Reported Fuel Time Line

14:47:00 – Departing Denver – 46,700 #'s - (dispatch ?)
Note: This supposedly should have resulted in about 13,800#'s of fuel upon arrival in Portland.

17:40:47 – 28 minutes into the hold – "about 7,000#'s" – Captain to UAL Maintenance

17:46:52 – 34 minutes into the hold – "5,000#'s" – Flight Engineer to First Officer

17:48:54 – 36 minutes into the hold – "5,000#'s" – Captain to First Officer

17:49:00 -36 minutes into the hold – "inboard fuel pump low pressure lights begin to blink" – captain & flight engineer (confirms about 5K on board according to manufacturer)

17:50:20 – 38 minutes into the hold - Flight Engineer informs the Captain that "Fifteen minutes is gonna really run us low on fuel here."

17:50:47 Flight Engineer tells the Captain: "okay, take three thousand, ah two hundred and four".

17:51:45 Captain tells Flight Engineer to contact the company representative at Portland and advise that they would be landing with about 4000 pounds of fuel.

17:52:17 -17:53:30 Flight Engineer tells Portland Representative that: "we'll be landing with about four thousand pounds fuel"; and "Ah, fuel correct currently about five thousand pounds".

17:56:53 – 44 ½ minutes into the hold – "4,000#, 1000# in each tank" – Flight Engineer to First Officer

18:02:22 – 50 minutes into the hold –"We got about three on the fuel and that's it" – Flight Engineer declaration to Cockpit

18:03:03 – 51 minutes into the hold – "about four thousand, well make it three thousand pounds of fuel" – Captain to Portland Approach

18:06:19 – 54 minutes into the hold – "I think you just lost number 4 …… better get some crossfeeds open there or something" – First Officer to Flight Engineer

18:07:06 – 55 minutes into the hold – "It's flamed out" – First Officer declaration to Cockpit

18:07:27 & 31 – 55 ½ minutes into the hold/second approach –"We're going to lose number 3 in a minute too" & "It's showing zero." – Flight Engineer declaration to Cockpit.

18:07:52 – Nearly 56 minutes into the hold/second approach – "O.K. watch one and two. We're showing down to zero or a thousand" – Captain to Flight Engineer

18:08:45 – 56 1/2 minutes into the hold/second approach – "It's showing not very much more fuel" – Flight Engineer declaration to Cockpit

18:09:16 – 57 minutes into the hold/second approach – "We're down to one on the totalizer. Number 2 is empty." – Flight Engineer declaration to the Cockpit.

18:10:59 – 58 ½ minutes into the hold/second approach – "Boy that fuel sure went to hell all of a sudden, I told you we had four .." – Flight Engineer declaration to the Cockpit

18:13:21 & 25 – 61 minutes into the hold/second approach – "We just lost two engines, guys" and "We just lost twp engines … one and two" – Flight Engineer declaration to Cockpit

18:13:38 – 61 1/3 minutes into the hold/second approach – "There all going, we can't make Troutdale." – Captain declaration to Cockpit.

18:13:50 – 61 ½ minutes into the hold/second approach – "United one seventy three heavy, Mayday. We're … the engines are flaming out." – First Officer to Portland Tower.

Reported Fuel Use Rate Estimate

Time	Delta Time	Computed	Reported	Difference	Rounded Computed Value	Actual Fuel Use Rate (Estimated)	Reported Fuel Use Rate	Reported Fuel Use had Gauges Rounded	Comment
17:12:20		13332	N/A	N/A					
				reported + 73	7000	220#/min			
17:40:47	28 9/20	7073	about 7000						
17:46:52	6 1/12	5735	5000		6000	220#/min	330#/min	165#/min	
				reported + 287	5000	220#/min	0	500#/min	
17:48:54	2 1/30	5287	5000						
				reported + 265	5000	220#/min	N/A		
17:49:00	1/10	5265	low press lights						
17:50:20	1 1/3	4972	*5000	N/A	5000	220#/min	0		
				reported - 469	4000	220#/min	100#/min	125#/min	
17:56:53	6 11/20	3531	4000						
				reported - 675	2000	220#/min	182#/min	364#/min	
18:02:22	5 29/60	2325	3000						
				reported - 193	1000	220#/min	286#/min	143#/min	
18:09:16	6 9/10	807	1000						
					0	220#/min	273#/min	273#/min	Computed point of Fuel Starvation @ 220#/min
18:12:56	3 2/3	0							
									Actual Point of Fuel Starvation is less than a minute later
18:13:38	7/10	-154	0	reported - 154					
Time Average						220#/min	210#/min	210#/min	