

**DOCKET NO.: SA-519
EXHIBIT NO. 2B**

**NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.**

**OPERATIONAL FACTORS GROUP CHAIRMAN'S FACTUAL REPORT
ATTACHMENT 1: INTERVIEW SUMMARIES**

**American Airlines flight 1420
Little Rock, Arkansas
June 1, 1999**

DCA99MA060

Attachment 1

to Operational Factors Group Chairman's Factual Report

DCA99MA060

Interview Summaries

INTERVIEW SUMMARIES

Interview: Mike Origel

Date: June 4, 1995

Location: UAMS Hospital, Little Rock, Arkansas

Time: 0930

Represented by: Ray Duke, Allied Pilots Association

Present: Operations Group (also Evan Byrne from Human Performance)

The F/O's union representative indicated that the F/O was being medicated at that time. He had taken medication consisting of 2 percocets at 0730. The representative said that when the F/O was off the medication, and if he had additional recall, or had said something in error he would provide a correction.

During the interview, F/O Origel provided the following information:

He commuted from Los Angeles, California on Sunday, May 30, to Chicago, Illinois and stayed with relatives. He was doing routine activities in Chicago, Illinois on the Sunday and Monday before the accident and "took it easy" on those days. On Monday night, he went to bed about 2200 and awoke on the day of the accident at about 0730. He felt rested when he woke up.

He said that was the first time he had flown with Captain Buschmann. On the day of the accident, he met the captain in the AA ORD base operations and, at that time, learned that the captain was a ORD chief pilot. The captain said he was assigned the trip as part of his monthly schedule. The captain was a great guy who made him feel comfortable in the cockpit. In ORD, prior to beginning the flight sequence, the captain gave him a standard American Airlines briefing (what to do in an emergency, who would fly, who would do the checklist, runways to use, etc.)

He said that from the start of the day they were fighting weather all day and each segment they flew involved a reroute. On flight 1226 to SLC, the captain was the PF and there was weather to the south of their flight path so they flew a northerly route. Mr. Origel was the PF for the second leg into DFW and there was weather moving in around Dallas as they approached, and they were given a hold on that flight.

When they arrived in DFW, they noticed there was no airplane at the departure gate and were informed there was a departure delay in DFW of about 2 hours due to the late arrival of the airplane scheduled for the accident flight. He said "they wanted to get going" because they wanted to get to LIT.

At that time, they felt okay and were not tired. They were concerned that an undue delay would reach their 14-hour contract duty limitations. He said that 14 hours was a long day but it "was not out of the ordinary."

He called the flight dispatcher who then arranged for a substitute airplane. He saw the flight departure papers that the captain had obtained. He said the accident airplane was a "clean" airplane, and had no maintenance items.

They knew there was weather between DFW and LIT. Their original flight plan route had the flight going direct to Little Rock, Arkansas (LIT), but they received a routing change before they left the ground that had them going southeast of their original route. At DFW, they knew they might not make it in to LIT, and said this had been a part of their briefing concerning alternates but was not really a discussion item.

While enroute, they used ACARS, not voice communication to receive weather information and communicate with dispatch. During the flight, they discussed a "bowling alley" ACARS message that was received from dispatch concerning weather between DFW and LIT. The airborne weather radar displayed the "lane" that was referred to in this message. They received other ACARS messages enroute and the messages contained SIGMETs with information that enroute weather was deteriorating. The ACARS messages included a Miscellaneous 7⁶¹ message that reported METAR weather at LIT was not a problem. They never talked about having to divert.

The captain was the PF during the leg to LIT and both pilots operated the airplane radar during the flight. He thought there was one ATC transmission about hazardous weather for the Texas and Arkansas area.

He said the radar was probably in normal [this would be in WX mode].

He was asked about the weather around the airport that he saw on the airplane airborne weather radar. He said the airport looked clear but there was a line of weather to the south and to the west. The weather was moving fast. They were using the 20 mile and 40 mile range on the airborne weather radar, going back and forth to get a better picture. They were trying to go around the weather where it was clear. He said "a good guess" was that, initially, the weather was about 15 miles from the airport and when they looked at the radar "it looked like they had some time." Mr. Origel said when they got to the airport the weather was very close "up against it." He said there was a sense of urgency to land based on the weather

Initially when they were handed off to LIT ATC, one person was controlling ground, tower, and approach. This controller reported the winds at the airport. They originally planned for a landing on runway 22L but when he and the captain discussed the weather and winds, they decided to use runway 4R. He said the only problem was landing on runway 4R they would be approaching the weather. The weather would have been better for runway 22L because of where it was coming from but the winds were better for runway 4R.

