MR. ALMY:

14 Q Your testimony is proffered to be, Mr. Carroll,
15 that there are no photographs recording accurately the color
16 changes evident on fabric, metal or other materials. I take
17 it then that the two color photographs before you, Plain-
18 tiff's Exhibits 3510 and 10-C inaccurately reflect the color
19 changes; is that correct?

20 A No, sir. In order to accurately record the color
21 changes, you would have to have photographs made with several
22 forms of lighting, including taking some of the components

1 out into daylight rather than being made with electronic
2 flash or flashbulbs. While these may not be inaccurate, they
3 are insufficient to accurately determine the color changes.

4 Q Why are they insufficient?

5 MR. FRICKER: Objection. I think that has been
6 asked and answered, but go ahead and clarify your prior
7 answers.

8 THE DEPONENT: In the absence of what would be
9 expected to be available after an accident of this magnitude
10 and in order to make an accurate determination with relation-
11 ship to the length of time of the exposure and the degree
12 of heat, the volume of smoke and its nature, it would re-
13 quire more photographs than just these few. It is incredible
14 to me that these would have been the only ones that would
15 have been made.

16 BY MR. ALMY:

17 Q You are suggesting then that neither of those
18 photographs suggests that there was smoke or carbon deposits?

19 A Just the opposite, that they do reflect that there
20 was.

21 Q Then they do, in fact, reflect the color changes?

22 A Insufficiently to make a more detailed analysis.

1 I have never seen a major aircraft accident investigation
2 with so few interior detailed photographs.

3 Q You say interior detailed photographs. Do you want
4 them of the interior fabric of the walls and ceilings? Is
5 that one of the areas?

6 A And seat and floor attachments and interior com-
7 ponents that are either in place or found elsewhere.

8 Q You are assuming then that color changes did, in
9 fact, take place?

10 A Yes, sir.

11 Q Do you know that they did?

12 A Only from the evidence that is available to me.

13 Q Specifically, what evidence shows you the color
14 changes took place?

15 Q These two color photographs.

16 Q Can you point on the photographs what it is that
17 indicates that the color changes took place?

18 A The overhead console units.

19 Q Of which exhibit?

20 A On 10-C and on portions of 3510.

21 Q What portions of 3510?

22 A The seat upholstery and the overhead materials.

1 Q What colors should they be?

2 A You would have to go into an intact aircraft and
3 take a picture of that to see what they should be.

4 Q So, you don't know whether those colors accurately
5 reflect the colors of the troop compartment or not, do you?

6 A That is right.

7 Q Then how do you know that there have been color
8 changes?

9 A It is the only evidence that is available, and
10 it is quite apparent that there is blistering and discolora-
11 tion and smoke deposits.

12 Q If you don't know what the proper color is, how
13 do you know there has been discoloration?

14 A I can only say that no manufacturer would turn
15 out a product that looked like this.

16 MR. FRICKER: You are referring to 10-C and point-
17 ing to the overhead bins.

18 BY MR. ALMY:

19 Q Because it is a light blue color?

20 A Because, obviously, it has been heat and smoke
21 damaged.

22 Q We are talking about coloration now. Is the light

1 blue color in 10-C the proper color for the overhead?

2 MR. FRICKER: I will object. There are a multitude
3 of colors in that photograph, and the overhead compartment,
4 or whatever you want to call it, has various colors in it,
5 whatever they may be, whether they be shadow or carbon or
6 paint, or whatever. It is not a uniform color in that photo-
7 graph. So, I object to the form of the question.

8 BY MR. ALMY:

9 Q Looking at Plaintiff's Exhibit 10-C and what you
10 have identified as the overheads, and specifically I will
11 point to the large structure in the upper left-hand side
12 of the corner, which I will describe as a light bluish-green
13 color, and this photograph obviously speaks for itself, has
14 there been a color change there?

15 A Yes, sir.

16 Q How do you know that if you don't know what the
17 proper color is?

18 A Just by looking at the photographs. No interior
19 cabin materials have ever been produced and installed in
20 an aircraft that give the appearance of smoke and heat damage
21 and blistering in a new aircraft or one that has been used
22 for a number of years.

