

Official and Technical investigation: The Role of the National Transportation Safety Board (NTSB)

Robert Sumwalt, NTSB Chairman, 2017-2021

Executive Director, Boeing Center for Aviation & Aerospace Safety
at Embry-Riddle Aeronautical University (2022-present)

Seminario

Los modelos de investigación de accidentes e incidentes en los modos del transporte: profesionales, operadores, administración, usuarios y víctimas
4 y 5 de mayo – Congreso de los Diputados



EMBRY-RIDDLE
Aeronautical University.







The Board





Boeing Center for Aviation & Aerospace Safety

EMBRY-RIDDLE
Aeronautical University

NTSB Response Operations Center



Situation Room





NTSB

NTSB

United States Of America

Labs









NTSB's Greatest Virtues:
Independence
Transparency
Credibility





NTSB's Greatest Virtues:



Independence

Transparency

Credibility





1967

In 1967, US Congress created an independent NTSB within the newly formed Department of Transportation (DOT) and expanded the NTSB's authority to include all modes of transportation.



April 1, 1967

- US Department of Transportation (DOT) Formed
 - Federal Aviation Administration
 - Federal Highway Administration
 - Federal Railroad Administration
 - NTSB

The law stated that NTSB would be an “independent government agency, located within the DOT, to promote transportation safety by conducting independent accident investigations...”

Is there a possible conflict here?





In 1974, Congress made the
NTSB completely
independent of the DOT.

1974





Independence

The NTSB reports directly to Congress.

The NTSB has no regulatory authority.



Independence

“Proper conduct of the responsibilities assigned to this Board requires vigorous investigation of accidents involving transportation modes regulated by other agencies of government; demands continual review, appraisal, and assessment of the operating practices and regulations of all such agencies or its officials;...”





Independence

... and calls for the making of conclusions and recommendations that may be critical of or adverse to any such agency or its officials.

No federal agency can perform such functions unless it is totally separate and independent from any other department, bureau, commission, or agency of the United States.”

ICAO Guidance



- “The accident investigation authority must be strictly objective and totally impartial and must also be perceived to be so.”
- “It should be established in such a way that it can withstand political or other interference or pressure.”
- ICAO Doc 9756, Part 1 “Organizing and Planning,” Paragraph 2.1.2



ICAO Guidance



- “Many States have achieved this objective by setting up their accident investigation authority as an independent statutory body or by establishing an accident investigation organization that is separate from the civil aviation administration.”
- “In these States, the accident investigation authority reports direct to Congress, Parliament or a ministerial level of government.”
- ICAO Doc 9756, Part 1 “Organizing and Planning,” Paragraph 2.1.2



What are challenges to independence?

- Special interest groups
- Public and political pressures
- Internet blogs
- 24-hour news services





NTSB's Greatest Virtues:

Independence



Transparency

Credibility



Transparency




Transparency



Transparency

NTSB	INTRA-AIRCRAFT COMMUNICATION	TIME and SOURCE
20:26:18.5 HOT-2	yeah.	
20:26:19.3 HOT-1	uh there are a lot of guys in Houston right now that have more seniority than I do uh um that refuse to go to the O or until it gets to Houston.	
20:26:31.3 HOT-4	yeah.	
20:26:32.1 HOT-1	uh I figured well you know I'll go ahead and jump in the O.	
20:26:36.5 HOT-2	yeah.	
20:26:37.0 HOT-1	uh maybe I'll be able to uh take another day off.	
20:26:39.7 HOT	[sound of double chime]	
20:26:41.2 HOT-1	I'll get it.	
20:26:43.1 INT-1	yes?	
20:26:43.5 INT-3	what about using the taxi? we've got a couple of people that are a little annoyed because we're telling them they can't use the taxi.	
20:26:51.3 INT-1	uh well you know as long as I'm sitting here uh let me know whenever they're seated because I don't know when they're gonna—when they're gonna release us to uh to move. uh but go ahead and just keep us updated for each and every person that gets up to go to the taxi I need to know when they're seated, when they're seated.	
20:27:09.1 INT-3	uh okay.	



