

Maryland State Police
District Heights, MD
September 27, 2008
MIA08MA203

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

ATTACHMENT 9

SEQUENCE OF EVENTS TIMELINE

16 Pages

As stated in the Survival Factors Specialist's Report, a sequence of events timeline was constructed from audio files and reports from the agencies involved in the search for N92MD. The timeline begins at 2245 on September 27th with Charles County 911 phone calls about the motor vehicle accident near 6006 New Forest Ct. and ends with MSP's notification of the Trooper 2 accident to the NTSB at 0232 on September 28th. The timeline does not contain a summary of all communications during this period of time. Rather, it includes selected transmissions and information to provide the reader with a basic understanding of what was happening during the time in question.

The timeline consists of three vertical columns. The first column contains the time of the beginning of the transmission or phone call. As expected when obtaining time data from so many different organizations, differences were noted in the clock settings of the computer systems used to record the data. For instance, it was noted in several calls that the MSP Forestville clock was registering about 3:20 slower than the PG Communications clock. However, no effort was made to reconcile the times between different organizations. The times in column 1 simply reflect the time code provided by the information source listed in column 3.

The timeline is color coded to provide the reader with a visual cue about the source of the information provided. The color code is as follows:

SYSCOM digital audio files
PG county digital audio files
Charles county digital audio files
MSP Forestville digital audio files
PG County CAD log
Charles county CAD log
Cell phone records for MSP Sgt. Mike Perkins

Also, please note:

- SYSCOM's computerized audio recording system was down for maintenance at the time of the accident. Due to technical difficulties in obtaining the audio recordings from the back-up system, and the need for MIEMSS employees to review and remove all personal medical information, the full recordings were not received by the NTSB until November 7, 2008. When received, review of the data was extremely labor intensive as there were multiple (and sometimes partial) recordings of the same transmission on different channels with slightly different times. For this reason, the several of the times in the timeline should be considered best estimates. Those times with a lower degree of confidence are displayed with the symbol '~'.
- In most cases, the individuals speaking in the conversation are identified by their last name provided in parentheses after the name of their organization.
- In some instances, both sides of the same conversation were heard in audio data obtained from two different sources. In that case, only one entry was made in the

timeline and the source cited generally provided the most complete (or highest quality) audio.

- All of the entries in the timeline are summaries of much longer conversations. Extensive effort has been made to provide the reader with the most important information from each call without providing full transcripts of every file. When it was felt that the exact phraseology of the discussions was of importance, direct quotations were provided.

Time	Event	Source
22:45:34	First of numerous 911 calls to Charles County communications about the auto accident	Charles County audio
22:46:09	EMS Duty 12 (Weyrich) and EMS Chief 12B on-scene	Charles County audio
22:49:00	EMS Unit 123 and 128 enroute	Charles County audio
23:01:51	Charles County called SYSCOM to request helicopter transport for two patients to PG Hospital	SYSCOM audio
23:02:13	SYSCOM called Trooper 2 and asked if they could accept mission; T2 accepted	SYSCOM audio
23:10:32	T2 radioed SYSCOM 10-8, enroute	SYSCOM audio
23:10:56	SYSCOM provided T2 with heading (210 for 12 miles) and landing zone coordinates, "north is three eight three six seven zero, west seven six five seven three nine;" T2 asked for coordinates to be repeated; SYSCOM provided "thirty-eight thirty-six seven zero, and then west is seven six five seven three nine"	SYSCOM audio
23:20:50	T2 arrived at landing zone	Charles County CAD log
23:37:07	T2 departed with 2 patients	Charles County CAD log
23:37:30	T2 radioed SYSCOM enroute to PG Hospital; 8 minute ETA with 2 patients	SYSCOM audio
23:47:30	T2 radioed SYSCOM to report PG Hospital "completely fogged in;" advised they would return to ADW; requested ambulances to meet helicopter	SYSCOM audio
23:49:49	SYSCOM called PG Communications to advise that T2 was unable to land at PG Hospital and was going to land at ADW with two patients; requested two BLS units to meet T2 there and finish transport to PG Hospital; ETA "a couple minutes"	SYSCOM audio
23:51:26	T2 radioed SYSCOM and advised 10 minute ETA to ADW	SYSCOM audio
23:52:02	SYSCOM confirmed 10 minute ETA to ADW with T2	SYSCOM audio
23:53:59	PG ambulance A827 arrived at ADW for patient transport	PG CAD log
23:58:00	ACCIDENT	ADS-B data
00:03:36	PG ambulance A823 arrived at ADW for patient transport	PG CAD log
00:07:14	ADW fire chief (Tackish) called MSP Forestville (Krysiak); reported T2 not there, ADW tower lost off radar 8-10 minutes prior, 2 miles out; MSP Forestville asked for lat/long; tower "working on it"; MSP Forestville called SYSCOM; SYSCOM reported T2 "already landed" (15 minute call - see 00:14:11 entry)	MSP Forestville audio
00:12:23	PG ambulances A823 and A827 arrived at MSP hangar at ADW while looking for T2	PG CAD log

