Continental Airlines
Boeing 737-500
Denver International Airport
Denver, Colorado
December 20, 2008
DCA09MA021

National Transportation Safety Board Washington, DC

Survival Factors Group Chairman's Report

Attachment 3

Denver Health Response Chronology (Prepared and provided by Denver Health)

11 pages

12.20.2008 DIA Plane Crash EMS Response Chronology

This

chronology is based solely on audio tapes, phone recordings and CAD entries in the custody of Denver Health Paramedics. It does **not** include any information from audio tapes or recordings in the custody of DIA, DIA Dispatch or the Denver Fire Department.

Overview		
18:18:00	Plane Crashes	
18:23:00	DIA medics arrive on scene	
	EMS call-taker receives call from	
18:23:31	DIA dispatch reporting a Red Alert crash	
10.23.31	Gradii	
	First unit (2B) assigned to respond	
18:27:22	Code 9.	
	Ambulance 2B stepped up to	
18:30:31	Code 10 response	
	DIA dispatchers calls requesting	
	one ambulance Code 10 and one	
	ambulance Code 9 to respond to	
	DIA Gate 1. (This is the first recorded request for an	
	ambulance to the scene. Two	
	ambulances were already on the	
	way, one Code 10 and one Code	
18:37:00	9.	
18:45:45	Ambulance 2B arrival to scene	
	Ambulance 2B departs Code 10 to	
19:05:39	Denver Health with four patients	

Jackamore declares MCI concluded

21:53:00	concluded		
Time	Duration of Call or Radio	Communications	Event
	Transmission	Medium	
18:18			Official Time of plane crash, according to DIA
18:20	0:08	Radio	Red Chief requesting for 1st alarm assignments to DIA for plane crash investigation (Red Chief is Denver Fire Department who called Denver Fire dispatch, not Denver EMS dispatch) At this time, Denver Paramedics at the airport have not yet been notified, nor have EMS dispatchers.
18:20		Radio	DIA dispatchers notify DIA Paramedics of Red Alert. 3 DIA Paramedics respond to Oak Hill and Charlie November for escort to crash, pursuant to existing policy. (This is a time estimate, as these records are in the custody of DIA Dispatch and therefore are not available to Denver Health.)
18:23		Radio	DIA Paramedics arrive on scene. (This is a time estimate, as these records are in the custody of DIA Dispatch and therefore are not available to Denver Health.)
18:23:17	1:02	Radio	Red Chief reporting 737 down off 34R on fire asked for 2nd alarm assignment (this was a communication only to Denver Fire dispatch) Denver EMS dispatchers have not yet been notified, and DIA Paramedics have not yet called for resources (transport ambulances or additional paramedics).
18:23:31	0:38	DIA Tie Line	EMS call-taker Shanya Massey in Combined Communications Center receives call from DIA dispatch (Stephanie) reporting a Red Alert crash runway 34R, 737 confirming flames and smoke, unknown number of souls on board. Massey notifies EMS Communications Lt. Piche.
18:24:09	0:28	Phone	PD agent 108 receives call from private caller - hard to understand - possibly passenger from plane. Reporting plane on fire, then said that firemen had arrived.
18:24:43	0:22	Phone	108 calls fire dispatch and asks if they know of crash. Fire says they are on the way.

