This collection is available at The State Historical Society of Missouri Research Center-Kansas City. If you would like more information, please contact us at shsofmo-ke@umsystem.edu.

**Introduction**
Technical training materials of Trans World Airlines (TWA) mechanic and maintenance instructor Dan Rex Cornwell. Also includes materials relating to TWA history such as ephemera items, 1960-2002. 17 cubic feet, oversize.

**Donor Information**
This gift was received from Dan Cornwell as accession KA1706 on June 12, 2009. An addition to the collection was received as accession KA2285 on July 9, 2015.

**Copyright:**
The Donor has given and assigned to the State Historical Society of Missouri all rights of copyright which the Donor has in the Materials and in such of the Donor’s works as may be found among any collections of Materials received by the Society from others.

**History / Biography:**
In 1966, Dan Cornwell began work for Trans World Airlines (TWA) as an air conditioning mechanic. He attended Aircraft and Engine mechanic school, obtained an A&P license, and spent approximately 20 years as a mechanic/lead mechanic with the airlines. In October 1986, Mr. Cornwell went to work in the Maintenance Training Department which was responsible for initial, recurrent, and specialty training. His specialty aircraft was the MD80 and DC9 Fleet.

**Description:**
This collection consists of technical training materials related to the following types of aircraft: Boeing 737, Boeing 747, Boeing 757, Boeing 767, Super MD-80, MD-82, and DC-9. Included are technical training guides, handbooks, service guides, base maintenance manuals, operations training, electrical/mechanical handbooks, refueling guides, customer training, system schematics and some magazines. Of particular interest are step-by-step rigging procedures on flight controls for the MD80 and DC9 fleet. Most of the early books ca. 1986 were hand made by the training department, and were very in-depth due to their extensive “hands on” experience.

Also included in the collection is: a wing tip, built by Dan Cornwell as part of his TWA mechanics training program ca. 1968; a picture of MD Series (1995-1998), a drawing of an Ozark Air Lines MD-80; and, artifacts, ephemera and printed materials relating to TWA history.
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BOX 001

TRAINING MANUALS

Folder 1. MD-80 Maintenance Training
Folder 2. MD-80 Maintenance Training
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Folder 4. MD-80 Maintenance Training
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Folder 6. MD-80 Maintenance Training
Folder 7. MD-80 Maintenance Training
Folder 8. MD-80 Maintenance Training
Folder 9. MD-80 Maintenance Training
Folder 10 MD-80 Maintenance Training
Folder 11. MD-80 Maintenance Training

BOX 002

TRAINING GUIDES / MANUALS

Folder 1. 757- Servicing Guide December, 2000
Folder 2. 757- Servicing Guide May, 1997
Folder 4. 757- Pocket Catalog
Folder 5. 747 Pocket Catalog
Folder 9. DC-9 / MD-80 Pocket Catalog March 1, 1997
Folder 10. DC-9 / MD-80 Pocket Catalog March 1, 1997
Folder 11. Flight Controls and Indications
Folder 12. Description and Operation Section
Folder 13. MD-80 Leading Edge Slat Rig
Folder 14. MD-80 /82/83 Circuit Breaker and Relay Locator March, 1997
Folder 15. Boeing Technical Training Student Manual
Folder 16. Boeing Technical Training Student Manual

**BOX 004**

**TRAINING GUIDES / MANUALS**

Folder 1. Boeing Technical Training Student Manual
Folder 2. Boeing Technical Training Student Manual
Folder 5. 757 Initial Training May 1996, A.T.A. Chapter 0, 7,8,9,12,25,35,38,52, and 56
Folder 6. 757 Initial Training May 1996, A.T.A. Chapter 26, 28, 32
Folder 7. 757 Initial Training May 1996, A.T.A. Chapter 27 & 29
Folder 8. 757 Initial Training June 1996, A.T.A. Chapter 24, 33, 36, 21, and 30
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Folder 11. Boeing 757 Fueling guide October 1996
Folder 12. 757 Servicing Guide February 1997
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Folder 19. MD-80 Technical Training Student Manual