Time	Event	Source
00:14:11	MSP Forestville (Lipsky) called SYSCOM (Noyes) to inquire about the status of T2; SYSCOM advised that T2 had "already landed" there; SYSCOM made repeated attempts to contact T2 by radio with no response and called hangar with no response; SYSCOM stated "I've got an audible alert... let me see, I got 'em ... the last time I have 'em is at thirty-eight fifty-two seventeen and then seventy-six fifty-two twenty-six." MSP Forestville asked what time; SYSCOM did not have a time of LKP; MSP Forestville asked if SYSCOM had cell phone numbers for the crew; [Lipsky placed on hold while Noyes answered call from Potomac TRACON]; SYSCOM would locate and attempt to call crew via cell phone; MSP Forestville requested ADW fire check the pad outside the hangar	SYSCOM audio
00:15:06	SYSCOM (Stinchcomb) attempted to call T2 call at ADW hangar; no answer	SYSCOM audio
00:16:28	MSP Forestville (Jeffries) called MSP College Park barracks and asked the to try to contact T2 via radio; no response received	MSP Forestville audio
00:17:05	SYSCOM (Stinchcomb) called PG Communications (Burian) to ask if their ambulances at ADW were with T2; PG advised that the ambulances at ADW were still waiting for T2 and that the patients had not arrived at PG Hospital; SYSCOM believed they may have landed somewhere else at ADW; PG reported they were checking other areas of ADW	SYSCOM audio
~00:18:05	SYSCOM (Noyes) received phone call from Potomac TRACON (Anderson) who stated they received a phone call from ADW tower that T2 had not landed there and was last seen north of the airport, TRACON looking for information about T2 whereabouts	SYSCOM audio
00:21:31	DCA tower (Ewings) called MSP Forestville (Krysiak) inquiring about T2	MSP Forestville audio
00:21:45	PG (Burian) called SYSCOM (Noyes & Stinchcomb) back and inquired where T2 was coming from; SYSCOM stated the last he had T2 was between PG Hospital and ADW, SYSCOM provided coordinates of "three eight five two one seven, north was seven six five two two six... about two nautical miles southwest of FedEx [Field]" PG sending units to that area	PG Communications audio
00:22:31	MSP Forestville (Krysiak) called PG Hospital and confirmed T2 had not landed there	MSP Forestville audio
00:23:23	PG (Collins) called FedEx Field Command Center to ask if helicopter had landed there; nothing seen or heard	PG Communications audio
00:24:00	SYSCOM (Noyes) called the National Capitol Region Coordination Center (NCRCC) to ask if they noticed T2 dropped off their radar; SYSCOM reported last position 2 NM SW of FedEx Field; "on my ADS-B I've got an alarm going off but he's not responding on the radio and usually when they're on the ground... we have no communication with them anyway, but he's not in a landing zone that we know of"; while on hold SYSCOM called MSP Officer of the Day Tobin Treibel; NCRCC replied "none of us here can find him either"	SYSCOM audio
00:24:24	SYSCOM called Norwood Section (Trooper 8) (Preston) and asked if there was any way they could launch with their weather; Preston would check and call back	SYSCOM audio

Time	Event	Source
00:26:11	PG (Collins) received call from MSP Forestville (Lipsky) asking about status of Eagle 2; MSP Forestville was told to call SYSCOM to dispatch Eagle 2	PG Communications audio
00:26:52	PG (Collins) called MSP Forestville (Krysiak) and reported coordinates plot on Google to Calvert Cliffs area of MD and advised to notify Calvert County; reverified coordinates "three eight five two one seven, seven six five two two six"; PG expressed confusion as to why coordinates are near Calvert Cliffs if T2 was going to PG Hospital, stated "maybe they got disoriented by the fog, 'cause this is where it's coming up"	MSP Forestville audio
~00:28:13	MSP Forestville (Lipsky) called SYSCOM (Stinchcomb) and asked if Eagle 2 was being launched to LKP; SYSCOM advised that T8 was curenly looking at their weather	SYSCOM audio
~00:28:33	T8 (Preston) called SYSCOM back and stated "we're going to head toward Andrews and see what we can do."	SYSCOM audio
~00:29:05	Potomac TRACON (Schuette) called SYSCOM (Noyes) for information on T2; SYSCOM provided LKP coordinates of "thirty-eight fifty-two nineteen point three and sevety-six fifty-two nineteen point five;" Potomac TRACON will start notifications on their end because "this is way too long."	SYSCOM audio
00:29:43	PG (Baugus) called Calvert Control Center (Holtzberger) and informed them that they had lost contact with a Trooper 2 and the lat/long coordinates were "coming up to near your area"; provided coordinates as "thirty-eight point five two one seven, and a negative seventy-six point five two two six" and stated "on the mapping system it's showing Scientist Cliffs"; advised they were transporting patients from Waldorf to PG Hospital; Calvert advised "they're going in the wrong direction if they came this way;" Calvert would continue to try to raise T2 via radio	PG Communications audio
00:30:12	PG (Burian) called PGFD unit and asked to "take the engine out... look around Walk Mill Regional... see if you find Trooper 2." PG "thinking Walker Mill Middle School or the park or somewhere in there..."	PG Communications audio
00:31:15	ADW tower (Hyman) called MSP Forestville (Jeffries) and asked if they had heard from T2; ADW tower stated "...if he was having problems with his equipment and he went down, you know, I guess somebody needs to be looking out north of the field for him."	MSP Forestville audio
00:31:26	MSP Forestville (Krysiak) called MSP Prince Frederick (Bolder) and notified him that they had lost contact with T2; MSP Forestville provided last coordinates of "three eight five two one seven... seven six five two two six... it's already been verified through PG County and Andrews, that's the last coordinates and it comes back to the Calvert Cliffs;" MSP Prince Frederick would notify commander and and send someone down to Calvert Cliffs	MSP Forestville audio
00:32:02	PG (Burian) called SYSCOM (Stinchcomb) and reported coordinates are near Calvert Cliffs; SYSCOM responded "okay I don't know where the duty officer got those..."; PG reported sending units to the area of Walker Mill Park and Wheatley School, any areas they could have landed, 2 miles SSW of FedEx Field	PG Communications audio

