

# AviationSafetyNetwork

..... CVR / FDR

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## United Airlines DC-10-10 - 19 JUL 1989

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Cockpit voice recorder transcript of the July 19, 1989 emergency landing of a United Airlines DC-10-10 at Sioux Gateway Airport, IA (SUX), USA.

Details: [Accident description](#)

Source: *NTSB*

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*The reader of these transcripts is cautioned that the transcription of a CVR tape is not a precise science but is the best possible product from a group investigative effort. The transcript, or parts thereof, if taken out of context can be misleading. Therefore, the CVR transcripts should only be viewed as an investigative tool to be used in conjunction with other evidence. Conclusions or interpretations should not be made using the transcript as the sole source of information. Furthermore, this transcript is made available for educational purposes, so the reader is encouraged to read the [accident description](#) associated with the transcripts for better understanding of the circumstances.*

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### Legenda:

**Text in blue:** radio communications (with United Airlines Dispatch, a UA maintenance worker and Sioux City Approach).

Captain: Ah, we're controlling the turns by power. I don't think we can turn right. I think we can only make left turns. We're starting a little bit of a left turn right now. Maybe we can only turn right. We can't turn left.

Approach: United two thirty-two heavy, ah, understand you can only make right turns.

Captain: That's affirmative.

Approach: United two thirty-two heavy, roger. Your present track puts you about eight miles north of the airport, sir. And, ah, the only way we can get you around [Runway 31] is a slight left turn with differential power or if you go and jocket it over.

Captain: Roger. Okay, we're in a right turn now. It's about the only way we can go. We'll be able to make very slight turns on final, but right now just ... we're gonna make right turns to whatever heading you want.

Approach: United two thirty-two heavy, roger. Ah, right turn, heading two five five.

Captain: Two five.

Captain: Now the goddamn elevator doesn't want to work. Rolling right.

Flight Engineer (to maintenance): This is United two thirty-two. We blew number two engine, and we've lost all hydraulics and we are only able to control, ah, level flight with the, ah, asymmetrical power settings. We have very little rudder or elevator.

First Officer: Very little elevator. [It's] hard or sluggish. Ah, AI, do you want me to slew this elevator. Feel.

Captain: Yeah, whatever you can.

Approach: United two thirty-two heavy, fly heading two four zero and say your souls on board.

First Officer: AI, now the nose is coming up.

Maintenance: United two thirty-two, understand that you lost number two engine totally, sir?

Captain: Say again.

Approach: Souls on board, United two thirty-two heavy.

Captain: Gettin' that right now.

Flight Engineer (to

maintenance):  
 Maintenance: Your, ah, system one and system three ? are they operating normally?  
 Flight Engineer: Negative. All hydraulics are lost. All hydraulic systems are lost. The only thing we have is the ... [and he itemizes the systems that are working].  
 Approach: United two thirty-two heavy, can you continue your turn to heading two four zero?  
 First Officer: I don't know. We'll try for it.  
 Maintenance: Okay, United two thirty-two, understand you have normal power on one and three engines.  
 Flight Engineer: That's affirmative.  
 First Officer: Wonder about the outboard ailerons. If we put some flaps out, you think that would give us outboard?  
 Flight Engineer: God, I hate to do anything.  
 Captain: Well, we're going to have to do something.  
 Maintenance: United two thirty-two, is all hydraulic quantity gone?  
 Flight Engineer: Yes, all hydraulic quantity is gone.  
 First Officer: Level off.  
 Approach: United two thirty-two heavy, souls on board and fuel remaining?  
 First Officer: Souls on board and fuel remaining. We have thirty seven six [on fuel].  
 Flight Engineer: We've got thirty-seven four on fuel.  
 Approach: Roger.  
 Cockpit sound: [Sound of two knocks on cockpit door]  
 Maintenance: Okay, United two thirty-two, where you gonna set down?  
 Captain: Unlock the door.  
 Captain: What's Sam saying?  
 Cockpit sound: [Sound of three knocks on door]  
 Flight Engineer: We need some assistance right now. We can't ... we're havin' a hard time controllin' it.  
 Maintenance: Okay, United two thirty-two.  
 Captain: We don't have any controls.  
 First Officer: You want to go forward on it, Al.  
 Cockpit sound: [Sound of two knocks on door; sound of landing gear warning horn]  
 Captain: Now go forward ... Now, let it come back. Got to lead ... got to lead it ...  
 Maintenance: I'll try to help ya. I'll pull out your flight manual.  
 Captain (to jumpseat captain): See what you can see back there [in the cabin], will ya?  
 First Officer (to jumpseat captain): Go back and look out the wing ... and see what we got ...  
 Jumpseat captain: Okay.  
 Captain: [Pull] back on the sucker.  
 Cockpit sound: [Cockpit door opens]  
 First Officer: Don't pull the throttles off ...