18:25:37	0:57	Phone	EMS Communications Lt. J.P. Piche (in Combined Communications Center) calls EMS 38 (Lt. Morris, on-duty street supervisor) to advise him of a RED ALERT at DIA, plane down with unknown number of souls on board, right side of wing on fire. Morris asks Piche to contact EMS 35 (Lt. Crowl, on-duty street supervisor) as part of notification call down. Piche states he is backing up all the closest posts, and will send one ALS ambulance Code 9 (as per normal procedure) to standby at DIA Gate 1, but not assigning anything in CAD yet, because no call from DIA Paramedics or Denver Fire on scene requesting additional resources or transport ambulances. Morris advises he will start making calls on notification list.
18:27:39	N/A	CAD	EMS receives call in EMS queue from either Police or Fire in Combined Communications Center. Call is coded as "Monitor Only" by EMS dispatcher pending information from DIA Paramedics and/or Denver Fire on scene
18:27:16	0:35	DIA Tie Line	EMS call-taker Massey receives second call from DIA dispatch 34R RED ALERT - aircraft smoke / flames on the ground unknown number of souls but DIA says "I would imagine it was full" - still no call from DIA Paramedics or Denver Fire on scene requesting additional resources or transport ambulance.
18:27:22	0:54	Radio AMB OPS	Denver Health Paramedic Unit 15B assigned to respond code 9 to DIA (still no call from DIA Paramedics or Denver Fire on scene requesting additional resources or transport ambulance). Dispatcher tells Unit 15B crew "Head code 9 to DIA Gate 1 please, we don't have a patient yet but we have an incident going on." Before ending communication with Unit 15B, dispatcher immediately changes call and sends 15B Code 10 to Montbello address on unconscious party. Dispatcher immediately calls Unit 2B, which reports location as I-70 and Colorado Blvd., (already moving towards DIA per normal response), and sends them Code 9 to DIA Gate 1.
18:27:35	0:24	Phone	DIA Paramedic Neiberlein who is on scene, calls EMS dispatch at Combined Communications Center to report he is staging per DIA Operations. There was smoke / fire, and Denver Fire is evacuating plane now. (Neiberlein does not request additional resources or transport ambulances at this time.)

18:28:25	1:04	Phone	Piche notifies Interim Chief Robinson, and states Red Alert issued, but minor so far.
18:29:21	1:50	Phone	Private caller to Combined Communications Center reporting a lot of people at the fire station, no firefighters there. They need help at the fire station.
18:29:55	N/A	CAD	EMS receives second call in EMS queue for the accident based on call above.
18:30:31	0:12	Radio AMB OPS	Based on call above from private caller, 2B stepped up to Code 10, current location 501.
18:30:40	1:16	Phone	EMS 26 (Capt. Jackamore) called Piche to advise him he has been in contact with DIA dispatch, the event was real, and that additional resources should be sent to DIA pending more information from DIA Paramedics. Piche states he has a Lt. and unit enroute to Gate 1 and backups heading to 502 and 501. He said he has already checked with privates who are available to assist. Piche asks Jackamore if he wants him to start moving the privates. Jackamore says no, current status is pre-deployed and that is good. Jackamore requests a group page to off-duty DIA-trained paramedics to be prepared to respond to airport to provide terminal and concourse coverage if needed. Piche states Neiberlein already on scene, wing on fire, heavy smoke, fire is out, no additional resources requested by DIA Paramedics or Fire at this time. Plane was a fully loaded 727, evacuation under way. Jackamore request Piche to conduct a full command staff notification (this was already done by Piche).
18:31:15	1:07	Radio AMB OPS	Crowl radios 2B to determine their current location. 2B replies I70 / Havana. Crowl states he is 5 minutes behind them. 2B asks for information sent via page to keep them informed of what's going on.
18:31:14		AMB OPS	Crowl steps up response to Code 10 to DIA
18:32:11	N/A	CAD input	CAD system information input catches up and assigns 2B to DIA Code 10
18:32:30	0:25	Radio AMB OPS	EMS dispatcher updates 2B with most recent information "737 down on runway, flames / smoke. Plane is being evacuated at this time."
18:33:16	0:10	DIA Tie Line	DIA dispatch calls EMS dispatch tells them to slow responding units to code 9 (source unknown)
18:33:31	0:15	Radio AMB OPS	Per backup positioning procedure 12A moved to 501 from Havana / Alameda