Time	Event	Source
00:34:42	PG (Collins) called MSP Forestville (Lipksy) in attempt to get cell phone numbers so they could be tracked by GPS through the cell phone companies; MSP Forestville provided phone number to SYSCOM (see 00:36:19 entry)	PG Communications audio
00:34:46	Trooper 8 (Preston) radioed SYSCOM that they were enroute	SYSCOM audio
00:35:19	PG (Burian) called SYSCOM (Stinchcomb) and asked where patients were intially picked up; SYSCOM replied 6006 New Forest Ct. in Waldorf; SYSCOM also stated Trooper 8 just ran into fog and would be of no help	PG Communications audio
00:36:02	Trooper 8 (Preston) radioed SYSCOM that "we're hitting a wall, we're making a return to Norwood"	SYSCOM audio
00:36:19	PG (Collins) called SYSCOM (Noyes) who provided two cell phone numbers fro MSP crew; PG reported they would be contacting the cell phone carriers and "try to get them to flip that GPS on"	SYSCOM audio
00:36:24	Lt. Morris called MSP Forestville (Krysiak) and received coordinates "three eight five, two one seven, and then it's gonna be, seven six, five two, two six;"; Lt. Morris asked if that put him over the state park or the power plant; [in the background Sgt. Lipsky can be heard stating "yeah I know we got the same coordinates, three eight five two, Calvert Cliffs or something... but they said, Andrews said they lost them on the approach, so I don't know... but we're going to start looking two miles out because Andrews said they went off the screen two miles on their approach... coming southbound. So I've got 'em checking around the East Penn buildings off of Westphalia and Old Marlboro Pike, that area..."] Lt. Morris requested that MSP Forestville call PGPD to help with search	MSP Forestville audio
~00:37:52	MSP F/Sgt. Triebel called SYSCOM (Noyes) and received briefing; SYSCOM had tried troopers' cell phones with no answer; PG trying to "ping" cell phones through cell carriers	SYSCOM audio
00:38:59	PG (Baugus) called Verizon to identify cell carrier phone trooper cell phones; one was Verizon Wireless (Bunker), one was Sprint/Nextel (Lippy)	PG Communications audio
00:39:07	MSP Forestville (Krysiak) called SYSCOM (Sanders) to get names of MSP T2 crew; [in the background Sgt. Lipsky received call from PG County who reported that PG would be doing GPS on troopers' cell phones]	Forestville Audio (Phone Calls)
00:39:28	PG (Glenn) received call from MSP Forestville (Lipsky) who stated they lost a helicopter 2 miles north of ADW while heading southbound; possibly near the intersection of Old Marlboro Pike and Westphalia Rd., PG would start there and "fan out"; PG reported the coordinates they received from SYSCOM were near Calvert Cliffs; PG stated "maybe somebody just gave us the wrong coordinates;"	PG Communications audio
00:40:22	PG (Burian) called Calvert Control Center (Stacy) who stated that SYSCOM had not called them; PG stated that T2 was missing and the coordinates plotted near Calvert Cliffs; PG stated "they picked these two trauma patients up in Waldorf, why they are at Calvert Cliffs I have no clue... they also had 'em 2 miles south southwest of FedEx which puts them on our roof, but we don't have them;" PG asked them to send someone to Soloman's Island Rd. and Kerwood Beach	PG Communications audio

Time	Event	Source
00:41:36	SYSCOM (Stinchcomb) called U.S. Park Police to request an aerial search; U.S. Park requested LKP and where they were headed; SYSCOM stated "I don't have good coordinates... it looks like we lost them off radar due north of Andrews maybe a mile or two and southwest of FedEx Field." U.S Park Police stated "we haven't been out that way tonight but we'll try to make our way over there"	SYSCOM audio
00:41:38	SYSCOM (Noyes) received phone call from MSP Captain Dan Cornwell; SYSCOM provided briefing and stated that T2 was making arrangements to have PG pick up patients at ADW and "then we never heard any more for a while, so I started getting a pinging sound on the ADS-B and I'm looking at it and it's like, that's not where they're supposed to be, and then Forestville called said that they hadn't heard from them either..." [Noyes overheard Jeff conversation with OOD Triebel in background and said "well they gotta be somewhat good Jeff because, I mean, that's what's coming up on here." (see 00:43:06 entry)] Lt. Walt Ker and Sgt. Bob Adams would be coming in; Capt. Cornwell asked about ADW tower; SYSCOM said they were aware and had called SYSCOM and stated that they lost all contact 2 miles out	SYSCOM audio
00:42:17	PG (Baugus) called Verizon Wireless who reported no activity on phone since 1932; asked PG to call phone now and call back in 15 minutes	PG Communications audio
~00:43:06	MSP F/ Sgt. Triebel called SYSCOM (Stinchcomb) for information and asked if they had a LKP; SYSCOM responded "we thought we did, George gave the coordinates to PG Fire and PG Fire said they're coming up around Calvert Cliffs, so the coordinates aren't good..." SYSCOM reported that last communication from T2 was around 0000 with a 10 minute ETA to ADW	SYSCOM audio
00:43:17	PG (Glenn) called MSP Forestville (Lipsky) to report they were 'pinging' phones	PG Communications audio
00:43:54	PG radio transmissions were sending units to Old Marlboro Pike and Pennsylvania Ave, Westphalia and Rt 4.	PG Communications audio
00:44:33	MSP Prince Frederick (Sgt. Bolder) called SYSCOM (Noyes) and asked for update on T2 because last lat/long was in their area; SYSCOM responded "I'm putting my ADS-B cursor on three eight five two one seven, seven six five two two zero.. I'm looking at my map and it's got me between PG Trauma Center and Andrews Air Force Base" Prince Frederick: "OK, they gave me three eight five two one seven, and then seven six five two two six" SYSCOM: "No, no... no, no, no, no... I appreciate you calling..." Prince Frederick asked for more information to pass to his Commander; SYSCOM stated it was "just not a good situation right now.." and had been going on 45 minutes; SYSCOM stated T2 was making arrangements to have ambulances at ADW on radio and "...it's not unusual not to have any radio contact til they land, and it was just like too long... and they don't normally go off the tracking system here between PG and Andrews so it's kind of unusual for them to do that." Prince Frederick asked SYSCOM to call back if any information was obtained	SYSCOM audio