*(For the next few seconds the Co-pilot and Captain continue to maneuver with the throttles, while the Engineer discuss the problem with Maintenance by radio.)*

First Officer: What's the hydraulic quantity?  
 Flight Engineer: Down to zero.  
 First Officer: On all of them?  
 Flight Engineer: All of them.  
 Captain: Quantity, quantity is gone?  
 Flight Engineer: Yeah, all the quantity is gone. All pressure is [gone].  
 Captain: You get a hold of Sam?  
 Flight Engineer: Yeah, I've talked to him.  
 Captain: What's he saying?  
 Flight Engineer: He's not telling me anything.

Captain: We're not going to make the runway, fellas. We're gonna have to ditch this son of a bitch and hope for the best.

Cockpit sound: [Sound of three knocks]

Captain: Unlock the damn door.

First Officer: Unlock it.

Captain: We've lost ... No hydraulics. We have no hydraulic fluid. That's part of our main problem.

Dispatch: [United two thirty-two, do you want to put that thing on the ground right now, or do you want to come to Chicago?](#)

Flight Engineer: [Okay, we're, ah, we don't know what we'll be able to do. We don't think we're even gonna be able to get on the runway right now. We have no control hardly at all ...](#)

Jumpseat captain: Okay, both your inboard ailerons are sticking up. That's as far as I can tell. I don't know ...

Captain: Well, that's because we're steering ... we're turning maximum turn right now.

Jumpseat captain: Tell me. Tell what you want and I'll help you.

Captain: Right throttle. Close one, put two up. What we need is elevator control. And I don't know how to get it.

Jumpseat captain: Okay, ah ...

Flight Engineer: [Roger, we need any help we can get from Sam, as far as what to do with this. We don't have anything. We don't \[know\] what to do. We're having a hard time controlling it. We're descending. We're down to seventeen thousand feet. We have ... ah hardly any control whatsoever.](#)

Captain: The only help you can get is the autopilot and I tried that, and it won't work

Jumpseat captain: It won't work. Okay ...

Captain: Go ahead and try it again. Pull back, pull back, pull back.

Dispatch: [Okay, copy that, two thirty-two. San Fran \[is on the\] line. Give 'em all the help you can. We'll get you expedited handling into Chicago put you on the ground as soon as we can ...](#)

Captain: You want full aileron and full elevator. No, no, no no no not yet. Wait a minute. Wait 'til it levels off. Now go.

Flight Engineer: [Well, we can't make Chicago. We're gonna have to land somewhere out here, probably in a field.](#)

Captain: How're they doin' on the evacuation?

Jumpseat captain: They're putting' things away, but they're not in any big hurry.

Maintenance: [United two thirty-two, we \[understand that you\] have to land the nearest airport, the nearest airport. Ah, I'm tryin' to find out where you've lost all three hydraulic systems.](#)

Captain: Well, they better hurry. We're gonna have to ditch, I think.

Jumpseat captain: Yeah.

Captain: Okay.

Cockpit sound: [Sound of knock on door]

Captain: I don't think we're going to make the airport.

First Officer: No. We got no hydraulics at all.

Cockpit sound: [Sound of landing gear warning horn]

Jumpseat captain: Get this thing down. We're in trouble ...

Flight Engineer TO: [That is affirmative. We have lost all three hydraulic systems. We have no quantity and no pressure on any hydraulic system ...](#)

Maintenance: [Sir, we have no hydraulic fluid, which means we have no elevator control, almost none, and very little aileron control. I have serious doubts about making the airport. Have you got someplace near there, ah, that we might be able to ditch? Unless we get control of this airplane we're gonna put it down wherever it happens to be.](#)

Captain to Sioux City Approach: [Ah, United two thirty-two, you have lost all manual flight control systems? That's apparently true.](#)

Maintenance: [United two thirty-two, ah, in the flight manual \[on page\] sixty?...](#)

Captain: Gotta put some flaps and see if that'll help ...

Flight Engineer TO: [I am on sixty-three.](#)

Maintenance:

First Officer: You want them now?  
 Captain: What the hell. Lets do it. We can't get any worse than we are ...  
 First Officer: Slats are out?  
 Jumpseat captain No, you don't have any slats.  
 Captain: We don't have any hydraulics, so we're not going to get anything.  
 Sioux City Approach: **United two thirty-two heavy, can you hold that present heading, sir?**  
 Captain: This is Sioux City, Iowa. That's where we're headed.  
 Captain: **Where's the airport now for [United] two thirty [-two]? We're turning around in circles.**  
 Jumpseat captain You get on number one and ask them where the hell we are.  
 Captain: **Where's the airport to us now, as we come spinning down here?**  
 Sioux City Approach: **United two thirty-two heavy, Sioux City airport is about twelve o'clock and three six miles.**  
 Captain: Okay. We're tryin' to go straight. We're not havin' much luck.  
 Jumpseat captain All right, I got you one seven hundred on the squawk, so they can track ya [on radar].  
 First Officer: He's got us on radar.  
 Captain: As soon as the nose starts up we have to push forward on the yoke.  
 Jumpseat captain We got nothing on number two, number two [engine]?  
 Captain: No, no, we got it shut down.  
 Maintenance: **United two thirty-two, I'm gettin' contact with flight ops right now. Standby please.**  
 Captain: I want a heading of about three zero zero. We kinda got level flight back again.  
 Jumpseat captain Okay, if you got denser air, you should [get level flight back again]. Whatever you got you got.  
 Captain: A little better.  
 Jumpseat captain Okay, ah, let me see ...  
 Captain: [Laughs] We didn't do this thing on my last [performance check in a simulator].  
 Cockpit sound: [Laughter]  
 First Officer: No.  
 Captain: [I] poured coffee all over ... it's just coffee. We'll get this thing on the ground. Don't worry about it.  
 First Officer: It seems controllable, doesn't it, AI?  
 Jumpseat captain Yeah. The lower you get the more dense that air is [and] the better your shots. Okay?  
 Captain: I'll tell ya what we need. We're puttin' this thing into Sioux City. Get me ...  
 Captain: **Sioux City, United two thirty-two, could you give us please your ILS frequency, the heading, and length of the runway?**  
 Sioux City Approach: **United two thirty-two heavy, affirmative. The localizer frequency is one zero nine point three and you're currently about thirty-five miles to north-east. It'll take about [heading] two two three five two four zero heading to join it.**  
 Maintenance: **United two thirty-two, this is Sam.**  
 Cockpit sound: [Sound of landing gear warning]  
 Flight Engineer: **Sam, two thirty-two. We're gonna try and put into Sioux City.**  
 Dispatch: **Sam, this is dispatch. I haven't been able to copy two thirty-two. We're hearing a rumor that he's on approach to Sioux City airport. Last we heard he's at seventeen thousand feet and he may be too low for us to maintain contact with him. Go ahead ...**  
 Sioux City Approach: **United two thirty-two, understand you are gonna try to make it into Sioux City. There's no airport out that way that can accommodate you, sir.**  
 Captain: **Okay, we'll head for Sioux City. We got a little bit of control back now. How long [is] your runway?**  
 Flight Engineer: **Two thirty-two is very busy right now. We're tryin' to go into Sioux City. We'll call you as soon as I can...**  
 Sioux City Approach: **Two thirty-two heavy, the airport, the runway is nine thousand feet long ...**  
 Maintenance: **He has no control. He's using that kind of sink rate, I believe. This is what he's doing. He's got his hands full for sure.**  
 Captain: **Okay, thank you.**  
 Captain: You're a little more ... Let's see if you can make a left turn.  
 Jumpseat captain Left turn. All right. Your speed is what? I'm worried about [it]. I don't want to stop you.

Flight Engineer: You want a no flap-no slat [landing], right?  
 Captain: Yeah. Ah, start dumpin' [fuel] will ya? Just hit the quick dump. Lets get the weight down as low as [we] can...

Flight Engineer: I didn't have time to think about that.  
 Captain: Try not to lose any more [altitude] than we have to.  
 First Officer: What? Altitude?  
 Captain: Yeah.  
 First Officer: Okay. Go ahead and dump.  
 Jumpseat captain: He's got his weight. He's got his weight. He's only got about a thousand pounds to go.  
 First Officer: Okay.  
 Jumpseat captain: This thing seems to want to go right more than it wants to go left, doesn't it?  
 Sioux City Approach: [United two thirty-two, did you get the souls on board count?](#)  
 Captain: What did you have for a count for people?  
 Captain: [\[Let me\] tell you, right now we don't even have time to call the gal...](#)  
 Flight Engineer: Ah, two ninety-two.  
 Sioux City Approach: [Roger.](#)  
 Captain: Ease all the power back.  
 Jumpseat captain: Okay, nose is coming up.  
 Maintenance: [All hydraulic systems are gone ...](#)  
 Sioux City Approach: [Okay, thank you.](#)  
 First Officer: Yeah, we're goin' up.  
 Captain: Yeah, I know it. I'm pushin' with all I got.  
 Jumpseat captain: Power's coming back. Power's coming back ...  
 Captain: As soon as it starts to come back ... Okay, come back ...  
 Jumpseat captain: Power's comin' back in...  
 Captain: Bring [turn] it to the right with the right one. You got to go left. We just keep turnin' right. Still turnin' right ...  
 Jumpseat captain: That's what I'm tryin' to do...  
 Captain: [Two thirty-two, we're just gonna have to keep turnin' right. There's not much we can do about \[turning\] left. We'll try to come back around to the heading ...](#)  
 First Officer: Is this Sioux City down to the right?  
 Captain: That's Sioux City.  
 Sioux City Approach: [United two thirty-two, roger. Need you on about a two-three-five heading, Sir, if you can manage that and hold that.](#)  
 Captain: [Well, we'll see what happens ...](#)  
 Jumpseat captain: [We're] goin' down now. I'll put a little bit more power. I'm gonna try and set about ninety per cent see if that holds up good for you. Tryin' to find the right power setting so you don't have to fight this pitch.  
 First Officer: Ease it to the right.  
 Captain: Did you ever get hold of Sam?  
 Flight Engineer: Yep. Didn't get any help.  
 Captain: [Sound of laughter] Okay, did you tell 'em to advise dispatch of our situation and what we're doing?  
 Flight Engineer: Yes, he knows.  
 Captain: No more right turns, no more. Ah, I mean, ah, we want to turn right. He [Sioux City] wants us to turn right.  
 Jumpseat captain: You do want to turn ... all right?  
 Captain: [Sound of exhalation]  
 First Officer: [Where is Sioux City from our present position, United two thirty-two?](#)  
 Sioux City Approach: [United two thirty-two, it's about twenty on the heading and thirty-seven miles ...](#)  
 First Officer: [There is an] airport right below us here, but ...  
 Captain: They said it won't accommodate us.  
 First Officer: Okay.  
 Captain: See if you can keep us with the throttles in a ten to fifteen degree turn ...