18:33:36		AMB OPS	EMS dispatch slows 2B to Code 9 per DIA request at 18:33:16. Crowl continues responding Code 10 to DIA
18:33:56	0:08	Radio AMB OPS	Crowl radios dispatch and requests to reinstate 2B to Code 10 response,
10.00.00	0.00	Radio AIVID OI O	disregarding DIA request (2B heard communications and never turned
			off lights and sirens)
18:33:58	0:51	Phone	Piche advises Asst. Chief Azuero of Red Alert and ongoing response
18:37:00	0.01	DIA Tie Line	DIA dispatchers calls requesting one ambulance Code 10 and one
10.57.00		DIA Ne Line	ambulance Code 9 to respond to DIA Gate 1. (This is the first recorded
			request for an ambulance to the scene. Two ambulances were already
			on the way, one Code 10 and one Code 9.
18:36:37		AMB OPS	Unit 12A requested to respond Code 9 to DIA as part of citywide
10.30.37		AIVIB OPS	redeployment and backfill
18:37:15	0:15	Radio AMB OPS	Unit 14A sent to Post 501 Code 9 from undocumented location as part
10.37.13	0.15	Radio Aivib OPS	·
			of citywide redeployment and backfill. (still no request from DIA
			Paramedics or Fire for additional resources or transport ambulances)
18:37:41	N/A	CAD	CAD system catches up and assigns EMS 35 (Crowl) to Code 10
			response to DIA
18:38:09	0:29	Radio AMB OPS	Crowl requests dispatch to page DIA medics to switch to MCI OPS
			channel on radio so can discuss what's going on at the scene.
18:38:25		AMB OPS	Dispatcher tells all units responding to DIA and DIA Paramedics to
			switch to MCI OPS channel.
18:39:13	0:47	Phone	EMS call-taker Marlena Stallsmith receives call from DIA Paramedic
			Schmipf requesting one ALS Code 10 transport ambulance and 2 ALS
			Code 9 transport ambulances for 4 patients triaged as needing transport.
			States they think they have everyone triaged, but not 100% sure. Code
			10 is a back and head injury.
18:40:33	0:31	Radio AMB OPS	Unit 14A sent Code 9 to DIA from I25 / I70 and told to change to MCI
			OPS for updated information. (Unit 2B already responding Code 10 and
			Unit 12A already responding Code 9). Jackamore radios dispatch still
			enroute to DIA Code 10.
18:40:45	0:06	AMB OPS	14A responds to dispatch confirming Code 9 to DIA
18:40:57	0:05	AMB OPS	Dispatch responds to Jackamore enroute to DIA
18:41:49	N/A	CAD	CAD system catches up and assigns unit 12A to DIA Code 9
18:42:14	0:19	Radio AMB OPS	Dispatcher Reifman changes 12A response to Code 10 from I70 / Peoria
			due to overheard Fire conversations in Combined Communications
			Center

18:42:26	0:02	AMB OPS	12A responds to dispatch confirming Code 10 to DIA
18:42:45	0:20	Radio MCI OPS	Reifman advises all responding units on MCI OPS need to be
			responding code 10 to gate 1
18:42:55	0:07	MCI OPS	All Units confirm Code 10 response to DIA gate 1
18:43:10	0:48	Radio MCI OPS	Jackamore updates progress to DIA. Reifman advises Jackamore that
			there are 4 total ALS cars going code 10 to DIA with Crowl also
			responding Code 10 to DIA. Jackamore asks if DH ED has been
			notified, if citywide bed count has been initiated. Reifman advises
			Jackamore that Neiberlien has triaged 4 patients for transport so far.
			Reifman asks Jackamore if he still wants a bed count as there are only 4
			patients so far. Jackamore responds not for 4 patients but to insert a
			note on EMSystems so all area hospitals are on alert.
18:43:54	0:05	Green 1	EMS dispatch asks mutual aid partner Rural Metro 200 to begin moving
			toward DIA Code 9 from 33rd & Peoria as part of citywide movement
			and backfill
18:44:27	0:17	Radio MCI OPS	Crowl asks Rural Metro 200 to respond Code 10 to DIA, even though no
			additional resources or transport ambulances have yet been requested
			by on scene DIA Paramedics or Fire. Still only 4 patients needing
			transport.
18:45:02	0:56	Radio MCI OPS	Morris asks Crowl for number of resources needed Crowl responds not
			on scene yet will give update once he arrives on scene at DIA. 2B
			notifies dispatch they have arrived at Gate 1 and are awaiting escort.
18:45:45	0:03	MCI OPS	Dispatch confirms with 2B that they are on scene at DIA Gate 1
18:47:29	0:03	MCI OPS	Crowl notifies dispatch that he has arrived at DIA Gate 1 and is awaiting
			escort
18:47:30	0:05	Radio MCI OPS	Dispatch confirms with Crowl his arrival at DIA Gate 1
18:48:12	N/A	CAD	EMS dispatch asks mutual aid partner Northglenn Unit 1 to respond to
			DIA Gate 1, Code 10
18:48:31	0:06	Green 1	EMS dispatch asks mutual aid partner Rural Metro 207 to respond to
			DIA Gate 1, Code 10
18:49:13	0:05	MCI OPS	2B reports part of convoy being escorted from Gate 1 to ARFF4
18:50:23	0:04	Green 1	EMS dispatch asks mutual aid partner Rural Metro 106 to respond to
			DIA Gate 1, Code 10