Time	Event	Source
00:44:42	Trooper 8 (Preston) called SYSCOM (Higgins) looking for LKP coordinates; SYSCOM provided "thirty-eight fifty-two sixteen, sevety-six fifty-two twenty;" SYSCOM had nothing back from PG on cell phones 'pings' yet; T8 stated that since they were down for weather and Mr. Scott Russell had a receiver for ELT signals, they were going to "figure out where that is and start heading over there"	SYSCOM audio
00:45:57	PG (Burian) called MSP Forestville (Krysiak) and asked if there was a command post set up; MSP responded "not yet"; PGFD was sending BC 803 to MSP Forestville to coordinate	MSP Forestville audio
00:46:09	PG (Collins) called PG Duty Chief asking what to do with units; he advised to send BC803 to MSP command post	PG Communications audio
00:48:36	MSP Forestville (Jeffries) asked MSP unit to check D'arcy Road	MSP Forestville audio
00:48:53	Unknown MSP road trooper called MSP Forestville (Krysiak); caller had not heard about T2; "are we looking for him or are you just letting us know?"; [in background Sgt. Lipsky hung up from SYSCOM and reported they must be somewhere between PG Hospital and ADW (see 00:51:32 entry)]; caller told to "check all side roads, wooded areas, anything you can see" near that flight path	MSP Forestville audio
00:50:02	PG radio traffic indicated Eagle 2 was going up	PG Communications audio
00:50:55	PG (Collins) called BC 803 and told him to report to MSP Forestville	PG Communications audio
00:51:15	ADW tower (Hyman) called SYSCOM (Stinchcomb) and asked if they had heard from T2; ADW tower reported that she had lost T2 off radar 2 miles north of the airport and T2 had not arrived nor had she talked to him; SYSCOM asked for coordinates and she could not provide; SYSCOM reported that Eagle was inbound to the LKP	SYSCOM audio
00:51:28	PG (Burian) called Calvert back to provide coordinates, passed "thirty-eight fifty-two and seventeen, and then seventy-six fifty-two and twenty-six"	PG Communications audio
00:51:32	MSP Forestville (Lipsky) called SYSCOM (Noyes) asking if there was any equipment that they could bring to help with the search; wanted more information about where T2 was coming from; SYSCOM reported T2 picked up patients in Waldorf, couldn't get into PG and were on their way to ADW when lost contact	SYSCOM audio
~00:52:44	Lt. Morris called MSP Forestville (Jeffries) and instructed him to call ADW and ask if they needed a specific request to obtain military help	MSP Forestville audio
00:52:47	PG (Baugus) called Verizon Wireless; was told he needed to fill out another form	PG Communications audio
00:52:53	SYSCOM radioed Eagle 2 with coordinates "three eight, five two, one eight, point eight, seven six, five two, two zero point four"	SYSCOM audio
00:54:41	Eagle 2 radioed that coordinates plotted to Walker Mill Regional Park and that there was a "really, really heavy line just outside D.C. I don't think we're going to get there..."	SYSCOM audio