Jumpseat captain All right. I'll play 'em. I'll play 'em. I'll power up this number three engine and try to accommodate you.  
Captain: You had the thing levelled off for a minute.

*A United Airlines training pilot who had been riding in first class (Denny Fitch), comes into the cockpit to see whether he can assist the crew. The Jumpseat Captain gives him his place and he goes back into the cabin and takes a seat in the rear of the airplane.*

Captain: My name's Al Haynes.  
Jumpseat Training pilot: Hi, Al. Denny Fitch.  
Captain: How do you do, Denny?  
Jumpseat Training pilot: I'll tell you what. We'll have a beer when this is all done.  
Captain: Well, I don't drink, but I'll sure as hell have one. Little right turns, little right turns.

*The captain and his crew discuss power settings and headings for a few seconds.*

Jumpseat Training pilot: You lost the engine, huh?  
Captain: Yeah, well, yeah. It blew. We couldn't do anything about it. We shut it down.  
Jumpseat Training pilot: Yeah.  
Flight Engineer: [Go ahead with any help you can give us.](#)  
Maintenance: [United two thirty-two, understand that you have one and three engines operating. You have absolutely no hydraulic power. You have no control over the aircraft. Is that correct?](#)  
Captain: Can't think of anything that we [haven't] done ... There really isn't a procedure for this.  
Jumpseat Training pilot: No, the only thing I can think about that might help you at some point here [is to put] the [landing] gear down and that might hold the nose down a bit.  
Maintenance: [Okay, United two thirty-two, I've got operational engineering on its way over here, and at the present time you are doing just about everything that you can possibly do. Your flaps and slats, I believe, are in the up position, are they not?](#)  
Sioux City Approach: [When you get turned to that two-forty heading, sir, the airport will be about twelve o'clock and thirty-eight miles.](#)  
Co-pilot: [Okay, we're tryin' to control it just by power alone now. We have no hydraulics at all, so we're doing our best here.](#)  
Sioux City Approach: [Roger, and we've notified the equipment out in that area, sir. The equipment is standing by.](#)  
Flight Engineer TO [That is affirmative. That is affirmative. That is affirmative. Do you read?](#)  
Maintenance:

*Captain Haynes confirms certain frequencies and headings for the final approach.*

Captain: Everybody ready?  
Jumpseat Training pilot: Anything above about two ten [knots] is going to give you a nose-up moment ...  
Captain: We have almost no control of the airplane.  
Maintenance: [United two thirty-two, in your handbook on page I ninety-one, I ninety-one ...](#)  
First Officer: We have no hydraulics at all.  
Captain: It's gonna be tough, gonna be rough...  
Flight Attendant: So we're gonna evacuate?  
Captain: Yeah. Well, we're gonna have the gear down.  
Flight Attendant: Yeah.  
Captain: And if we can keep the airplane on the ground and stop standing up, give us a second or two before you evacuate.  
Flight Engineer: [We already have a no flap-no slat made up and we're gettin' ready. We're gonna try to put into Sioux City with gear down.](#)  
First Officer: Okay ... pull back a little more.  
Captain: 'Brace' will be the signal; it'll be over the PA system -'Brace, brace, brace.'

Maintenance: United, you're tryin' to go into Sioux City. We'll contact Sioux City and have emergency equipment available.

Flight Attendant: And that will be to evacuate?

Captain: No, that'll be to brace for landing.

Flight Attendant: Un huh.

Captain: And then if you have to evacuate you'll get the command signal to evacuate, but I really have my doubts you'll see us standing up, honey. Good luck, sweetheart.

Flight Attendant: Thank you too.

Flight Engineer: Okay, we will be tryin' to get in there.

Maintenance: Okay, United two thirty-two, I'll stay with you.

Flight Engineer: Okay, we will be waitin' in case you have anything more.

Maintenance: We're scurrying around and I've got people out looking for more information.

Captain: The heading is two forty.

Jumpseat Training pilot: Okay, I'm gonna try to hold you about two ten. I'll just see if it makes a difference if I bump it ... bump it up in the air. This may be the world's greatest tricycle ...

