

Flight Path

Water Landing of U.S. Airways Flight 1549, Airbus A320, N106US,
in the Hudson River

Weehawken, New Jersey

January 15, 2009

DCA09MA026

Animation Description/Disclaimer

This animation depicts the flight path of U.S. Airways Flight 1549 in Weehawken, New Jersey, on January 15, 2009. The animation begins after the airplane's takeoff from La Guardia Airport at 3:26:50 PM EST and ends with the water landing in the Hudson River. Flight data recorder and radar flight path information is displayed on a satellite photo illustration of the area. Near the end of the flight, the animation transitions to surveillance video from Pier 88, which captured the landing. Selected comments from the cockpit voice recorder transcript are displayed as text. The animation audio consists of portions of the recorded air traffic control communications.

The airplane's speed, altitude, and local time are displayed in the lower portion of the screen.

Selected CVR comments:

03:26:54	HOT-1	flaps up.
03:27:07	HOT-1	after takeoff checklist complete.
03:27:10	HOT-1	birds.
03:27:11	CAM	[sound of thump/thud(s) followed by shuddering sound]
03:27:14	HOT-2	uh oh.
03:27:15	HOT-1	we got one rol- both of 'em rolling back.
03:27:18	HOT-1	ignition, start.
03:27:21	HOT-1	I'm starting the APU.
03:27:23	HOT-1	my aircraft.
03:27:24	HOT-2	your aircraft.

03:27:28 HOT-1 get the QRH... loss of thrust on both engines.

03:27:32 RDO-1 mayday mayday mayday. uh this is uh Cactus fifteen thirty nine hit birds, we've lost thrust (in/on) both engines we're turning back towards LaGuardia.

03:27:46 RDO-1 two two zero.

03:27:50 HOT-2 if fuel remaining, engine mode selector, ignition.* ignition.

03:27:55 HOT-2 thrust levers confirm idle.

03:27:58 HOT-1 idle.

03:28:02 HOT-2 airspeed optimum relight. three hundred knots. we don't have that.

03:28:10 RDO-1 we're unable. we may end up in the Hudson.

03:28:14 HOT-2 emergency electrical power... emergency generator not online.

03:28:19 HOT-1 (it?s/is) online.

03:28:21 HOT-2 ATC notify. squawk seventy seven hundred.

03:28:25 HOT-1 yeah. the left one's coming back up a little bit.

03:28:30 HOT-2 distress message, transmit. we did.

03:28:34 RDO-1 unable.

03:28:49 RDO-1 I'm not sure we can make any runway. uh what's over to our right anything in New Jersey maybe Teterboro?

03:28:59 TCAS monitor vertical speed.

03:29:00 HOT-2 no relight after thirty seconds, engine master one and two confirm, off.

03:29:03 RDO-1 yes.

03:29:07 HOT-1 off.

03:29:10 HOT-2 wait thirty seconds.

03:29:11	PA-1	this is the Captain brace for impact.
03:29:14	GPWS	one thousand.
03:29:25	RDO-1	we can't do it.
03:29:28	RDO-1	we're gonna be in the Hudson.
03:29:37	GPWS	too low. terrain.
03:29:41	GPWS	too low. terrain.
03:29:43	GPWS	too low. terrain.
03:29:44	HOT-2	no relight.
03:29:45	HOT-1	ok lets go put the flaps out, put the flaps out.
03:29:45	EGPWS	caution. terrain.
03:29:48	EGPWS	caution. terrain.
03:29:48	HOT-2	flaps out?
03:29:49	EGPWS	terrain terrain. pull up. pull up.
03:30:01	HOT-2	got flaps out.
03:30:03	HOT-2	two hundred fifty feet in the air.
03:30:04	GPWS	too low. terrain.
03:30:06	GPWS	too low. gear.
03:30:06	CAM-2	hundred and seventy knots.
03:30:13	GPWS	caution terrain.
03:30:15	HOT-2	hundred and fifty knots.
03:30:17	HOT-2	"got flaps two, you want more?"
03:30:19	HOT-1	no lets stay at two.
03:30:21	HOT-1	got any ideas?

03:30:23 EGPWS caution terrain.
03:30:23 CAM-2 actually not.
03:30:38 HOT-1 we're gonna brace.
03:30:38 HOT-2 * * switch?
03:30:40 HOT-1 yes.
03:30:43 CAM [End of Recording]

ATC Communications used in animation audio:

UNKN seventy (garbled)
L116 everyday
BTA2750 new york jetlink twenty seven sixty is five thousand turning right one five zero
L116 jetlink twenty seven sixty climb maintain one zero thousand
BTA2760 one zero thousand jetlink twenty seven sixty
L116 cactus fifteen forty nine turn left heading two seven zero
AWE1549 ah this is cactus fifteen thirty nine hit birds we lost thrust in both engines we're turning back towards laguardia
L116 okay yea you need to return to laguardia turn left heading two two zero
AWE1549 two two zero
L116 tower stop your departures we got an emergency returning
LGA who is it
L116 it's fifteen twenty nine he ah bird strike he lost all engines he lost the thrust in the engines he is returning immediately
LGA cactus fifteen twenty nine which engines

L116 he lost thrust in both engines he said

LGA got it

L116 cactus fifteen twenty nine if we can get it to you do you want to try to land runway one three

AWE1549 were unable we may end up in the hudson

L116 jetlink twenty seven sixty turn left zero seven zero

BTA2760 left turn zero seven zero jetlink twenty seven sixty

L116 alright cactus fifteen forty nine its going to be left traffic to runway three one

AWE1549 unable

L116 okay what do you need to land

L116 cactus fifteen forty nine runway four is available if you want to make left traffic to runway four

AWE1549 i am not sure if we can make any runway oh what's over to our right anything in new jersey maybe teterboro

L116 okay yea off to your right is teterboro airport

L116 do you want to try and go to teterboro

AWE1549 yes

L116 teterboro uh empire actually laguardia departure got an emergency inbound

TEB okay go ahead

L116 cactus fifteen twenty nine over the george washington bridge wants to go to the airport right now

TEB he wants to go to our airport check does he need any assistance

L116 ah yes he ah he was a bird strike can i get him in for runway one

TEB runway one that's good

L116 cactus fifteen twenty nine turn right two eight zero you can land runway one at teterboro

AWE1549 we can't do it

L116 okay which runway would you like at teterboro

AWE1549 we're gonna be in the hudson

L116 i'm sorry say again cactus

L116 jetlink twenty seven sixty contact one two six point eight

BTA2760 twenty six eight jetlink twenty seven sixty

L116 cactus ah cactus fifteen forty nine radar contact is lost you also got newark airport off your two o'clock and about seven miles

L116 eagle flight forty seven eighteen turn left heading two one zero

EGF4718 two one zero un forty seven eighteen i don't know i think he said he was going in the hudson

L116 cactus fifteen twenty nine uh you still on

L116 cactus fifteen twenty nine if you can ah you got ah runway two nine available at newark off your two o'clock and seven miles

L116 eagle flight forty seven eighteen climb maintain one two thousand

EGF4718 okay one two thousand and ah leaving five and two eighty heading

L116 and eagle flight forty seven eighteen i'm sorry i missed that say again

EGF4718 and uh we're up to twelve thousand uh two eighty on the heading

L116 okay thank you eagle flight forty seven eighteen turn left two two zero

EGF4718 two two zero forty seven eighteen