⁶¹ Miscellaneous 7 messages displayed meteorological weather for selected AA stations.
INTERVIEW SUMMARIES

The PF usually briefs approaches so that the pilot not flying “is on the same page.” He said the captain formally briefed a runway 22L landing, but when the runway was changed, he believed there was not a formal briefing. He said that because the captain was busy, he tried to help by doing the approach briefing even though he was the PNF and that he briefed frequencies, Minimum Safe Altitude (MSA), and Decision Altitude (DA).

He said, during descent, he did the descent checklist and the first half of the mechanical checklist. He said the mechanical checklist was completed later during the approach and added “can’t complete it until you get gear and flaps.”

Initially when they were over the field, they decided to make the approach to runway 4R and ATC gave them vectors. They had the airport in sight at that time and wanted to keep the airport in sight. He said he had visual contact with the runway during the entire approach to runway 4R.

During vectoring, flaps were being extended, to 11 degrees, then to 15 degrees, then to 28 degrees. When they turned base, the flaps were probably at 15. At 1000 feet AFL on the approach, he noticed the flaps were still set at 28 degrees and he asked the captain if he wanted 40 flaps. The captain said he thought they were at 40 degrees. The captain had briefed 40 degrees flaps for landing due to the short runway and field conditions. Mr. Origel said at about 900 feet, he put the flaps to 40 degrees. About 1000 AGL is normally when the flaps are usually put to the final flap setting.

During the vectoring from an approach to runway 22L to an approach to runway 4R, he asked the captain if he had the runway in sight and the captain said “no.” The F/O told the captain that he’d keep him apprised and give him vectors. About that point Mr. Origel said he lost the runway and advised ATC.

Mr. Origel said the controller working the LIT approach frequency gave them weather but did not say whether the runway was wet or not. He could not recall the ATIS identifier because it was changing but they had received a Miscellaneous 3⁶² ACARS message that gave weather for the airport.

He said the Before Landing checklist was challenge and response and was completed late in the approach. The last part of it he remembered was gear, flaps, and slats. He said the first part of the checklist was definitely done and did not remember exactly after that. He did not recall when the gear was extended. The captain just said gear down and Mr. Origel said he did it. He remembered saying “spoilers” while doing the checklist and said “he [the F/O] didn’t reach over to arm them”[spoilers] and “he doesn’t remember if the captain pulled them up not.” The captain usually reached up and armed them and he thought the captain did arm them.

⁶² ATIS for selected stations.
INTERVIEW SUMMARIES

ATC reported the winds as 320 degrees at 40 kts. He did get out the "redbook [AA DC-9 Operating Manual, Volume I]" and reviewed the 30 kts. crosswind limitation and 10 kts. tailwind limitation. The captain and he discussed the winds and the restriction of a wet runway, but Mr. Origel said he thought that was a recommendation and was at the captain's discretion. He said he knew there was a restriction for RVR and wet, but he could not find it in his flight manuals.

The captain asked for plus 20 kts. on the approach and landing bug speed settings. When he made the 500 feet call, the captain was on speed. The approach speed was 145-150 kts.

During the vector to 4R, the controller said the winds had died down to 10 or 11 kts. ATC vectored them for a short approach because we asked for it. ATC turned them onto final approach "fairly close" to the marker. The F/O said he could see the approach end of the runway and said "we came around that cloud and there it was." As they came out of the turn, the approach lights were in front of them. On final approach, ATC reported the RVR was 1600 feet and the captain said "tell them we're established inbound." The runway was visible until they got lower and were drifting to the right.

On approach to runway 4R, he was not really paying attention to the airborne weather radar since he saw the runway. The weather was off the side of the runway. He saw the approach end of the runway but could not see the full length and did not know why, but assumed it was because of the weather. He said the approach lights looked good, the edge lights were working, the runway end lights looked good, and he didn't think they had a lighted touchdown zone (TDZ).

He said there were no airspeed deviations on the approach. When he was making the plus 20 kts. callout, he heard ATC giving windshear alerts but they had no indications of windshear in the airplane.

The F/O said the controller was very good and provided RVR and windshear alerts and made 2 or 3 callouts of weather and wind.