Flight Engineer: She says there appears to be some damage on that one wing. Do you want me to go back and take a look?

Jumpseat Training pilot: No, we don't have time.

Captain: Okay, go ahead. Go ahead and see what you can see, not that it'll do any good.

Captain: I wish we had a little better control of the elevator. They told us the autopilot would do this, but it sure as hell won't. Try yours again.

First Officer: Can't get it on.

Captain: Well, we've got the ah ... ah.

Jumpseat Training pilot: All right, we came into the clear.

Captain: Turn, baby.

Jumpseat Training pilot: Which way do you want it, AI?

Captain: Left.

First Officer: Left.

Captain: Come on back, come on back, come on back ... As soon as that [is] vertical go for it, go for it. Watch that vertical speed the second it starts to move. Come back, come back, come back. Go for it. If we can get this under control elevator-wise we can work on steering later.

Cockpit sound: [Sound of laughter]

Jumpseat Training pilot: We need to go left again to get ready to go ...

Captain: You keep goin' right two forty 'cause we still got two thousand feet to go.

Captain: United two thirty-two, we're gonna have to continue one more right turn. We got the elevators pretty much under control within three or four hundred feet but we still can't do much with the steering.

Sioux City Approach: United two thirty-two heavy, roger. Understand you [have] the elevators possibly under control [enough to hold] altitude?

First Officer: Barely.

Captain: Negative. We don't have it, but we are better, that's all.

Sioux City Approach: Roger.

Jumpseat Training pilot: You want to turn right?

Captain: Yeah, let's turn right.

Jumpseat Training pilot: All right, here we go.

Captain: How far is the field now, please?

Sioux City Approach: United two thirty-two heavy, you're currently thirty-three miles north-east.

Cockpit sound: [Sound of three knocks on door]

Captain: Thank you.

Captain: Just let her ease down. I wish they'd unlock that damn door pull the circuit breaker on that door. just unlock it, will ya?

Flight Engineer: Okay.

Sioux City Approach: United two thirty-two heavy, there are a couple of really small airports out in the vicinity here, and Storm Lake is four thousand two hundred feet by seventy-five. That's about

fifteen miles east of your position.

Flight Engineer: All right, I walked to the back and we got a lot of damage to the tail section. We could see through the window.

First Officer: Roger, we're still goin' down tryin' to control it. As we get down a little lower here we'll pick it out.

Maintenance: Okay, United two thirty-two, you have a lot of damage to the tail section?

Flight Engineer: The leading edge of the elevator is damaged. I mean, there's damage there that I can see. I don't know how much [there] is that I cannot see. I can see it on the leading edge, on the outer parts.

Maintenance: United two thirty-two, Engineering is assembling right now, and they're listening to us.

*Captain Haynes announces his orders through the Public Address system about the warning to 'brace'.*

Flight Engineer: Okay, number two engine blew. Severe shudders and vibration through the airplane when it blew. Then we tried to pull the throttle back on number two, it wouldn't come back. It was frozen. We shut it down turned off the fuel in that, pulled the fire handle on it, and we have only been able to hold direction control through power application ... We're down to nine thousand now and we're tryin' to make Sioux City. We're gonna have to use alternate gear to get the gear down. I think we're gonna be kinda busy here. If there's anything I can talk to you about, I'll try to. If there's anything you can give for suggestions, give me a holler.

Sioux City Approach: United two thirty-two heavy, there is a small airport at twelve o'clock and seven miles. The runway is four thousand feet long there.

First Officer: Hey, I'm controllin' it myself now. As soon as the captain gets back on, he'll give me a hand here. He's talking on the PA.

Captain: Okay, let's start this sucker down a little more.

Jumpseat Training pilot: Okay, set your power a little bit.

Captain: Anybody have any ideas about [what to do about the landing gear]? He's [the Engineer] is talking to Sam.

Jumpseat Training pilot: Yeah, he's talking to Sam. I gonna alternate-gear you. Maybe that will even help you. If there is no fluid, I don't know how the outboard ailerons are going to help you.

Captain: How do you we get gear down?

Jumpseat Training pilot: Well, they can freefall. The only thing is, we alternate the gear. We got the [landing gear] doors down?

Captain: Yep.

First Officer: We're gonna have trouble stopping, too.

Captain: Oh, yeah. We don't have any brakes.

First Officer: No brakes?

Captain: Well, we have some brakes [but not much].

Jumpseat Training pilot: [Braking will be a] one-shot deal. Just mash it, mash it once. That's all you get. I'm gonna turn ya. [I'm gonna] give you a left turn back to the airport. Is that okay?

Captain: I got it.

Captain: Okay, United two thirty-two, we're startin' to turn back to the airport. Since we have no hydraulics braking [it's] gonna really be a problem. Would suggest the equipment be toward the far end of the runway. I think under the circumstances, regardless of the condition of the airplane when we stop, we're going to evacuate. So you might notify the ground crew that we're gonna do that.