Time	Event	Source
00:56:05	MSP Trooper 7 (Wild) called SYSCOM (Stinchcomb) and asked if they had heard from T2; short discussion about possible location being on airport and T7 asked "where are they going to land off-airport and in PG County where nobody is going to notice them?"	SYSCOM audio
00:56:26	Captain Cornwell called SYSCOM (Noyes); instructed SYSCOM to call ADW tower and tell them that MSP considers this a missing aircraft and to obtain LKP coordinates from them	SYSCOM audio
00:57:24	MSP Forestville (Lipsky) called PG (Glenn) and asked to check all parking lots at FedEx; PG will comply	PG Communications audio
12:59:54	SYSCOM (Noyes) attempted to call ADW Tower; line busy	SYSCOM audio
~01:00:10	SYSCOM (Noyes) received phone call from Sgt. Frank Childress (duty officer at MSP HQ Pikesville) who had just spoken with ADW tower; Sgt. Childress relayed information that he received - 3 1/2 to 4 miles out T2 could not get glideslope, T2 asked for another approach which controller could not provide, 2 miles out they dropped off the radar around midnight and the altitude changed to Z's; Sgt. Childress stated "I'd also let them know 2 miles north of Andrews, I guess start at Andrews and start working north... I don't know what's out there, that's the thing... if it was populated we'd be getting calls from houses... so it must not be populated." SYSCOM would call ADW tower again	SYSCOM audio
01:01:00	MSP Sgt. Adams notified MSP Sgt. Perkins that contact had been lost with T2	Sgt. Perkins cell records
01:02:30	USCG (Potter) called SYSCOM (Higgins); USCG notified by Calvert County about difficulties contacting T2; USCG offered assistance	SYSCOM audio
01:03:02	SYSCOM (Noyes) ADW tower (Hyman) and asked when was the time of last contact; ADW reported about midnight and provided briefing; SYSCOM asked "do you have a particular location, a north or west location?" ADW reported she did not have the ability to do lat/longs, but reported T2's LKP as 2 miles north of the runway; SYSCOM asked again "there's no way to get any kind of a bearing on what his location was, as far as north and west?" ADW tower responded "I don't know how to do that."	SYSCOM audio
01:04:30	Calvert County (Holtzberger) called PG (Baugus) and had talked to Pax river who did "some calling around, and apparently Andrews had them on short final for 19 right at Andrews and they have yet to land;" PG asked for last time ADW had them and phone number for Pax river to get coordinates; Calvert stated that "it came through MSP that the coordinates were incorrect... I would assume they got them from SYSCOM"	PG Communications audio
01:05:28	Unknown MSP road unit radioed Lt. Morris that he had been down both sides of Westphalia without results; trooper requested additional areas to search; Lt. Morris requested Dower House be searched; unit L31 radioed he had checked D'Arcy Rd. from beginning to end; visibility was only about 50 feet	MSP Forestville audio
01:06:28	MSP AV18 (Preston) radioed to MSP Forestville that they were enroute to the Forestville barrack area	MSP Forestville audio

Time	Event	Source
01:06:37	Charles County Communications called SYSCOM (Stinchcomb) and asked where T2 took patients because the sheriff's office was looking for T2	SYSCOM audio
01:06:40	Potomac Tracon (Schuette) called SYSCOM (Higgins) for additional basic information about T2; would call FSS to put out ALNOT for N92MD	SYSCOM audio
01:07:01	PG (Baugus) called SYSCOM (Krediet) to retrieve last known coordinates; SYSCOM passed "thirty-eight fifty-two seventeen, by seventy-six fifty-two eighteen, about two miles north of Andrews."	PG Communications audio
01:07:49	PG (Glenn) called MSP Forestville (Lipsky) to report T2 had not landed at FedEx	PG Communications audio
01:08:08	Eagle 2 radioed SYSCOM (Noyes) that they had "PG County that are going to Walker Mill Regional Park, if they get anything they're going to call you landline;" they could not reach the area of Walker Mill Regional Park from the south; they were attempting to come in from the north near Greenbelt Metro station; SYSCOM relayed information from ADW tower that they were lost about 2 miles north of ADW and could not get glideslope	SYSCOM audio
01:09:31	MSP unit L31 radioed MSP Forestville requesting additional location to search; was directed to Woodyard Rd; L31 confirmed Suitland by ADW had been checked	MSP Forestville audio
01:09:46	PG (Baugus) called Calvert Control Center (Holtzberger) to notify them that "SYSCOM got a correction on their lat/long, the last location is two miles north of Andrews Air Force Base"; Calvert already aware and had notified him of that previously	PG Communications audio
01:10:21	Lt. Morris called SYSCOM (Noyes) and asked about protocols for getting Air Force involved in search; she was setting up command post at MSP Forestville barrack	SYSCOM audio
01:10:36	PG Sheriff's Office called MSP Forestville (Krysiak); was monitoring US Park frequency who said they were searching for downed aircraft near ADW and "do you want me to make notification to our communications?" MSP Forestville responded that he "might want to let them know." MSP Forestville waiting to hear back from USCG to see if they can get a helicopter up	MSP Forestville audio
01:12:02	Eagle 2 radioed that they've "got Park Police that are checking the north approaches to the runway in the area of Morningside/Suitland..."	SYSCOM audio
01:13:00	MSP Sgt. Perkins responding on Beltway; Sgt. Adams redirected him to search area	Sgt. Perkins cell records
01:14:47	BC803 called PG (Collins) and requested unit 823 to go to MSP Forestville from ADW; unit 827 was to remain at ADW; unit 37 mini pumper was in service, requested 826 responded MSP Forestville barrack; PG passed chief 837A was waiting for "Maryland Park" to open a gate near the landfill at Ritchie-Marlboro Rd.; Calvert was looking near beach; Charles sherrif's was looking all over; [in background Baugus stated that he received a 'ping' from the cell phone company off cell phone at 0102; the location of the 'ping' was 9100 E. Hampton Dr. in Capital Heights]	PG Communications audio