18:50:31	0:52	Radio MCI OPS	Crowl arrives at ARFF4 (escorted as part of convoy) and reports total of 14 patients now triaged for transport. Asks Reifman to advise DH ED and asks how many cars are responding. Reifman replies 10 ALS, all upgraded to Code 10. Crowl asks Reifman to have DH ED begin determining destinations for patients needing transport via biophone. Confirms 2 patients require transport to a trauma center. Reifman asks if helicopters are needed. Crowl requests 2 helicopters to be placed on
			standby
18:50:31	N/A	CAD	CAD catches up - EMS dispatch asks mutual aid partner Rural Metro 3 to respond to DIA Code 10
18:50:45	N/A	CAD	CAD catches up - EMS dispatch asks mutual aid partner Pridemark 1 to respond to DIA Code 10
18:50:45	N/A	CAD	CAD catches up - EMS dispatch asks mutual aid partner Pridemark 2 to respond to DIA Code 10
18:50:47	0:07	MCI OPS	Dispatch confirms with Crowl that 10 ALS units are now responding to DIA Code 10
18:51:49	0:57	Radio MCI OPS	Crowl tells dispatch if don't have enough ALS ambulances dispatch can start sending a couple of BLS ambulances Code 10 to DIA.
18:52:18	0:43	Radio AMB OPS	Reifman dispatches X2 to DIA Code 10.
18:52:25	0:03	AMB OPS	X2 confirms that they are responding to DIA Gate 1 Code 10 from 23rd / Colorado, and will move communications to MCI OPS channel
18:52:25	0:05	Green 1	Mutual aid partner Pridemark 107 (see 18:50:45) confirms they are enroute to DIA Code 10 from I-70 & Wadsworth
18:53:00	0:05	Green 1	Mutual aid partner Pridemark 102 (see 18:50:45) confirms they are enroute to DIA Code 10 from I-70 & Sheridan
18:54:12	0:21	Radio MCI OPS	Reifman asks Crowl if he wants ground or air standbys for the helicopters.
18:56:11	0:08	Radio AMB OPS	Unit 12A reports arrival at DIA Gate 1 awaiting escort to scene.
18:56:51	0:03	MCI OPS	Unit 12A reports arrival at DIA Gate 1 awaiting escort to scene.
18:56:52	0:28	Radio MCI OPS	Unit 14A diverted to DIA Gate A42 for patient complaining of shortness of breath. DIA patient awaiting transport.
18:57:26	0:36	Radio MCI OPS	Crowl reports ingress/egress is going to be a problem. All responding units from Gate 1, upon arrival with escort need to make u-turn in driveway at AARF4. Dispatch advises Crowl that 14A has been redirected to call on Concourse A.
18:58:16	N/A	CAD	CAD system catches up and assigns Unit X2 to DIA Code 10.