Sioux City Approach: United two thirty-two heavy, wilco, sir. If you can continue that left turn to about two-twenty heading, sir, that'll take you right to the airport.

First Officer: Two-twenty, roger.

Captain: What's your ceiling right now?

Jumpseat Training pilot: How far away are we from the airport? How far from the airport?

Sioux City Approach: Ah, ceiling is four thousand, broken, and visibility's one five underneath it.

Captain: And the airport elevation?

Sioux City Approach: One thousand ninety-eight.

First Officer: Well, five thousand feet we ought to break out. If you have any problem about the



spoilers, Al, we won't have those either, will we?  
 Captain: I don't think that'll help. I'm off for just a second to buckle up.  
 First Officer: All right.  
 Jumpseat Training pilot: You can tell me what you need. Holler what you need ...  
 Captain: What did Sam say? Good luck?  
 Flight Engineer: He hasn't said anything.  
 Captain: Okay, well forget them. Tell 'em you're leaving the air, and you're gonna come back up here and help us ... and screw 'em. Ease her down just a little bit.  
 Jumpseat Training pilot: When you get a chance ask them how far out we are?  
 Captain: *How far are we away from the airport now ... ?*  
 Sioux City Approach: *Thirty-five miles, and if you continue that left turn about another fifteen or twenty degrees it'll take you right to the runway.*  
 Captain: *Okay. We don't have a localizer or a glide slope, so ...*  
 Sioux City Approach: *Yes, sir. You're well too far north of it now.*  
 Captain: *Okay.*  
 Maintenance: *United two thirty-two, one more time. No hydraulic quantity, is that correct?*  
 Captain: *Now we gotta level off a little bit. We're six thousand feet above the field right [now].*  
 unknown: Yeah, right.  
 Captain: About eighteen miles is where we want to be on the glide slope. We got about twelve miles to go before you want...  
 Flight Engineer: *Affirmative, affirmative, affirmative.*  
 Jumpseat Training pilot: Oh, yeah, we'll be with power.  
 Flight Engineer: Add a couple of knots for those speeds up there.  
 Jumpseat Training pilot: All right.  
 Captain: Anybody got any idea about pottin' the gear down right now?  
 Jumpseat Training pilot: All right, I would. I would suggest ...  
 Captain: Should we free fall it?  
 First Officer: Yeah, yeah. I got to get out of the way to get the door.  
 Captain: Put it down.

*For the next few seconds the crew discusses the best way to get the landing gear down without hydraulic pressure. They will either use gravity and let the gear fall out, or they will crank it down manually.*

Captain: Okay, put it down.  
 Jumpseat Training pilot: I don't know. I don't have any great ideas.  
 First Officer: Try it out.  
 Sioux City Approach: *United two thirty-two heavy, your present heading looks good.*  
 Captain: *We'll see how close we can come to holding it.*  
 First Officer: Apply a little power.  
 Jumpseat Training pilot: I can slow you down. Do you want to go to one eighty-five.  
 Captain: Nope ...  
 Flight Engineer: Green.  
 Captain: Go for it. Go ahead. Keep it at [one] eighty-five. Okay, start it down now. Ease back.  
 Flight Engineer: Gear handle down. Gear handle down.  
 Captain: Okay, lock up and put everything away.  
 Jumpseat Training pilot: Oh shit, there go the slats.  
 Captain: A little right turn. Don't have much to do. Sit down and lock up. Get up there and see what he is doin' for power.  
 unknown: Here we go.  
 unknown: I want to stay level if we can, if we're not too far out.  
 Captain: Okay, right turns. Level up first. Or level up our turn. Straighten out the turn. Get yourself all buttoned up.  
 Cockpit sound: [Sound of a groan]  
 Captain: Level up here.