Time	Event	Source
01:15:48	PGPD (Glenn) called MSP Forestville (Jeffries) and reported they did a "ping" on Trooper Bunker's cell phone; the ping was received at "9100 E. Hampton Dr. is where the tower location is supposed to be at... and it doesn't have a direction or anything, but that's the closet cell phone tower." PGPD inquired about a GPS on the helicopter and was told there was no GPS on board	MSP Forestville audio
01:16:41	Eagle 2 radioed PG and asked "any luck at Walker Mill Regional Park with that aircraft?" PG responded "negative. The units out there don't have anything showing as of yet" and advised MSP requested an area near the landfill on Ritchie-Marlboro Rd. be searched	PG Communications audio
01:17:30	Unknown PG individual stated he was "down here with the state police" and called PG (Ryan) to request "can you get with Henry sector and have them check the area of Walker Mill Park?" PG responded "They're right there now..."	PG Communications audio
01:18:32	PG (Ryan) received from from "Robertson over at aviation;" he just talked to ADW tower and they lost them shooting ILS approach to 19 which would be near Pennsylvania Ave.; PG advised already they were searching that area; he reported they could not fly due to weather	PG Communications audio
01:18:43	MSP Forestville (Jeffries) radioed AV18 to "check inside the Beltway at 214... in the area of Hampton Mall... getting a response from one of the cell phone towers... pinging off that area." AV18 departed Walkers Mill Park to that location; AV 80 reported he was at inner loop at Ritchie/Marlboro	MSP Forestville audio
01:20:07	AV18 radioed MSP Forestville that he and a couple county and park police are heading to 9100 E. Hampton area	MSP Forestville audio
01:20:25	SYSCOM (Noyes) called MSP Forestville (Lipsky) and asked "Do you have anybody checking that Walker Mill Regional Park?" MSP Forestville responded "Well, we just got a possible location somewhere around East Hampton area... on one of the cell phones... so we're going to send troopers there" SYSCOM stated "Because the coordinates that I have put you somewhere between those two parks..." MSP Forestville "You're talking about on the approach flight, right?" SYS: "Yes" MSP: "We're doing the cell phone thing." SYS: "OK, well they were coming in on the approach to..." MSP: "...but that would be close to the approach, really"	SYSCOM audio
01:20:55	AV 16 and AV80 arriving in area of 9100 E. Hampton Dr.	MSP Forestville audio
01:21:19	Unknown PG individual (Same as 01:17:30 caller) called PG (Collins) and asked if "You guys got somebody going up to E. Hampton Dr... that's the tower it's hittin' off of." PG would send units	PG Communications audio
~01:22:06	PG unit 1H5 radioed to PG "I'm out with MSP Forestville and they're going to get on their machine and the bird is going to be in the park, so I'll be on foot with MSP in the park... the machine they use ma'am is showing that the helicopter is in the park, they've had no confirmation from anybody... I'm at Walker Mill Park now ma'am, we may be changing location they just got a... [end of transmission]" [About 1:10 seconds later 1H5 radioed to PG "show me around the Hampton Park mall ma'am, they just got a hit, and possibly the aircraft is in that area.]"	PG Communications audio
01:22:13	PG BC803 called PG (Collins) and asked for unit 37 to respond to whole area near E. Hampton	PG Communications audio

Time	Event	Source
01:23:25	AV18 radioed AV80 to identify his location; behind Staples	MSP Forestville audio
01:24:18	AV18 radioed to AV80 that "talking to SYSCOM, the CRABS coordinates put listed him in the park off Walkers Mill Road as best I could tell..."	Forestville (Phone&Radio)
01:24:27	PG radioed "For any units that can respond over, we're getting a supplement on this call, apparently they've cheked with Verizon and they're puttin' it possibly in the area of 9100 East Hampton Drive in Capitol Heights... if anyone can check that area."	MSP Forestville audio
01:26:14	MSP Forestville called PG (Glenn) about the cell phone location; told "they don't have a quadrant which direction it came in, but the nearest cell phone [tower] is at 9100 E. Hampton Dr," Lipsky asked "How far of a radius would they be then?" PG "that depends on where the next nearest cell phone tower is... that would probably be a 2-3 mile radius... I would guess at least." They discussed possible search areas. PG recommended "I would go from the stadium... all the way down to Rt. 4 on both sides." Lipsky "so it still could be anywhere from Westphalia Rd. on up to Ritchie Marlboro Rd." PG still waiting for other trooper's cell phone results	PG Communications audio
01:26:20	SYSCOM (Noyes) radioed information to Eagle 2 about cell phone "ping" received from MSP Forestville; SYSCOM provided coordinate for the cell phone "ping" as "thirty-eight fifty-two fifty-seven, west seven six five one one two"	SYSCOM audio
01:26:58	Unknown MSP trooper near Woodyard Rd. called MSP Forestville (Jeffries) to inquire about use of military aircraft from ADW; was informed they had already called and "everybody said no." Caller knew about cell phone "pings" and MSP Forestville repeated that closet cell tower was 9100 E. Hampton Dr.	MSP Forestville audio
01:27:00	Sgt. Perkins arrived at cell tower and met Mr. Russell and TFC Preston and responded to a school near Wilker Mill Rd. They discussed a search plan at the school.	Sgt. Perkins cell records
01:27:56	Eagle 2 radioed to SYSCOM that there is a school near those coordinates; Eagle 2 would return to hangar and search by ground	SYSCOM audio
01:28:53	Eagle 2 radioed PG concerning E. Hampton address; advised that there was a school just off Ritchie north of Walker Mill that pilot might have landed at in fog; they were unable to check due to fog bank; PG unit 1H5 would respond to that location	PG Communications audio