18:58:43	0:02	Green 1	Mutual aid partner Rural Metro 200 reports arrival at DIA Gate 1, awaiting escort
18:59:22	0:02	Green 1	Mutual aid partner Rural Metro 101 updates status enroute to DIA
19:00:14	0:02	Green 1	EMS dispatch asks mutual aid partner Northglenn 4 to respond to DIA Gate 1ort
19:00:51	N/A	CAD	Dispatch asks mutual aid partner Northglenn 6 to respond to DIA Code 10
19:04:49	0:03	Green 1	Mutual aid partner Rural Metro 106 reports arrival at DIA Gate 1, awaiting escort
19:05:39	0:03	MCI OPS	Unit 2B reports leaving scene, going Code 10 to Denver Health with 4 patients
19:07:05	0:02	Green 1	Mutual aid partner Rural Metro 207 reports arrival at DIA Gate 1, awaiting escort
19:07:24	0:02	MCI OPS	Jackamore reports arrival at DIA Gate 1, awaiting escort
19:07:52	0:05	MCI OPS	14A departs from Concourse A, has room for additional patients
19:08:40	0:08	MCI OPS	Crowl requests 14A to come to ARFF4 to transport additional patients (14A was already cleared onto airport property with escort to ARFF so immediate response to ARFF was permissible)
19:12:38	0:02	MCI OPS	Unit X2 reports arrival at DIA Gate 1, awaiting escort
19:13:07	0:02	Green 1	Mutual aid partner Rural Metro 101 reports arrival at DIA Gate 1, awaiting escort
19:14:38	N/A	CAD	Dispatch asks mutual aid partner Northglenn 2 to respond to DIA Code 10
19:15:30	0:02	Green 1	Mutual aid partner Pridemark 102 reports arrival at DIA Gate 1, awaiting escort
19:15:56	0:03	Green 1	Mutual aid partner Pridemark 107 reports arrival at DIA Gate 1, awaiting escort
19:22:01	0:08	MCI OPS	Unit 12A depart scene Code 9 to University of Colorado Hospital with 3 patients
19:27:30	0:02	MCI OPS	Lt. Bookman reports arrival at City of Denver OEM
19:31:06	0:02	MCI OPS	Unit X2 departs scene Code 9 to Medical Center of Aurora with 1 patient
19:31:29	0:03	AMB OPS	Dispatch assigns Unit 15B to DIA Code 10
19:31:39	0:03	Green 1	Mutual aid partner Northglenn 6 depart scene Code 9 to Denver Health with 3 patients
19:31:57	0:03	AMB OPS	Dispatch assigns Unit 11A to DIA Code 10
19:32:03	N/A	CAD	CAD system catches up and assigns unit 11A to DIA

19:32:16	N/A	CAD	CAD system catches up and assigns unit 15B to DIA
19:34:25	0:10	Green 1	Dispatch asks mutual aid partner Action Care 106 to respond to DIA
			from 56th & Chambers Code 10
19:34:32	N/A	CAD	CAD system catches up and assigns Action Care 106 to DIA
19:38:04	0:03	Green 1	Dispatch asks mutual aid partner Rural Metro 107 to respond to DIA
			from 48th & Peoria Code 10
19:38:08	0:03	MCI OPS	Unit 14A depart scene Code 9 to Medical Center of Aurora with 3
			patients
19:38:39	N/A	CAD	CAD system catches up and assigns Rural Metro 107 to DIA
19:40:00	0:03	MCI OPS	Unit 15B reports arrival at DIA Gate 1, awaiting escort
19:40:07	0:02	MCI OPS	Unit 2B reports arrival at Denver Health
19:41:20	N/A	CAD	CAD system catches up and reports Pridemark 102 leaving scene
19:41:52	0:05	Green 1	Mutual aid partner Rural Metro 106 departs scene Code 9 to Denver
			Health with 1 patient
19:46:43	0:05	Green 1	Mutual aid partner Action Care 106 reports arrival at DIA Gate 1,
			awaiting escort
19:46:59	0:03	Green 1	Mutual aid partner Pridemark 102 departs scene Code 9 to Swedish
			Medical Center with 3 patients
19:48:14	0:06	Green 1	Mutual aid partner Rural Metro 101 departs scene Code 9 to University
			of Colorado Hospital with 2 patients
19:48:30	0:02	MCI OPS	Unit 12A reports arrival at University of Colorado Hospital
19:49:50	0:02	Green 1	Mutual aid partner Rural Metro 207 departs scene Code 9 to Medical
			Center of Aurora with 1 patient
19:51:22	0:04	Green 1	Mutual aid partner Rural Metro ??? departs scene Code 10 to Denver
			Health with 2 patients
19:51:43	0:04	Green 1	Mutual aid partner Pridemark 107 departs scene Code 9 to Medical
			Center of Aurora with 2 patients
19:51:57	0:02	MCI OPS	Unit 11A reports arrival at DIA Gate 1 awaiting escort
19:52:55	0:04	Green 1	Mutual aid partner Rural Metro 107 reports arrival at DIA Gate 1 awaiting
			escort
19:57:16	0:06	Green 1	Mutual aid partner Rural Metro 200 departs scene Code 9 to University
			of Colorado Hospital with 2 patients
19:58:46	0:03	MCI OPS	Unit X2 reports arrival at Medical Center of Aurora
20:01:44	0:03	MCI OPS	Unit 15B departs scene Code 9 to Medical Center of Aurora with 3
			patients
20:05:45	0:07	Green 1	Mutual aid partner Action Care 106 departs scene Code 9 to Swedish
			Medical Center with 4 patients