1 Q Limiting yourself to the color, has there been
2 a color change?

3 A Yes, sir.

4 Q How do you know that is not the proper color if
5 you don't know what the original color is?

6 MR. FRICKER: I object. It has been asked and
7 answered.

8 THE DEPONENT: After this object has been blistered
9 and sooted, it is not the same color as when it started.

10 BY MR. ALMY:

11 Q But you don't know what the original color was.

12 A No, I don't know what the original color was.

13 Q But it could have been that color?

14 A No, sir.

15 Q But you don't know what the original color was,
16 do you?

17 A No.

18 Q It is your assumption that there was a fire in
19 there which changed its color?

20 A Yes, sir, and sooting.

21 Q You are proffered to testify that autopsies were
22 performed on all of the persons who died in that troop

1 compartment; is that correct?

2 MR. ALMY: For the record, Mr. Fricker has just
3 pointed out in Plaintiff's proffer from the supplemental
4 pretrial offer to the witness concerning what his testimony
5 is supposed to be.

6 MR. FRICKER: Mr. Almy, let's be fair. Have I said
7 a word, whispered or otherwise, to the witness? Have I not
8 simply placed in front of him a copy of the thing which you
9 are reading from?

10 Are you suggesting there is anything objectionable
11 about what I am doing?

12 MR. ALMY: Yes.

13 MR. FRICKER: Then I will object to the question
14 and ask you to show him what you are reading from. If you
15 don't do that, I will instruct him not to answer the ques-
16 tion until you show it to him.

17 MR. BAGNI: What is your objection now?

18 MR. FRICKER: I am trying to expedite the deposi-
19 tion and not trying to be obstreperous, and I underlined
20 what defense counsel was referring to. I see no objection
21 to that; but, if he wishes to do that, then we will do it
22 by the numbers then.

1 MR. BAGNI: Let's do it by the numbers.

2 BY MR. ALMY:

3 Q You will testify autopsies were performed on all
4 those who died in the troop compartment; is that correct?

5 A In my opinion, from the data I have seen, I have
6 no reason to believe that autopsies were not performed on
7 all those who died in the troop compartment, including the
8 children.

9 Q What evidence do you have to conclude that autopsies
10 were conducted on all of the personnel in the troop compart-
11 ment, including the children?

12 A I recall having reviewed the data, and I think
13 that it was in the Air Force report that the children had
14 been taken to some other location and the crew members had
15 been taken to some other location where, as I recall,
16 autopsies were performed on those, on all of the crew members
17 and on all of the remains of the children that could be
18 autopsied.

19 Q Do you recall what it was that you reviewed that
20 indicated that?

21 A Not at this point, no, sir. Whatever I did review,
22 which was some two years ago, it indicated that the autopsies

1 were done at some remote location away from Saigon.

2 Q Are you familiar with Air Force regulations con-
3 cerning autopsies?

4 A I have been. I have not reviewed those in a long
5 time.

6 Q Do you recall the substance of what they require
7 of the Air Force?

8 A Not accurately. I would have to review the docu-
9 mentation on that.

10 Q What is the purpose of photos of the remains of
11 the accident victims?

12 A There are many, many reasons. They are spelled
13 out in great detail in the guides that are produced by the
14 Armed Forces Institute of Pathology which are supposed to
15 be followed by the military services, and in civil aircraft
16 accident investigation, authorities mostly throughout the
17 free world call for photographic documentation at the site
18 where the bodies or remains, or parts thereof, are recovered.
19 Then, after their removal, having tagged those sites so they
20 can be accurately plotted on a wreckage distribution chart.
21 The purpose is to show the condition to supplement the medi-
22 cal examiner's autopsy or gross examination for the purpose

1 of identification of individuals and relating personal
2 effects found in the same location where the deceased was
3 recovered, to relate to the identification, and to provide
4 an accurate documentation for aeromedical and biomedical
5 and pathological examinations that would relate to crash
6 injury at a later time.

7 Q In relation to crash injuries, what would a pic-
8 ture of a child who apparently strangled show?

9 A I am not a pathologist. I don't know.

10 Q Have you been involved in investigations where
11 the photographs of the deceased were taken at the site?

12 A Yes, sir.

13 Q When was that normally done?

14 A At the earliest possible time. In fact, the Air
15 Force training includes, where possible, bring both a photog-
16 rapher and a flight surgeon onto the scene to conduct those
17 aspects of documentation and removal.

18 Q In the investigations in which you have been in-
19 volved, how long before the bodies were removed from the
20 site?

21 A Sometimes immediately, sometimes as long as two
22 day later -- in fact, later than that for recovery -- sometimes

1 weeks and months.