Time	Event	Source
01:30:04	MSP Capt. Mark Gibbons called SYSCOM (Noyes) and SYSCOM provided briefing; provided LKP lat/long "three eight five two one six, seven six five two two one" from ADS-B; SYSCOM stated after coordinating with PG to have ambulances meet T2 at ADW, "a couple minutes later... Andrews called Forestville and said 'we lost Trooper 2 on the radar, have you heard anything?' and then Forestville called me and I said 'hey I've been watching them, they just went off the ADS-B' and I tried to contact them on the radio, called them numerous times with no response." Gibbons asked "have you pulled out the book and reviewed it for missing/overdue aircraft action plan?" SYSCOM replied "Not since this happened, no." Gibbons instructed him to "pull out the book. Start going down that by the numbers... that will help you as a reference to make sure you've done what you've done, and then just make sure you've documented everything that you've done."	SYSCOM audio
~01:33:30	PG unit 1H5 advised PG that MSP now treating incident as a downed aircraft; "they want to do the woods, they don't believe the bird landed on any ground." Another PG unit advised that Wheatley school location was negative	PG Communications audio
01:34:11	Unknown MSP trooper radioed MSP Forestville regrading witness reports about seeing lights go down in the area; he was going to be on foot searching area; PGFD using SUV to access areas	MSP Forestville audio
01:34:29	Numerous radio communications regarding search now centering on industrial area near Chick-Fil-A	PG Communications audio
01:35:39	PG (Baugus) called Verizon and asked about second cell phone ping; Nothing from (301) number - going straight to voice mail; (443) number was the one Verizon got info from before; it was still pinging off 9100 E. Hampton; Verizon stated it was bouncing off west side, could be within 3-5 mile radius	PG Communications audio
01:35:41	MSP unit L31 radioed MSP Forestville that he had checked Woodyard, Dower House, and Melwood	MSP Forestville audio
01:35:49	SYSCOM (Noyes) received phone call from Eagle crewmember; they were heading out on ground search going to Wheatley school area	SYSCOM audio
01:36:52	Lt. Morris directed unit to H.W. Wheatley School off Ritchie Dr.	MSP Forestville audio
01:36:56	PG radio traffic indicated units were discussing witness report of lights in construction area near Chick-Fil-A; one stated "looks like smoke from over that way."	PG Communications audio
~01:37:30	PG unit 1H5 arrived at H.W. Wheatley School	PG Communications audio
01:37:33	PGPD (Glenn) called MSP Forestville (Krysiak) and reported second "ping" from Trooper Lippy's cell phone at 9100 E. Hampton Dr, "from the west quadrant so it's coming from the east... 3-5 mile radius...that would probably take you over towards, I'm guessing like, Harry Truman Dr... down towards Ritchie-Marlboro Rd towards the Beltway"	MSP Forestville audio
01:38:08	AV18 radioed MSP Forestville that he and multiple units were at H. W. Wheatley School and they were "going to set up operations and organize a search from here, getting in touch with Andrews tower..."; requested any units they could spare for search efforts	MSP Forestville audio

Time	Event	Source
01:39:20	MSP Forestville (Lipsky) radioed Lt. Morris to inform about the second "ping" on cell tower's west side	MSP Forestville audio
1:39:40	PG unit EMS 801 called PG (Burian) to report he was headed to MSP Forestville barrack; PG reported "they may have found it...the construction with the new shopping center... security guard said he saw something go down and they got smoke."	PG Communications audio
1:39:52	PG BC 803 sent unit 823 to the station to get brush truck (BX) unit to go to Ritchie/Marlboro Rd.; sent BX43 to Watkins Park	PG Communications audio
01:40:00	MSP Sgt. Perkins obtained phone number for ADW tower from Sgt. Adams at SYSCOM and provided it to Mr. Scott Russell	Sgt. Perkins cell records
01:40:11	Charles County called SYSCOM (Higgins) to confirm that there was a female EMT on board T2 from Station 12	SYSCOM audio
01:41:10	PG unit stated that "smoke" looks like it is just fog	PG Communications audio
01:41:12	SYSCOM (Noyes) received call from MSP Captain Ron Lewis setting up a command post; SYSCOM provided LKP that "kinda puts us in Walker Mill Regional Park... it's three eight five two one six, seven six five two two zero" Capt Lewis asked if SYSCOM had received a low altitude alert or alarm; SYSCOM responded "we get the low altitude once they... if they drop below, drop below minimums, or if they land, yeah, we get a pinging sound, and I started calling them and got no answer. Forestville barrack called me and said we're getting a call from Andrews that they lost 'em on the radar, you know, prior to coming into Andrews, and that's what started the whole thing." Capt. Lewis asked for last two lat/longs prior to the LKP; SYSCOM unable to provide from ADS-B system, but confirmed 5 people on board	SYSCOM audio
01:43:29	Lt. Morris called MSP Forestville (Jeffries) to obtain number of personnel actively searching for T2; she requested additional personnel respond	MSP Forestville audio
01:43:37	PG units report needing true 4-wheel drive vehicles to search area near Chick-Fil-A; BC803 sending BX23 to that location	PG Communications audio
~01:45:35	PG unit 3D9 radioed that "I'm out at MSP also and I just talked with the desk sgt. And they're receiving additional calls now and they're going to be shifting where they're looking to the area between D'arcy Rd. Ritchie Rd., and the Capital Beltway. It'll be back off Forest Park Rd., Ritchboro Rd. that whole area back up in there... where the new chicken place is. They just received a second ping a couple of seconds ago from a tower in that area..."	PG Communications audio
01:46:00	MSP Sgt. Perkins called Sgt. Adams at SYSCOM to obtain exact map location of last ADS-B position report for T2	Sgt. Perkins cell records
01:46:24	AV18 moved toward D'arcy and Ritchie Rd. after consulting with ADW tower	