At about the 500 feet callout, the controller reported the weather. He could see the runway and noticed the airplane start to drift off course. He felt it was a stabilized approach until 400 feet when they drifted to the right. He estimated they were displaced to the right about a runway width and said he was looking down the right hand edge lights of the runway. At about 400 feet, Mr. Origel said he thought they should go around and said "go around" because he thought they were too far to the right to make the approach. The F/O said "I have got to admit I didn't do it with a very strong voice - I remember saying go around." He said, at that time, he looked at the captain and "Rick was working his butt off." The F/O said he then asked "you got it, do you have the airplane", and the captain nodded his head in response and kept on flying. He said that he did not take control of the airplane because the captain was on speed and on the glideslope. The F/O said another thing going through his mind, at that point, was he's a

chief pilot and check airman and I'm a new guy. The F/O said that to his credit, the captain got it on centerline.

He did not hear any GPWS warnings.

He said they used windshield wipers on high setting during the approach, but they were turned off at a fairly low altitude because they were "not needed." He thought it was raining at the point of touchdown.

He said that for the landing the captain used nose lights but the he doesn't remember landing lights. He was asked why the captain may not have used the landing lights and he thought that it might have been a drag consideration.

The touchdown point was not that far down the runway. At touchdown, the mains were to the right of centerline and the nose was pointed left. He said they touched down "sort of flat," sideways, and it was "violent." It obviously wasn't a smooth down-the-runway touchdown. When they landed, the captain went into reverse immediately and he saw the 4 reverser lights come on. Mr. Origel said he noticed that when the captain went into reverse thrust, "he really honked on it" and the EPRs read 1.6 to 1.8.

He did not remember if the spoilers came out or not. He said if the spoilers came out, they came out automatically.

He said that after touchdown, it first felt like they had no control of the airplane and he did not feel like the airplane ever had contact with the ground. After landing he noticed the aircraft was not moving in a straight-ahead direction. He felt the airplane was skidding "right off the bat." It felt like we were skidding in a straight line sideways and then we started to drift to the left across the runway. He described the sensation as "like a roller coaster." As they progressed down the runway, they went to the left but came back and he felt they had it under control. He was fairly sure the left mains went off the runway and then came back towards the middle of the runway. At one point, he felt the airplane was fishtailing and he "felt like we might ground loop [spin around]." He thought he asked "you got it" a couple of times. His main concern was the speed and the hydroplaning. It was not like a normal landing where you felt brakes, spoilers, and reverse and he did not experience normal landing sensations.

At one point, the captain came out of reverse and it looked like he was going to go around or it was for directional control. He thought the captain was thinking about a go-around. They "kind of drifted" on the runway and when the captain brought it out of reverse it seemed to be under control but just going fast. There was a little bit of asymmetric thrust after that but the airplane was under control. The captain then went back into reverse and even reverse didn't seem to be working. Mr. Origel said, at first, the captain was not using the thrust reversers to control the airplane's direction, but when the airplane got out of control, he thought the captain began using the reversers for control. He did not remember any "pumping of the brakes," but was sure the captain was

using brakes although he couldn't see them from his position. He knew the captain used reverse and was using brakes but they did not have any effect.

He did not remember if the captain used the steering tiller and he did not remember the positions of the flight controls during the landing rollout.

As they continued down the runway, he saw the alternating red and white lights⁶³. He thought to himself that this was not going the way we want it to but the airplane was on the runway and we were using brakes and thrust. When their speed was about 80 kts and they were near the end of the runway, the captain said "brakes" and he got on the brakes with the captain. He said he did not help on the controls except for the brakes at the end. He said they did not use autobrakes, because the captain had wanted to use manual brakes for landing.

The airplane's movement down the runway caused G-forces that restricted his movement and he did not have a lot of mobility.

When they went off the end of the runway, they went straight off the runway.

He said that when the airplane stopped, the lights went out. He thought the captain had been ejected from the airplane. He undid his seatbelt and tried to get up. He collapsed on his left leg and as he fell backwards into his seat, his hand hit the center console. He said he knew he hit something on the center console but did not remember moving any switches. He knew the firemen moved things on the center console when they were trying to get him out.

As he was sitting, he could hear people talking and he asked about the F/As and about the captain. He heard someone say the captain was still in his chair.

He called his wife on a cell phone while still in his seat..

The interview ended about 1140.

⁶³ The red and white alternating lights start 3,000 feet from the departure end of the runway.
INTERVIEW SUMMARIES

Interview: Captain Richard Gibson, American Airlines MD-80

Date: June 4, 1999

Location: Riverfront Hilton Hotel, Little Rock, Arkansas

Time: 1300

Represented By: Bruce Bickhaus, APA Staff – Safety

All members of the Operations Group were present.