2 Q The bodies were left in the field for months?

3 A In one case, the bodies were distributed through
4 deep snow and were not found until the springtime.

5 Q Why do you try to identify them at the site?

6 A Because it may not be possible to identify them
7 later, so it is a humane thing as well as crash injury and
8 other aspects to assist in identification of the remains.

9 Q If you didn't know where the body was located after
10 the accident, would it serve any particular purpose to take
11 a photograph?

12 A If you don't know where the body was located?

13 Q At the site of the accident.

14 MR. FRICKER: I will object. I am not sure I under-
15 stand. Is your question, more fully stated, if you didn't
16 know where the body was at the site because the body had
17 been removed, would it serve any purpose to photograph the
18 site where one suspected? Is that what you are driving at?
19 I am not sure what you are asking.

20 BY MR. ALMY:

21 Q What purpose would be served to take a photograph
22 of a body that had been removed from the scene of the

1 accident such that you did not know where it came from?

2 A Yes, sir, that is standard prescribed practice

3 and part of the autopsy protocol spelled out by the Armed

4 Forces Institute of Pathology and followed by all of the

5 military services.

6 Q What purpose would it serve?

7 A All of those purposes I mentioned earlier includ-

8 ing the crash injury. If you knew only that a body came from

9 a certain part of the aircraft rather than a specific seat

10 within that structure, it would still be of benefit for the

11 medical examiner to establish the cause of injury or the

12 cause of death.

13 Q But it would not serve any particular purpose for

14 the accident investigation?

15 A Well, that is part of the accident investigation,

16 yes, sir.

17 Q Would it serve any purpose in terms of trying to

18 figure out how the plane crashed or what caused the injury?

19 A In some cases, yes. While an accident investiga-

20 tion is underway, those determinations can't really be made

21 until many other aspects of the investigation are completed

22 or nearly completed to determine whether it should or should

1 not have been done, or whether it's a waste of time or not.

2 It is a standard protocol to follow to do these things.

3 Q Is it possible to do a physical-chemical analysis
4 from a photograph?

5 A Not that I know of. It may be possible for some
6 scientists to do a color scan if they have something accurate
7 to scan.

8 Q But you have no expertise in that area?

9 A No, sir.

10 Q Based on what I understand from your review of
11 aircraft accident investigations, the purpose of the crash
12 injury analysis is to determine the mechanical causes of
13 injury or death. Is that basically correct?

14 A That is part of it. The purpose eventually finds
15 its way to future design considerations for the prevention
16 of injuries and accidents.

17 Q So that when you are investigating a crash, there
18 is a distinction to be made. We have the crash injury
19 analysis which relates to the injuries of the people or the
20 cause of death, and then we have the second somewhat more
21 distinct investigation involving the cause of the accident;
22 is that correct?

1 They are not really separately defined that way.

2 Well, just as an example, you may have no aircraft
3 structure at all. Maybe it is sunk at the bottom of Lake
4 Michigan or the Ionian Sea, and all you have is the human
5 remains. It is possible, and it has been done in the past,
6 to reconstruct what actually happened in that aircraft from
7 the evidence available only in the remains of the fatalities.

8 Q In other words, the converse is also true, that
9 you can conduct an accident investigation to determine the
10 cause of the accident without going througha crash injury
11 analysis?

12 A I suppose it could be done and it probably has
13 been done, but it is just not the protocol that is followed
14 in accident investigation procedures.

15 MR. ALMY: I guess I have no further questions.

16 MR. BAGNI: I have a few questions, but I would
17 like to take a 5-minute break.

18 [Brief recess.]

19 MR. BAGNI: Back on the record.

20 BY MR. BAGNI:

21 Q Mr. Carroll, my name is Bruce Bagni. The United
22 States is third-party defendant in this case, and I am

1 representing the United States.

2 How many Air Force accident investigations have
3 you been involved in? Air Force.

4 A I have been consulted on a number of them through-
5 out the 25 years that I have been in the business.

6 Is your question have I participated on an Air
7 Force accident board?

8 Q Yes.

9 A No, I haven't.

10 Q Have you ever participated or even acted as a con-
11 sultant, if you will, in an Air Force investigation or other
12 military accident investigation in a combat zone?

13 A No, sir.

14 Q I take it you are aware of the fact that this par-
15 ticular aircraft crashed in Saigon, Viet Nam during the fall
16 or just prior to the fall of the city of Saigon. Are you
17 aware of that factor?