Sioux City Approach: United two thirty-two heavy, can you still make the slight right turns?  
 Captain: Yeah. Right turns are no problem, just left turns...  
 Sioux City Approach: Roger.  
 Captain: Well, momma. We'll [make or miss] those baseball games after all.  
 First Officer: Are you in good and tight?  
 Jumpseat Training pilot: I'm not in at all, Bill.  
 First Officer: No, not you. But him ...  
 Jumpseat Training pilot: Yeah. It seems [we're] gonna have to keep more power on the right engine.  
 Sioux City Approach: United two thirty-two heavy, Sir, you are well too far north.  
 Captain: Pull it back.  
 Captain: We know.  
 unknown: How many miles?  
 Sioux City Approach: Two thirty-two heavy, your present heading is a little close, Sir. Can you make a shallow left turn about ten degrees or so?  
 Captain: I'll try.  
 First Officer: Back on the controls.  
 Jumpseat Training pilot: Got to get my glasses on or I can't see shit.  
 First Officer: Where's the airport?  
 Sioux City Approach: United two thirty-two, the airport's currently twelve o'clock and two one miles.  
 Captain: Twenty-one miles and thousand feet. We got to level off.  
 Sioux City Approach: United two thirty-two heavy, you're gonna have to widen out just slightly to your left, Sir, to make the turn to final and also it'll take you away from the city.  
 Captain: A little left bank.  
 Captain: Whatever you do, keep us away from the city.  
 Captain: Back, back.  
 Jumpseat Training pilot: Hold this thing level if you can.  
 Captain: Level, baby, level, level ...  
 Flight Engineer: We're turning now.  
 Jumpseat Training pilot: More power, more power, give 'em more power.  
 First Officer: More power, full power.  
 Jumpseat Training pilot: Power picks 'em up.  
 Sioux City Approach: United two thirty-two heavy, fly heading one eight zero, one eighty ...  
 Captain: I don't think we can do that, but we'll try.  
 unknown: Right turn, throttle back.  
 Captain: Can we turn left?  
 Sioux City Approach: You are currently one seven miles north-east of the airport. You're doing good ...  
 Captain: It has to be a right turn to one eighty. We can't do anything about it ...  
 Flight Engineer: Do you want this seat?  
 Jumpseat Training pilot: Yes, do you mind?  
 Flight Engineer: I don't mind. I think that you know what you're doing there before.  
 Captain: Level it off.  
 Sioux City Approach: United two thirty-two heavy, there's a tower five miles off to your right side that's three thousand four hundred ... in height.  
 First Officer: Roger.  
 Jumpseat Training pilot: Keep turning right, Al. Keep turning right.  
 Captain: You got to level this sucker off. The only thing that I was afraid of was putting the gear down in case we have to ditch.  
 Sioux City Approach: United two thirty-two heavy, how steep a right turn can you make, sir?  
 unknown: Right.  
 Captain: We got to go to one-eighty. Right is the only way to go. So we can't control the airplane. That way ... [Sound of laughter]  
 First Officer: All right, we're gonna have to try it straight ahead, Al. I think what we're gonna have to do ...  
 Sioux City Approach: United two thirty-two heavy, if you can hold that altitude, Sir, the right turn to one-

eighty would put you on about ten miles east of the airport.  
 Captain: That's what we're tryin' to do.  
 First Officer: Let's see if we can get a shallow descent, Al.  
 Captain: That's what I'm tryin' to do ... Get this thing under control. When it starts up, push.  
 First Officer: Okay. Here we go. Push hard, push hard.  
 Jumpseat Training pilot: When the speed bleeds [creeps] back you'll catch it. Now, where do you want to go?  
 Captain: Want to keep turnin' right. Want to go to the airport.  
 Jumpseat Training pilot: You want to go to the airport.  
 Captain: About a thirty degree bank.  
 Sioux City Approach: United two thirty-two heavy, roger. Turn right heading one eight zero.  
 First Officer: One eighty.  
 Captain: We got to level this sucker off. Come back, come back, come back.  
 Jumpseat Training pilot: I got the tower.  
 Captain: Come back, come back, all the way back.  
 Jumpseat Training pilot: I can't handle that steep a bank. Can't handle that steep a bank.  
 Sioux City Approach: United two thirty-two heavy, Been advised there is a four-lane highway up in that area, Sir, if you can pick that up.  
 Captain: Okay, we'll see what we can do here. We've already put down the gear and we're gonna have to be puttin' [down] on something solid if we can ...  
 Jumpseat Training pilot: Damn it. Wish we hadn't put that gear down.  
 Flight Engineer: Ah, well.  
 Jumpseat Training pilot: We don't know.  
 Captain: Just keep turnin' if you can.  
 Jumpseat Training pilot: Which way do you want to go?  
 Captain: I Want to get as close to the airport as we can.  
 Jumpseat Training pilot: Okay.  
 Captain: If we have to set this thing down in dirt, we set it in the dirt.  
 unknown: Speed's too low; watch the angle.  
 Captain: Get on the air and tell them we got about four minutes to go.  
 First Officer: We've got about three or four minutes to go, [it] looks like.  
 Captain: PA system, PA system ... Tell the passengers [to brace].  
 Flight engineer: We have four minutes to touchdown, four minutes to touchdown ...  
 Sioux City Approach: United two thirty-two heavy, roger. Can you pick up a road or something up there?  
 First Officer: We're tryin' it. Still anywhere from two thousand up to fifteen hundred feet, down now, in waves.  
 Jumpseat Training pilot: Which way do you want to go?  
 Captain: Right, right, right. We gotta go ...  
 unknown: Speed up!  
 Jumpseat Training pilot: Airport's down there. Got it.  
 Captain: I don't see it yet.  
 First Officer: Soon as it starts down, back we go...  
 unknown: Not too much back ...  
 First Officer: Okay, now you can bring 'em up.  
 unknown: Keep turning, keep turning, keep turning.  
 First Officer: There's the airport.  
 Sioux City Approach: United two thirty-two heavy, the airport is about eighteen miles south-east of your position, about two-twenty on the heading, but we're gonna need you southbound away from the city first. If you can hold one-eighty heading...  
 First Officer: We're tryin', tryin' to get to it right now.  
 Jumpseat Training pilot: If I keep you about two hundred knots I seem to be able to get enough control...  
 Sioux City Approach: United two thirty-two heavy, advise if you can pick up a road or anything where you can possibly land it on that.  
 Captain: Okay, we're a hundred eighty degree heading. Now what do you want?  
 Sioux City Approach: United two thirty-two, if you can held the attitude, the one-eighty heading will work fine

for about seven miles.