During the interview, Captain Gibson provided the following information:

Captain Gibson stated he flew the accident airplane two legs from DFW to Denver, Colorado, (DEN) and back to DFW on June 1, 1999.

The spoilers were armed on each landing and deployed normally. The reversers worked normally and were symmetrical with no adverse yaw. No autobrakes were used.

The radar worked well during deviations around weather in the Denver area.

Interview: First Officer Kevin Little, American Airlines MD-80 Pilot
Date: June 4, 1999
Location: Riverfront Hilton Hotel, Little Rock, Arkansas
Time: 1400
Represented By: Bruce Bickhaus, APA Staff – Safety

All members of the Operations Group were present.

During the interview, F/O Little provided the following information:

He was a crew member on the accident airplane on the previous two flights before the accident. The flights were DFW to Denver, Colorado (DEN), and DEN to DFW.

When asked if he had seen or talked to Captain Buschmann on the day of the accident, he said they passed about ten feet apart in a crowded part of the terminal. They did not talk, but F/O Little mentioned that Captain Buschmann appeared to have had a long day. Part of his basis for this comment was beard stubble on Captain Buschmann.

He said the accident airplane airborne weather radar operated normally in the 160, 80, 40, and 20 mile ranges.

He reported the accident airplane landed normally with a seventeen kt. crosswind at DEN.

First Officer Little was the pilot flying on the DEN to DFW leg.

On both legs, the spoilers, thrust reversers, and brakes operated normally. No autobrakes were used.

He said he did not know the accident crew.

Interview: Captain Bob Lines, American Airlines X-type Pilot Checkairman

Date: June 4, 1999

Location: Riverfront Hilton Hotel, Little Rock, Arkansas

Time: 1430

Represented By: Bruce Bickhaus, APA Staff Safety

All Operations Group members were present.

During the interview, Captain Lines provided the following information:

He was an X-type Pilot Check airman who performed line checks, simulator checks, type rating certifications and oral examination in the MD-80. He had been a Check airman for four years and a FAA designee for one year.

New hires and captain transitions received some weather training in the simulators and this was covered on training day-six of simulator training which was referred to as takeoff and landing day. This simulator session included day, dusk, night, short runways, and icy runways landing and takeoff training. This simulator session also included wind shear training on takeoff and landings as well as high altitude airport training (i.e. - MEX, DEN).

He stated that airborne weather radar training was normally covered during Initial Operating Experience (IOE). Other items covered during the IOE were diversions, weather minimums, and fuel management. Discussions about diversions due to crosswinds were also held during day six of simulator training. AA publications had a very good weather radar operating/interpretation publication written by Archie Trammel that had good information on convective weather and how to interpret it, but this publication was not normally issued to crew members. The AA DC-9 Operating Manual, Volumes I and II covered weather radar operation.

He said the use of differential reverse thrust was not discussed in the simulator and rudder effectiveness as the airplane was slowing down was discussed but not practiced in the simulator.

Day-six simulator period included crosswind training beginning at five knots and working up to 30 knots.

The rudder was almost completely ineffective below 90 knots with 1.6 reverse thrust EPR and this blanketing effect was discussed during the briefing for day-six simulator period.

He explained an AA IFR stabilized approach was that at 1000 feet altitude, you should have final flaps set and the aircraft on approach speed. Deviations of ½ dot above or ½ dot below glideslope and any deviation of 1/3 dot off localizer were to be called out by PNF.

Interview: Captain Larry Jamison, AA MD-80 Pilot Checkairman

Date: June 4, 1999

Location: Riverfront Hilton Hotel, Little Rock, Arkansas

Time: 1530

Represented By: Bruce Bickhaus, APA Staff – Safety

All members of the Operations Group were present.

During the interview, Captain Jamison provided the following information:

He was hired by AA in October 1976. He served as a MD-80 pilot check airman, in the simulator and the airplane, and as an Aircrew Program Designee. He first worked as a line check airman in the fall of 1994, then was trained as a simulator check airman in the fall of 1996. He worked between four and six months per year in the simulator and the remainder of the year performed line checks and IOEs, with two months of line flying.

He stated airborne weather radar interpretation information was normally presented during IOE and said written guidance for weather radar operation was in the airplane Operating Manual.