18 A Yes, sir.

19 Q I take it you are also aware of the fact that the
20 United States' military presence was all but removed from
21 Viet Nam at the time of this accident? Are you familiar with
22 that fact?

1 A No, sir.

2 Q Are you familiar with the fact that the only mili-
3 tary contingent left in Viet Nam at the time of this acci-
4 dent was attached to the United States Embassy in Saigon?

5 A No, sir.

6 Q You have testified about various NTSB accident
7 investigations you have been involved in. I would like to
8 ask you some questions about those.

9 Have you been involved in NTSB accident investi-
10 gations involving passenger aircraft where large numbers
11 of individuals were killed?

12 A Many, yes.

13 Q Were you involved in any of those investigations
14 where there were also survivors?

15 A Yes, sir, many.

16 Q In those particular accidents that you investigated
17 where there were deaths and also survivors -- let me back
18 up and ask a preliminary question.

19 I take it when there is such an accident that the
20 accident site is secured through some mechanism?

21 A If at all possible.

22 Q Just take a couple of examples, if you would, of

1 large passenger aircraft accident where individuals perished
2 and survived. Could you just pick a couple and tell us what
3 they were and what provisions were made, if any, for securing
4 the crash site.

5 MR. FRICKER: Do you care whether he picks those
6 which had the greatest or least security?

7 BY MR. BAGNI:

8 Q Just give me a crosssection. Give me one where
9 you were able to have extensive security and one where you
10 were not able to have extensive security, if, in fact, that
11 has been your experience.

12 A We have had major air carrier accident occur in
13 fairly remote locations where local residents get into the
14 scene and start removing watches and gold teeth and personal
15 effects before any security can be established.

16 Q Are you thinking of a specfic accident?

17 A There was one in the Everglades outside of Miami
18 where security could not be established immediately. There
19 was one at Lake Tahoe up in the mountains where cross-country
20 skiers were there, where the aircraft had been lost for two
21 or three days, and there were people there before any of
22 the accident investigation party.

1 Normally, in the early days, the security would
2 be established by the nearest field office through municipi-
3 pal, county or state sheriffs' departments, and one of the
4 field office personnel would go there to take immediate con-
5 trol of security.

6 Q What is the purpose of securing an area at an acci-
7 dent site?

8 A To assure that the accident investigation will
9 not be impeded by moving or removal of evidence or changing
10 the physical location of evidence or, in some cases, actually
11 stealing it from the scene.

12 Q Actually removing parts of the aircraft?

13 A Yes, sir.

14 Q Do you know of instances where parts of the air-
15 craft had been removed?

16 A I know of some, yes.

17 Q Has that had a negative effect on the ability of
18 the NTSB to perform an investigation?

19 A It has a negative effect.

20 Q So, it is important to maintain security or set
21 up a security system?

22 A Yes, sir.

1 Q Do you know how soon after the accident the Air

2 Force investigating team arrived on the scene?

3 A No, sir.

4 Q Do you have any idea?

5 A I know that there was military presence and heli-
6 copters and recovery people there while the aircraft was
7 still burning.

8 Q Were those helicopters operated by the United
9 States military?

10 A I don't know.

11 Q And you don't know when the accident investigation
12 team got on the site?

13 A No, sir.

14 Q And you don't really know anything about the
15 security of the accident site, do you?

16 A From the motion pictures and TV coverage and the
17 early photographs where the fire was still in progress, I
18 didn't see any evidence of any hostile action.

19 Q But you are basing your opinion simply on those
20 photographs and movies you have seen and you are talking
21 about hostile action. Did you see any Vietnamese or others
22 ransacking the aircraft?

1 A I was not there. I did not see that.

2 Q You did not see that in any film or movie you are
3 referring to?

4 A I did not see any of that. I don't know whether
5 it occurred or not.

6 Q If, in fact, the Vietnamese soon after the acci-
7 dent began to systematically strip the airplane and to actu-
8 ally cart off large parts of the airplane, do you think that
9 might have had an effect on the investigation of the acci-
10 dent by the Air Force?

11 MR. FRICKER: I will object to the form of the ques-
12 tion. You are using some very vague words -- assume, sys-
13 tematically.

14 BY MR. BAGNI:

15 Q You have testified in your experience in prior
16 accidents which the NTSB investigated where persons were
17 at the scene, those persons carried off materials and that
18 did, in fact, impair the NTSB investigation; isn't that
19 correct?