**BOX 005**

**TRAINING GUIDES / MANUALS**

Folder 1. MD-80 Technical Training Student Manual
Folder 2. MD-80 Technical Training Student Manual
Folder 3. MD-80 Technical Training Student Manual
Folder 4. MD-80 Technical Training Student Manual
Folder 5. MD-80 Technical Training Student Manual
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Folder 11. MD-80 Technical Training
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Folder 14. MD-80 Technical Training

BOX 006

TRAINING GUIDES / MANUALS
Folder 1. MD-80 Technical Training
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Folder 6. DC-9-80 Take-off and Landing Speeds
Folder 7. DC-9 Amplified checklist
Folder 8. DC-9, MD-80 Electro-Mechanical Handbook May 1990
Folder 9. DC-9, MD-80 Electro-Mechanical Handbook May 1990
Folder 10. DC-9, MD-80 Electro-Mechanical Handbook May 1990
Folder 11. DC-9 Avionics handbook August 1992

BOX 007

TRAINING GUIDES / MANUALS
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Folder 2. DC-9 Initial Training September 1994, Chapter 26, Intro
Folder 3. DC-9 Initial Training Auxiliary Power Unit June 1995
Folder 4. DC-9 Initial Training June 1995 (1)
Folder 5. DC-9 Initial Training June 1995 (2)
Folder 6. DC-9 Initial Training March 1997, Intro. Chapter 27
Folder 7. DC-9 Initial Training March 1997, Chapter 28-57
Folder 10. Boeing Configuration
Folder 11. Boeing 767
Folder 12. Boeing 767 FYI
Folder 14. Corporate Manuals July 18, 1994
Folder 15. Ground Operations Training
Folder 16. Aircraft Ground Handling Procedures November 1996
Folder 18. 747-400 Differences Training May 1994, A.T.A. Chapter 27, 28 & 35
Folder 19. 747-400 Differences Training May 1994, A.T.A. Chapter 21, 36 & 48
Folder 20. 747-400 Differences Training May 1994, A.T.A. Chapter 25, 32, 38 & 52
Folder 23. 747-400 Initial Training November 1994, A.T.A. Chapter 45
Folder 24. TWA Maintenance Program Familiarization July 1995

BOX 008

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Folder 1. C-9 Differences Training August 1995
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Folder 4. B-767 Cockpit Panel View Book
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Folder 6. TWA 767 Servicing guide March 1991
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Folder 8. 767 Maintenance Handbook September 1991
Folder 9. 767 Electrical/Mechanical Handbook May 1992
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Folder 18. Super 80 Master Component List
Folder 19. MD-80 Component Description and Location List (1)
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Folder 4. McDonnell Douglas
Folder 5. MD-82 System Schematics
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Folder 1. MD-80 Maintenance Training
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Folder 4. Aircraft Maintenance Log
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Folder 6. Maintenance Taxi Handbook
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Folder 10. DC-9 APU Troubleshooting Guide April 1991
Folder 11. MD-82 System Schematics (1)
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Folder 1. MD-82 Dfqs/Electronic Displays Operational Description September 1992
Folder 2. Super 80 Maintenance Handbook November 1983 (1)
Folder 4. Hazard Awareness
Folder 5. MD-80 Avionic Self-tests
Folder 7. Current set of Lamm Schematics (1)
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Folder 9. Current set of Lamm Schematics (3)
Folder 10. Boeing Line and base maintenance April 3, 2000
Folder 11. Correspondence
Folder 12. MD-83 Flight Compartment Pilots Instrument Panel November 19, 1996
Folder 13. Boeing 717-200 Access door diagrams and data sheets (1)
Folder 14. Boeing 717-200 Access door diagrams and data sheets (2)
Folder 15. Boeing 707 Planning & Performance (1)
Folder 16. Boeing 707 Planning & Performance (2)
Folder 17. Boeing 707 Planning & Performance (3)

**BOX 012**

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Folder 2. Boeing Line and Base Maintenance April 3, 2000 (2) Volume: AF3
Folder 3. Boeing Line and Base Maintenance April 3, 2000 (3) Volume: AF3
Folder 4. 767 General Familiarization
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**BOX 013**