He stated crosswind takeoffs and landings using the wing low method were trained during the IOE and simulator phases of training. The simulator training included variable wind components up to 30 knots, and varying runway friction coefficients.

He was familiar with “rudder blanking” on the MD-80 series airplanes. Rudder blanking was a specific topic covered during recurrent training and during the Day-six simulator takeoff and landing training period.

He stated that the Cleveland accident had produced an “increased awareness” of MD-80 handling characteristics on slippery runways. This accident was briefed at check airman standardization meetings, then passed on to line pilots as part of recurrent training.

He did not participate in the ASAP program.

He was not familiar with the check airman selection process, but offered that individuals selected should be good technical pilots that were easy to work with.

Interview: Bob Chambers American Airlines Ramp Supervisor/ Crew Chief
Date: June 4, 1998
Location: Riverfront Hotel, Little Rock, Arkansas
Time: 2000
Represented by: Greg Klein, American Airlines Operations Manager, Little Rock, Arkansas

All members of the Operations Group were present.

During the interview, Mr. Chambers provided the following information:

He observed a portion of the accident flight landing and rollout on runway 4R at Adams Airport in Little Rock Arkansas. He was standing under a concrete overhang in a position on the ramp of the operations building that was located next to and beneath American Airlines gate 3.

Initially, he observed the airplane at a point about 2,500 to 2,800 feet from the approach end of runway 4R. Prior to that, trees had blocked a visual view of the runway. When he observed the landing, he could not identify the airplane itself and was only able to recognize the landing lights of the airplane. He was not able to recall if he saw the strobe lights located on the wing. When he first saw the airplane, it appeared to be in a landing flare and was rocking side to side slightly. He did not see the spoilers or reversers of the airplane. He said that he did not hear the roaring sound of the engines reversing that he normally heard. He saw the lights of the airplane from the initial point until a point approximately abeam taxiway "W." This last point was approximately 1500 feet from the far end of runway 4R and beyond that point, a building obscured his view.

He said five minutes before the landing, there was a moderate rain and a wind coming from the northwest.

At the time of the airplane touchdown, there was heavy rain falling in sheets at the airport and he observed a large thunderstorm and lightning about a mile to the north of the airport.

After the crash, he said the rainfall was still increasing and the visibility was decreasing.

He said that he noticed standing water on the ramp area near him, but commented that the ramp was not very level.

At the time of the accident, his visibility was not restricted much by the rainfall. He was able to see the United Parcel Service hangar, which was located across the 4R runway behind the initial point at which he saw the airplane.

He did not recall seeing any hail at the time of the accident.

Interview: Captain Jim Propheter, American Airlines

Date: 6/5/99

Location: Phone Interview

Represented by Bruce Bickhaus- APA Staff Safety

All Operations Group members present.

During the interview, Captain Propheter provided the following information:

He flew a two-day trip with F/O Origel approximately two weeks prior to the accident and that was the only time he had flown with him. The trip consisted of two legs the first day and three legs the second day and F/O Origel flew two of the five legs. The five legs flown on this sequence consisted of approximately 12 hours flight time.

He did not recall any significant weather on either of the days.

He noted nothing unusual about F/O Origel and he considered him an above average new hire that was very competent and knowledgeable. He said F/O Origel had good procedural knowledge and there were no events that would have required the F/O to display assertiveness or be aggressive. F/O Origel's conversational voice was normal, not soft spoken.

There were no checklist omissions or any need to prompt the F/O to accomplish a checklist.

General discussions in the cockpit included family and past work and revealed no significant personal problems.

He said he always armed the spoilers, regardless of who was the "pilot-flying", but he would not consider it unusual for a F/O to back him up by arming the spoilers if he was too busy. Captain Propheter said he expected to hear, "spoilers armed", during before landing checklist accomplishment.

During their trip, there were no significant crosswinds. He knew the airplane had a 30 kts. crosswind limit and a 15 kts. wet runway limit. He knew visibility could drive the crosswind limits down to 10 kts. as indicated in the Part 1 (Flight Manual). He also knew there were crosswind limits in the red book (Operating Manual, Volume 1).

When asked a hypothetical question about skidding on a landing, He said he would first use rudder and aileron to correct a skid. Next, he said he would come out of reverse to regain control and then back into reverse.

He does not remember any training in "rudder blanking" in the simulator. He remembered discussing rudder effectiveness some time during his American Airlines training. The discussions indicated rudder effectiveness was better at higher speeds and there was possible rudder blanking at lower speeds due to reverse thrust.