20 A To what degree, you would have to go back and see
21 whether an accurate cause and determination was made.

22 Q The fact of the matter is if persons are at the

1 scene prior to it being securely secured and, in fact, prior
2 to the investigation beginning, their activities could have
3 an effect on the ability of the NTSB or another investigating
4 body to conduct the investigation. Isn't that a fair state-
5 ment?

6 A It is a matter of degree. I don't know that we
7 have ever been unable to determine the cause of an accident.

8 Q What was the cause of this accident?

9 MR. FRICKER: I will object. He is not being offered
10 for that purpose.

11 MR. BAGNI: This is a preliminary question. I note
12 your objection and I understand your objection, but I think
13 you will see this is quite relevant.

14 This man is an accident investigator who will be
15 proffered at this trial as an accident investigator expert.
16 He is also giving testimony now in effect as to the suffi-
17 ciency at least of the photographic and autopsy phases of
18 this investigation. It seems to me that the question of what
19 caused the accident sort of establishes a standard of rele-
20 vancy.

21 BY MR. BAGNI:

22 Q So, I am asking the question, do you know what

1 was the cause of this particular accident?

2 A My words might vary but, in essence, there was
3 a mechanical failure connected with the aft ramp loading
4 cargo door that caused it to separate from the aircraft
5 which resulted in explosive decompression, and in the subse-
6 quent attempt to return to Saigon, the aircraft lost flight
7 control and struck the ground on the east side of the Saigon
8 River, bouncing across and striking the ground several times
9 afterwards.

10 Q Is it fair to say that the cause centered in the
11 center portion in the aft door area?

12 MR. FRICKER: Again, same objection.

13 BY MR. BAGNI:

14 Q You talked about the aft ramp.

15 A The initial failure.

16 Q Is the troop compartment in which these children
17 were riding a part of that system, that ramp area?

18 A It is above that.

19 Q But there was no door, for instance, that blew
20 off of the aft troop compartment, was there?

21 A There is no door up there. There are emergency
22 escape hatches.

1 Q But the failure was below; is that correct?

2 A Yes.

3 Q Are you familiar with the Air Force regulations
4 relating to the investigation of aircraft accidents?

5 A Over the years I have been familiar with them as
6 part of the requirement, because we would have to partici-
7 pate with the Air Force in some accident investigations,
8 particularly where there was a civil aircraft and a military
9 aircraft involved.

10 Q What is the purpose of an Air Force accident inves-
11 tigation? What is the stated purpose in the regulations of
12 an Air Force accident investigation?

13 A Essentially it is to determine the cause of the
14 accident.

15 Q To determine the cause of the accident.

16 I would like to ask you a hypothetical question.
17 If you as an investigator knew that that portion of the air-
18 craft that caused the accident was, in this particular in-
19 stance, the aft cargo area, and if you were operating under
20 this Air Force regulation as an investigator to determine
21 the cause of the accident, why, sir, would you want to take
22 extensive photographs of the troop compartment?

1 MR. FRICKER: I am going to object. The hypothetical
2 assumes several facts that are either not anywhere in
3 evidence or refuted by the evidence.

4 There is the further objection it is vague in
5 terms of time. Your question is not clear as to what point
6 in time he, as a hypothetical investigator, would know.

7 MR. BAGNI: Let me reform the question a little
8 bit for Mr. Fricker's sake here.

9 BY MR. BAGNI:

10 Q Sir, in this proffered testimony, it indicates
11 that you are going to testify that other photographs were
12 taken of the interior of this troop compartment, and you
13 have stated that the basis for your conclusion is your
14 experience and your knowledge of aircraft accident investi-
15 gations. Isn't that correct?

16 A I have even taught military accident investigators
17 in the science of aircraft accident investigation, and this
18 is part of the curriculum.

19 Q I won't put you in this, but I will just ask in
20 terms of the Air Force people who were there, why, if that
21 portion of the aircraft that was the cause of the air crash
22 was not the troop compartment, why should there have been

1 additional photographs taken of the troop compartment?

2 A If you entered an aircraft accident investigation
3 knowing what the cause was, the circumstances might be a
4 little different, but that never happens, or it rarely
5 happens.

6 Q Do you know for a fact that the Air Force investi-
7 gating team, when it went out to the scene, did not know
8 what had produced the failure?