20:06:00	0:04	MCI OPS	Unit 14A reports arrival at Medical Center of Aurora
20:16:22	0:03	MCI OPS	Unit 11A departs scene Code 9 to Swedish Medical Center with 1 patient
20:22:52	0:04	Green 1	Mutual aid partner Rural Metro 107 departs scene Code 9 to University
			of Colorado Hospital with 1 patient
20:26:02	0:02	MCI OPS	Unit 15B reports arrival at Medical Center of Aurora
20:49:29	0:03	MCI OPS	Unit 11A reports arrival at Swedish Medical Center
21:50:39	0:05	AMB OPS	Dispatch assigns Unit 1B Code 9 to respond to DIA Concourse A for
			patient at train terminal
21:53:00			Jackamore declares MCI concluded
22:00:09	0:05	AMB OPS	Dispatch assigns Unit 3B, Code 9 to DIA Concourse A President's Club,
			for additional crash patient transport
22:02:05	0:07	AMB OPS	Per DIA Paramedics, Unit 1B is swapping calls with Unit 3B
22:03:18	0:02	AMB OPS	Unit 1B states they can double load. Unit 3B cancelled.
22:07:15	0:02	AMB OPS	Unit 1B reports arrival at DIA Concourse A
22:28:31	0:03	AMB OPS	Unit 1B departs DIA Code 9 for Denver Health with two patients

	Responding Units - 17		
Unit #	Time Assigned/Code	Time arrived at DIA Gate	Response Time
		1	
DIA	18:20	18:23	This is a time estimate, as these records are in the custody of DIA
Paramedics			Dispatch and therefore are not available to Denver Health.
(3)			
EMS 35	18:25	18:47	Initial response was Code 9, then upped to Code 10 6 minutes into call
15B	18:27		Initial assignment was Code 9 to DIA, was rerouted within seconds Code
			10 to Montbello
2B	18:27	18:45	18 minute response time - originally assigned Code 9, then stepped up
			to Code 10, 3 minutes into the call; then 6 minutes into call DIA Dispatch
			slows to Code 9; within same minute Supervisor steps back up to Code
			10
12A	18:36	18:56	20 minute response time - initially Code 9, stepped up to Code 10 6
			minutes into the call
14A	18:40	18:56	16 minute response time - Code 9 response all the way to DIA -
			Diverted from escort area to go to Concourse A, Gate 42 14A also
			responded to ARFF4 to transport additional patient
EMS 26	18:40	19:07	27 minute response time - Code 9 all the way

Rural Metro 200	18:43	18:58	15 minute response time - Code 10 all the way
Northglenn 1	18:48	19:12	24 minute response time - Code 9 all the way
Rural Metro 207	18:48	19:07	13 minute response time - Code 10 all the way
Rural Metro 106	18:50	19:04	14 minute response time - Code 10 all the way
Pridemark 107	18:50	19:15	25 minute response time - Code 10 all the way
X2	18:52	19:12	20 minute response time - Code 10 all the way
Pridemark 102	18:50	19:15	22 minute response time - Code 10 all the way
Rural Metro 101	18:59	19:13	14 minute response time - Code 10 all the way
Northglenn 4	19:00	Arrival time unknown	
Northglenn 6	19:00	Arrival time unknown	Departed scene with patients at 19:31
Northglenn 2	19:14	Arrival time unknown	
11A	19:31	19:51	20 minute response time - Code 10 all the way
Action Care 106	19:34	19:46	14 minute response time - Code 10 all the way
Rural Metro 107	19:38	19:52	14 minute response time - Code 10 all the way
15B	19:31	19:40	9 minute response time - Code 10 all the way
1B	21:50	22:07	17 minute response time - Code 9 all the way
3B	22:00	Cancelled	Code 9 all the way

²³ units (not counting DIA paramedics) were assigned to respond to DIA. Two of these units were EMS Command staff.

² Denver Health units were cancelled or re-assigned enroute.

¹² mutual aid partners were called to respond, for two arrival time and use status is unknown.