Captain: Okay, we're tryin' to turn back.

Captain: Forward, make a left turn, left ...

Jumpseat Training pilot: No left at all.

Captain: No left at all?

Jumpseat Training pilot: I'll give you some.

First Officer: Okay, now it's ...

Captain: Back, back back back ... Forward forward forward ... Won't this be a fun landing? Back ... [sound of laughter].

Sioux City Approach: United two thirty-two heavy, can you hold that heading, sir?

First Officer: Yeah, We're on it now for a little while.

Sioux City Approach: United two thirty-two heavy, roger. That heading wilt put you currently fifteen miles north-east of the airport. If you can hold that, it'll put you on about a three-mile final.

First Officer: Okay, we're givin' it heck.

Captain: I'll tell you what. I'll Write off your damn PC [Pilot Certificate] if we make this... when we make this. Hold the heading if you can ... That's fine. Turn left. Help me turn left so we know what it's doing. Back back back ...

Sioux City Approach: United two thirty-two heavy, the airport's currently twelve o'clock and one three miles.

First Officer: Okay, we're lookin' for it.

Captain: Forward forward forward ...

First Officer: Twelve o'clock at thirteen miles. We have to start down, but ...

Jumpseat Training pilot: Ask what the field elevation is.

Captain: Field elevation is what again?

First Officer: A thousand eighty.

Sioux City Approach: Ah, eleven hundred feet, one thousand one hundred ...

Captain: Okay, thank you.

Jumpseat Training pilot: Let's Start down. We have to ease it down.

Captain: We're startin' down a little bit now. We got a little better control of the elevator.

Sioux City Approach: United two thirty-two heavy, roger. The airport's currently at your one o'clock position, one zero miles.

Captain: Ease it down, ease it down ...

Cockpit sound: [Sound of groan, sound of exhalation]

Jumpseat Training pilot: I got the runway, if you don't...

Captain: I don't ... Come back, come back.

Jumpseat Training pilot: It's off to the right over there.

First Officer: Right there. Let's see if we can hold five hundred feet a minute.

Sioux City Approach: United two thirty-two heavy, if you can't make the airport, sir, there is an interstate that runs north to south, to the east side of the airport. It's a four-lane interstate.

Jumpseat Training pilot: See? We got tower [in sight] right here at our one o'clock low...

Captain: We're just passing it right now. We're gonna try for the air[port].

Captain: Is that the runway right there?

unknown: Right.

Captain: We have the runway in sight. We have the runway in sight. We have the runway in sight. We'll be with you shortly. Thanks a lot for your help.

Jumpseat Training pilot: Bring it on down ... Ease 'er down.

First Officer: Oh, baby.

Jumpseat Training pilot: Ease her down.

Captain: Tell 'em that we're just two minutes from landing.

Sioux City Approach: United two thirty-two heavy, the wind's currently three six zero at one one three sixty at eleven. You're cleared to land on any runway ...

Captain: [Laughter] Roger. [Laughter] You want to be particular and make it a runway, huh?

Flight Engineer (on PA): Two minutes.

*In the passenger cabin, the Attendants begin shouting for passengers to get their heads down. The first Flight Attendant yells commands.*

Jumpseat Training pilot: What's the wind?  
Captain: Say the wind one more time.  
Sioux City Approach: Wind's zero one zero at one one ...  
First Officer: Yeah, we want to go down.  
Jumpseat Training pilot: Yeah, I can see the runway, but I got to keep control on ya.  
First Officer: Pull it off a little.  
Captain: See if you can get us a left turn.  
First Officer: Left turn just a hair, Al.  
Captain: Okay, we're all three talking at once. Say it again one more time.  
Sioux City Approach: Zero one zero at one one, and there is a runway that's closed, sir, that could probably work to he south. It runs north-east to southwest.  
Captain: We're pretty well lined up on this one here ...  
Jumpseat Training pilot: I'll pull the spoilers on the touch.  
Captain: Get the brakes on with me.  
Sioux City Approach: United two thirty-two heavy, roger, sir. That's a closed runway, sir, that'll work, sir. We're gettin' the equipment off the runway. They'll line up for that one.  
Captain: How long is it?  
Sioux City Approach: Sixty-six hundred feet, six thousand six hundred. Equipment's comin' off.  
Captain: Pull the power back. That's right. Pull the left one back.  
First Officer: Pull the left one back.  
Sioux City Approach: At the end of the runway it's just wide open field.  
unknown: Left throttle, left, left, left, left ...  
unknown: God!  
Cockpit sound: [Sound of impact]

*END OF TAPE*