9 MR. FRICKER: Mr. Bagni, are you suggesting they
10 did?

11 MR. BAGNI: That is your question. You may ask
12 the witness that later. You can clarify that with the witness.

13 I am asking this gentleman if he knows for a fact
14 that when they went out to investigate the scene, they did
15 not know what the causal mechanism was.

16 THE DEPONENT: I would say they did not know. Even
17 though the aft cargo door blew off, they did not necessarily
18 know that was the cause of the accident until they gathered
19 more evidence.

20 BY MR. BAGNI:

21 Q Did they have reason to believe from the informa-
22 tion they got from the cockpit crew that, in all likelihood,

1 the cause of the accident centered in that aft cargo area?

2 A I don't know what the crew told them.

3 Q If they had reason to believe that the cause of
4 the accident was centered in that aft cargo area, wouldn't
5 it make sense that most of their investigative efforts would
6 center on that particular portion of the aircraft?

7 A No, sir.

8 Q Why is that?

9 A There is a possibility in all aircraft accident
10 investigations that there were other major contributing fac-
11 tors that would go undetermined or unfound if the team were
12 to concentrate in one area only and ignore all of the others.
13 You can have a subtle failure of the power plant system that
14 may have preceded or induced the failure of a boost factor
15 that caused the door to go. You just don't know those things
16 until you have been into the investigation for some period
17 of time.

18 Q What do the Air Force regulations say about taking
19 photographs of an accident site?

20 A I can recite what the regulations call for.

21 Q Let me ask you in general terms. In general air-
22 craft investigating terms, are there any hard and fast rules

1 about what photos should be taken and how many should be
2 taken?

3 A No, sir.

4 Q It is really a matter of discretion, and it is
5 a matter that has to be determined on the site at the time
6 of the accident investigation; is that correct?

7 A I have found it has been largely a matter of na-
8 tional attention. If you have a major air crash with multiple
9 fatalities and, in particular, the world's largest transport
10 aircraft, you go complete throttles to the wall to make sure
11 that you have document everything connected with that acci-
12 dent.

13 Q Would that be true if you were investigating this
14 as an NTSB investigator or if you were investigating it as
15 an Air Force investigator?

16 A Anyone in the field of aviation.

17 Q In those accidents that you investigated for the
18 NTSB where there were fatalities and survivors, were there
19 autopsies done in all those cases of the dead persons?

20 A In some cases, it was necessary to do autopsies
21 on all of the fatalities. The authority to conduct autopsies
22 in the civil field did not come into existence until about

1 1962, or thereabouts.

2 Q When you say authority, do you mean statutory
3 authority to conduct autopsies?

4 A Yes, sir.

5 Ever since that time, it has been in the civil
6 field essentially a requirement to conduct autopsies on all
7 air crew members and on those passengers whose medical data
8 could relate to the cause of the accident but, in any case,
9 at least a gross medical description and documentation of
10 all of the other fatalities.

11 Q What do you mean by gross medical description?

12 A That is generally an external examination for frac-
13 tures or internal injuries as opposed to incision and dis-
14 mantling of the body at autopsy.

15 Q What authority does the Air Force have to conduct
16 autopsies on civilians?

17 A I don't know.

18 Q What do the Air Force regulations say regarding
19 autopsies of deceased persons in Air Force accidents?

20 A At this point, I don't know.

21 Q So, you are basing your opinion then about the
22 autopsies that you think should have been conducted or, as

1 you say, were in fact conducted in this case on your experi-
2 ence on the civil side; isn't that fair to say?

3 A No, I am relating this to the C5A accident where
4 it was indicated that autopsies were conducted and yet no
5 documentation, photographic or otherwise. Autopsies were
6 alleged to have occurred but no evidence seems to be avail-
7 able here.

8 Q So, it is your understanding that autopsies were
9 performed on some persons in this accident?

10 A Yes, sir.

11 Q And on what persons were they performed, do you
12 know?

13 A I believe it was the deceased crew members and
14 whichever of the deceased orphans were in sufficient condi-
15 tion to conduct autopsies.

16 Q So, it is your understanding that those autopsies
17 that were performed on those deceased or the reports of those
18 autopsies of those deceased orphans have never been produced.
19 Is that your understanding?

20 A Yes, and any photographs that may have been con-
21 nected with those.

22 Q Incidentally, how many children died in the troop

1 compartment, do you know?