Time	Event	Source
01:47:59	Lt. Morris called MSP Forestville (Lipsky) and asked about the last position of T2; MSP Forestville reported "the approach was 2 miles from FedEx Field coming in from the north approach;" Lt. Morris asked "and you verified that the numbers they gave you were the ones that put them over Calvert Cliffs?" MSP Forestville responded "yeah, we verified that twice, we called and checked twice... so that doesn't make sense." Lt. Morris stated "okay, somebody wrote it down wrong then." MSP Forestville "No... but they may have logged it from the last time they were taking off, wherever they were coming up from, from Calvert, from Prince Frederick, to Prince George's Hospital."	MSP Forestville audio
01:51:00	Sgt. Perkins, Mr. Russell, and TFC Preston depart H.W. Wheatley school	Sgt. Perkins cell records
01:54:27	PG unit 1H5 radioed PG that he was enroute back to Walker Mill Park	PG Communications audio
01:54:39	Lt. Morris called MSP Forestville (Lipsky) to request an AV unit respond to the command post at Forestville barracks, "we've got questions that we need them to answer about how things work."	MSP Forestville audio
01:55:00	Unknown PG individual called PG (Burian) to get a contact number for Civil Air Patrol and asked to PG to contact the tower at DCA to see where they lost them on radar	PG Communications audio
01:55:31	MSP Forestville (Lipsky) called PG (Baugus) requesting number to contact Verizon; MSP Forestville (Lipsky) called Verizon requesting information about additional cell towers in the area so they could "coordinate our efforts between that tower and the other towers you have." Verizon already working with Baugus at PG. Verizon reported tower covers a 5 mile radius and "ping" is on the southwest side.	MSP Forestville audio
01:57:00	MSP Sgt. Adams called Sgt. Perkins asking for update; SGT. Perkins located at main entrance of Walker Mill State Park about to enter park trail	Sgt. Perkins cell records
01:58:00	TFC. Preston called Sgt. Perkins and confirmed smell of jet fuel; later stated that he heard someone screaming	Sgt. Perkins cell records
01:58:12	PG unit 1H5 radioed PG "I'm at Walker Mill Regional and there's a strong odor of jet fuel coming from the Ritchie Rd. area... uh, give me one second, it looks like they located the plane down by Ritchie and Walker Mill."	PG Communications audio
01:58:37	PG (Collins) called Verizon 411 to get a phone number for the Civil Air Patrol, 411 could not find a phone number for MD CAP	PG Communications audio
01:59:00	TFC Preston called Sgt. Perkins and confirmed wreckage and one survivor	Sgt. Perkins cell records
02:01:20	PG (Collins) called BWI Operations to ask for phone number to MD CAP; call ended when T2 located	PG Communications audio
02:01:20	PG unit 1H5 reported location as Ritchie Rd. and Berry Ln.	PG Communications audio
02:01:52	PG (Baugus) called MSP Forestville (Jeffries) to report the helicopter had been located; "per Maryland Park advised they found helicopter off the trail behind Walker Mill and Berry Lane;" no information about injuries	MSP Forestville audio
02:01:57	PG unit 1H5 requested fire equipment stage at a church on D'arcy and Ritchie	PG Communications audio

Time	Event	Source
02:02:10	PG (Burian) called DCA and asked if tower had T2 on radar; call ended when T2 located	PG Communications audio
02:02:38	SYSCOM (Adams) received phone call from Mr. Scott Russell who was with the patient and described the scene and location; Mr. Russell confirmed that pilot and medic were deceased	SYSCOM audio
02:03:00	Sgt. Perkins arrived at south entrance to Walker Mill Regional Park; called Sgt. Adams to update him on Preston's location and findings; after hanging up met TFC Preston at his vehicle retrieving medical gear; Sgt. Perkins entered the park with TFC Preston	Sgt. Perkins cell records
02:05:03	MSP unit L31 radioed MSP Forestville for accident location; MSP Forestville (Jeffries) reported Walker Mill and Berry Lane	MSP Forestville audio
02:06:04	SYSCOM (Krediet) called MSP Forestville (Jeffries) to confirm that T2 has crashed with one survivor; 5 POB (pilot, paramedic, on-air provider, and two patients)	MSP Forestville audio
02:07:09	SYSCOM (Sanders) called PG (Collins) and notified them T2 was located in Walker Mill Park - one survivor was a patient	SYSCOM audio
02:08:15	MSP Forestville (Jeffries) radioed that T2 had been located at Walker Mill State Park; all units requested to respond	MSP Forestville audio
02:10:00	After moving survivor away from accident site TFC Preston resumed primary care of patient; Sgt. Perkins called Sgt. Adams back to provide confirmation and update	Sgt. Perkins cell records
02:32:36	SYSCOM (Sgt. Adams) called NTSB to provide notification of accident; NTSB already aware	SYSCOM audio