NATIONAL TRANSPORTATION SAFETY BOARD
OFFICE OF RAILROAD, PIPELINE & HAZARDOUS MATERIALS
INVESTIGATIONS WASHINGTON, D.C. 20594

RAILROAD SIGNAL & TRAIN CONTROL SIGNAL FACTUAL

BCA-15-MR-010

Train Derailment in Philadelphia, Pennsylvania

On the Amtrak Northeast Corridor

May 12, 2015

SIGNAL GROUP FACTUAL

Prepared by: Timothy J. DePaese, Signal Group Chairman

177/10

AMTRAK

Maintenance Analysis Program
 Performance Condition Report - MAP Form

Form Number: 601
 Revision: 10/15
 Date: 10/15/10
 Part of Form 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

Case Number: 15-010
 Date: 5/12/15
 Location: Philadelphia, PA
 Description: Train Derailment in Philadelphia, Pennsylvania

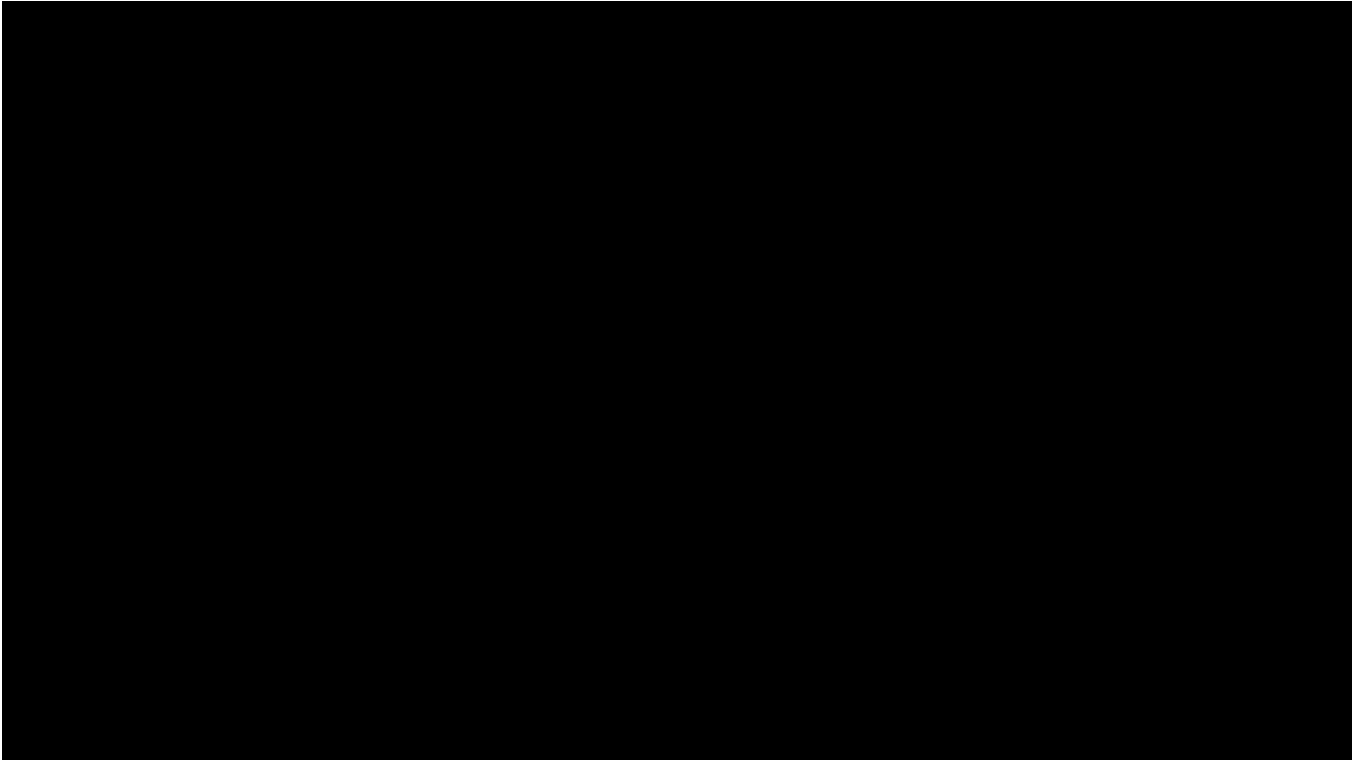
Signal Group: [Redacted]
 Signal: [Redacted]
 Train: [Redacted]

Investigator: Timothy J. DePaese
 Date: 5/12/15

Reviewed by: [Redacted]
 Date: [Redacted]

Approved by: [Redacted]
 Date: [Redacted]







NTSB's Greatest Virtues:

Independence

Transparency

Credibility



Credibility

- We all seek credibility
- How do we achieve it?
- Credibility is built with independence
- Independence relates to credibility



Miracle on the Hudson





Robert L. Sumwalt
Chairman, Board of Inquiry



CAPTAIN
Chesley Sullenberger

THANK YOU

↑	
ance Sciences	340
AMS Hangar	398
ht Operations	320
ance Hangar	312
ht Sim Center	311
→	
of Business	321
←	
of Aviation	341