2 A It has been a long time since I reviewed that.

3 I can't give you an accurate number. In fact, I think there
4 was a discrepancy at the time as to the exact number.

5 Q Can you give me a ballpark figure?

6 A No, sir. I would have to review the data on that.

7 Q Of the children you believe died in the troop com-
8 partment, do you know what the instrumentality of death was?

9 A I don't know, sir.

10 Q So, you don't have any knowledge as to how they
11 died, if, in fact, any died?

12 A I think that there was a pathologist who gave his
13 analysis on that.

14 Q I am asking you about your knowledge.

15 A It would only be from his data. I would have to
16 review that.

17 Q But without knowing what the instrumentality of
18 death might have been, you still believe that autopsies were
19 performed on any and all deceased children in the troop com-
20 partment?

21 A I saw that documented somewhere in the reports,

22 yes, sir.

1 Q So, if I were to represent to you that we believe
2 perhaps one child died in the troop compartment and that
3 one child apparently died as the result of strangulation,
4 either as a result of having a little bag of belongings tied
5 around its neck, or the result of the pipe from the oxygen
6 mask strangling the child, if I were to tell you that, do
7 you think that there would be any purpose in performing an
8 autopsy on that particular child?

9 A By all means, yes, sir.

10 Q Even though the instrumentality or the cause of
11 death was clearly established?

12 MR. FRICKER: I object to the form of the question.

13 THE DEPONENT: The cause of death really couldn't
14 be accurately determined even though it would appear the
15 child had strangled. It could also be the child ingested
16 toxic fumes or died of hypoxia even though the mechanism
17 of the strangulation was evident. An autopsy really would
18 be required to determine the accurate cause of death.

19 BY MR. BAGNI:

20 Q So, an autopsy under those circumstances would
21 be required under Air Force regulations?

22 A Again, I can't put it in the perspective of Air

1 Force regulations.

2 Q Because you don't really know Air Force regula-
3 tions, do you?

4 A I don't know if anyone does. They change all the
5 time.

6 Q You don't have a clear understanding of what the
7 Air Force regulations were with respect to autopsies at the
8 time of the accident?

9 A Like anyone else, I would have to review the regu-
10 lations that were in effect at the time.

11 Q But, at this point, your opinion is not based on
12 your present understanding of what the Air Force regulations
13 were with respect to autopsies at the time of this accident?

14 A I told you, I don't know what the regulations were
15 at that time.

16 Q Incidentally, do you know whether or not the
17 bodies of the deceased children in this accident were ever
18 identified?

19 A It is my understanding that it was done largely
20 from a manifest of those known to be onboard. I don't know
21 that it was done on an individual basis.

22 Q When Mr. Almy was asking you questions about

1 Plaintiff's Exhibit 10-C, you were talking about the ques-
2 tion of color changes, and you indicated that there was
3 evidence in that photograph of blistering and other evidence
4 that there had been a fire; is that correct?

5 A Exposure to heat.

6 Q Would that be true of not only the overhead bins
7 but also the seat fabric?

8 A In that picture, there is no seat fabric. It has
9 been removed, so it is not possible to answer that question.

10 Q Have you seen any other photographs that would
11 lead you to believe that the seat fabric was exposed to high
12 temperatures?

13 A You can't tell that accurately, not from Exhibit
14 10-C. The seat fabric does show in 3510. It is sufficient
15 to tell the degree to which there was exposure on the
16 upholstery.

17 Q On the first one, Exhibit 10-C, can you point on
18 the exhibit and identify those portions of the exhibit that
19 would indicate or that show you there was a fire or evidence
20 of fire?

21 A In the overhead areas on the left and on the right
22 in this photograph.

1 Q What is the specific evidence of that?

2 A The blistering, discoloration, sooting, sintering,

3 and overall condition which is consistent with exposure to

4 high heat and smoke and sooting.

5 Q In order for that material to blister, can you

6 give me an idea as to how high the temperature would have

7 to be?

8 A No, sir.

9 Q A rough estimate?

10 A No, sir. It is a combination of temperature and

11 time exposure. It could be a high temperature for a very

12 short duration, or it could be a lower temperature for a

13 longer duration, and it is somewhere in that range, but I

14 can't tell you from these photographs.

15 Q Can you tell from those photographs where any fire

16 might have originated?

17 A No, sir.

18 Q Do you know whether or not the children who were

19 evacuated from the troop compartment, the surviving children,

20 showed any signs of being burned?

21 A I understand there were burn injuries, but I don't

22 know specifically.

1 Q Is that something you would take into considera-
2 tion in arriving at your conclusion that there was fire in
3 the troop compartment?