He said he would only use asymmetric thrust as a last ditch effort to save the airplane.

He remembers airborne weather radar training in ground school training, but did not remember any hands-on practical weather training in ground school. He stated his most valuable training on airborne weather radar was received from his IOE check airman.

Wet runway performance discussions took place during recurrent training. When asked what he might do if there were reports of standing water on the runway, he responded he would refer to his operating manual for advice.

Interview: Captain Larry Franklin, American Airlines
Date: June 5, 1999
Location: Phone Interview
Time: 1230
Represented by: Bruce Bickhaus, APA Staff Safety

All Operations Group members present.

During the interview, Captain Franklin provided the following information:

He flew three or four legs with F/O Mike Origel two or three weeks prior to the accident. All legs were clear of weather except for the DFW to ORD leg, where the weather was less than 1,000 feet ceiling and less than two miles visibility.

He stated that F/O Origel had lots of experience in Lear Jets and was knowledgeable and He gave him an "outstanding" rating on his probationary report. He considered F/O Origel to be on the "vocal side" and said that he stayed ahead of the airplane. F/O Origel was a good pilot and had good cockpit discipline.

During the trip they flew, F/O Origel spoke of his wife and new baby and seemed to be really happy and was happy to be an American Airlines pilot.

F/O Origel also spoke of his aviation background, which involved a charter business utilizing Lear Jets. He felt F/O Origel was a very experienced pilot.

He stated he arms the spoiler regardless of whether he was the flying pilot or not and said the only time it was armed by the F/O was when he was distracted.

He said the MD-80 maximum demonstrated crosswind was 30 knots and that with reduced RVR, the crosswind limitation was 10 to 15 kts. The autoland crosswind limit was 15 kts. and Category II and III approaches had a 10 kts. limitation.

Captain Franklin was knowledgeable of American Airline procedures concerning hydroplaning, skidding and reverse thrust policy. He said his personal limitations would not allow him to land on runways with more than ½ inches of standing water.

He was asked about rudder blanking and stated that high reverse disrupts flow across the rudder and that coming out of reverse will help establish directional control.

Interview: F/O Todd Hughes, American Airlines
Date: June 5, 1999
Location: Phone interview
Time: 1330
Represented by: Bruce Bickhaus, APA Staff Safety

All Operations Group members were present.

During the interview, F/O Hughes provided the following information:

He flew one leg with Captain Buschmann from ORD to DFW and there was no weather encountered on that leg. Approximately 45 minutes prior to the flight, F/O Hughes met the captain at the airplane and standard American procedures were briefed. He said the captain was very personable, nice, open, and not intimidating.

He was asked questions concerning the initiation of the Descent and Before Landing checklists. He normally starts the descent checklists on his own descending through 18,000 feet and said there was no specific time for the Before Landing checklist.

He said the captain appeared knowledgeable and flew the line once a week. The captain had children, no personal problems and was fit for the trip.

When asked who normally arms the autospoilers, he said the captain always arms and the PNF always confirms. If they were not armed the F/O would query the captain.

Mr. Hughes displayed a good working knowledge of all crosswind limitations in the AA Flight Manual, Part I and the AA Operating Manual, Volume.

When he was asked about situations involving airplane skids, he said he would come out of reverse thrust and that differential power would only aggravate the situation. He was knowledgeable about "rudder blanking" and was not sure if there was any training on the use of reverse thrust in situations involving skids. He thought, during initial training, that there might have been some training in "rudder blanking."

Mr. Hughes has 750 hours in the MD-80 and 8,500 total time.

Interview Bob Dansby, American Airlines, Manager On Duty Crew Scheduling

Date: June 3, 1999

Location: Riverfront Hilton Hotel, Little Rock, Arkansas

Time: 0900

All Members of the Operations Group were present except Randy Wyatt.

During the interview, Mr. Dansby provided the following information:

He explained that a crew duty day begins one hour prior to scheduled departure time and continues until scheduled arrival time at the final destination plus a 15 minute debrief time.

American's policy was not to pair crewmembers when both have less than 75 hours in the type airplane.

A crew was normally scheduled for a maximum of 12 hours and 30 minutes on duty, and, if necessary, could be extended up to a maximum of 14 hours on duty.

If a pilot is re-scheduled, he can be scheduled for a maximum of 13 hours. The pilot could still be extended to a maximum of 14 hours on duty.

These duty times are for pilots reporting for sign in from 0600-1759 local time at their home domicile, and are based on scheduled flying time.