4 A If there was a more accurate determination of
5 where the occupants were at the time of the accident.

6 Q Well, the occupants were in seats. You know that,
7 don't you, sir, in the rearward-facing seats?

8 A I know that there were many of them put two at
9 a time in each seat under a seat belt when the aircraft was
10 being loaded for departure, and it had only been airborne
11 a short while, so I think it is reasonable and logical to
12 assume that they were in those seats after the explosive
13 decompression and up until the time of the impact.

14 MR. BAGNI: I don't have anything further. Thank
15 you, Mr. Carroll.

16 BY MR. ALMY:

17 Q To follow up on that last question, is it your
18 view, Mr. Carroll, that the children were not in the seats
19 after the impact?

20 A I don't know. Obviously, at some point, none of
21 them were in their seats after the impact. They were all
22 removed or thrown clear.

1 Q You have no idea how they got out from the seats?

2 A No, sir.

3 Q In response to Mr. Bagni's questions, you indi-
4 cated that some sort of statute had been passed apparently
5 in the late 1960s relative to civilian authorities.

6 A I think it was the early 1960s -- 1962.

7 Q Prior to that time, were autopsies done in the
8 case of aircraft accident investigations?

9 A Yes, sir, and it was predominantly in the military
10 field that it was done routinely based on the successful
11 experience of improving air safety through these aeromedical
12 investigations, so it was possible to bring about the re-
13 quirement on the civil side.

14 Q On the civil side up to that time, was it possible
15 to do autopsies at all?

16 A Yes, sir.

17 Q Under what circumstances?

18 A By agreement not to prohibit autopsies.

19 Q By agreement of whom?

20 A Usually the next of kin, or, based on religious
21 belief, an intention could be stated we would like to con-
22 duct or are going to conduct an autopsy, and unless there

1 was strong and legal objection, it would be done.

2 Q Who was authorized to conduct autopsies according

3 to the statute that was passed?

4 A Congress authorized the conduction of autopsies

5 by, at that time, the Civil Aeronautics Board. The statutes

6 have come down to utilization by the National Transportation

7 Safety Board.

8 Q Is anyone else authorized to do autopsies as a

9 result of aircraft accident investigations?

10 A Local authorities, local medical examiners.

11 Q Is that pursuant to the authority of the NTSB?

12 A No, that would be independent and existed long
13 before the CAB or NTSB authority.

14 Q Those would only be government-type organizations?

15 A Usually municipal, city, county or state medical
16 examiners or coroners and usually in the case of violent
17 death.

18 Q Assuming that I was at an aircraft investigation
19 and had the interest, would I be allowed to do an autopsy?

20 MR. FRICKER: Do you mean, Mr. Almy, as an attorney?

21 MR. ALMY: That is correct.

22 THE DEPONENT: I think you could make efforts to

1 have one conducted, but you would not be permitted to con-
2 duct one yourself.

3 BY MR. ALMY:

4 Q A private individual would have no authority to
5 conduct an autopsy?

6 A Authority, no, but I think you could request one
7 through the authorities.

8 MR. ALMY: I have no further questions.

9 MR. BAGNI: Thank you, Mr. Carroll.

10 [The deposition was concluded at 12:06 p.m.]

11
12 I, John J. Carroll, do hereby certify that I have read
13 the foregoing 67 pages of my deposition and attest to the
14 accurate transcription of my answers given to the questions
15 propounded.

16
17 [Signature of deponent]

18 Sworn and subscribed to before me this _____ day of
19 _____, 1983.

20
21 NOTARY PUBLIC

22 My Commission expires:

CERTIFICATE OF NOTARY PUBLIC/REPORTER

UNITED STATES OF AMERICA

ss.

DISTRICT OF COLUMBIA

I, Albert J. Gasdor, a Notary Public in and for the District of Columbia, the officer before whom the foregoing deposition was taken, do hereby certify that the witness whose testimony appears herein was duly sworn by me; that the testimony of said witness is a true and accurate transcription of the stenographic notes taken by me and thereafter reduced to typewritten form by me.

I further certify that I am neither counsel for, related to, nor employed by any of the parties to this action in which this deposition was taken; and, further, that I am not a relative or employee of any attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this litigation.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal this 5th day of August, 1983.

Albert J. Gasdor

Albert J. Gasdor

Notary Public in and for
the District of Columbia

My Commission expires:

July 31, 1985