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Folder 20. Boeing 717 Technical Training Manual (2)
Folder 22. JT4A Overhaul Manual
Folder 23. Boeing Customer Services Training Center 1984
Folder 25. Aircraft Maintenance Technology April 1998

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Folder 1. Douglas Service
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BOX 015

TRAINING GUIDES / MANUALS

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Folder 5. C-9 Refueling/ Defueling Servicing November 1995
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Folder 7. C-9 Ground Support Equipment November 1995
Folder 8. C-9 Towing checklist November 1995
Folder 9. C-9 Hydraulic Servicing November 1995
Folder 10. C-9 Aircraft marshalling November 1995
Folder 11. Basic Pressurization and air conditioning August 1990
Folder 12. Basic Pressurization and air conditioning August 1990
Folder 13. C-9 Liquid Oxygen Servicing checklist December 1995
Folder 14. 707 Vapor Cycle Air Conditioning June 1977
Folder 15. 737 Hydraulics January 1996, A.T.A. Chapter 29
Folder 17. 737 Landing Gear January 1996, A.T.A. Chapter 32
Folder 18. 737-200 & 300 Aircraft General Description January 1996, Chapter 25, 51, 52, 53, 54, 55
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Folder 25. 737 Ice and Rain Protection January 1996, A.T.A. chapter 30
Folder 26. 737 Light January 1996, A.T.A. Chapter 33
Folder 27 Oxygen January 1996, A.T.A. Chapter 35
Folder 31. Servicing guide January 1996
Folder 32. MD-80 Light/HVY C Check
Folder 33. Agreement between World Airline and International and Aerospace March 14, 1975
Folder 34. Agreement between World Airline and International and Aerospace October 31, 1978
Folder 36. Agreement between World Airline and International and Aerospace October 18, 1976

BOX 016 (includes accessions KA1706, KA2285)

TRAINING GUIDES / MANUALS

Folder 1. Interleaf 6 Handbook (Win 95 and Win NT)
Folder 2. Interleaf getting started with Interleaf 6 (Win 95 and Win NT)
Folder 3. Interleaf 6 keyboard shortcuts and palettes
Folder 4. Interleaf 6 Fonts and character sets
Folder 5. Interleaf 6 Clip art
Folder 6. DC-9 Super 80 flight Crew Operating Manual March 1983
Folder 7. DC-9 super 80 flight Crew Operating Manual March 1983
Folder 8-23. Slides
Folder 24. Business cards, contacts
Folder 27. TWA history – 2001-2002 wall calendars; 2002 “Final Departure”

*Tape Recordings: ¼” tape*
Tape 5. C.P.C. May 18, 1982: C.P.C. May 18, 1982: C.P.C. June 1, 1982
Tape 7. 17/8/PS Tape #29 2/24/1986
Tape 8. 17/8/PS Tape #30 2/24/1986

**BOX 017**

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Folder 2. The concept of thrust
Folder 3. Types of gas turbine engines
Folder 4. A typical turbojet engine
Folder 5. Securing of external plumbing
Folder 6. Engine location designations
Folder 7. Variations in jet engine design
Folder 8. MD-80 APU oil reserve servicing
Folder 9. MD-80 CSD transmission servicing
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Folder 13. Winter operating policies De-icing and anti-icing
Folder 14. Mystery of flight 163-crashes
Folder 15. MD-80 Wing clear ice
Folder 16. The path to certification
Folder 17. TWA Cargo compartment integrity
Folder 18. Hydraulics systems reservoir servicing
Folder 19. Energy analysis: mystery of flight 163
Folder 20. De-ice/ anti-ice procedures training
Folder 21. Aircraft receive and dispatch signaling
Folder 22. Winter operations layover preparations for DC-9/MD-80 aircraft
Folder 23. Door rigging fwd pass/service door
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Folder 26. CSD & IDG servicing for all TWA aircraft
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Folder 29. JT 8D-200 Anti bleed system
Folder 30. JT 8D-200 General Description
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Folder 32. P&W JT 8D general description 1-PW 783581
Folder 33. System status test panel operation
Folder 34. Evacuation slides & tail cone installation 13 –MD 468225-1
Folder 35. Fuel& oil servicing 3-55041583-A
Folder 36. Potable water serving system T-MD 368238-1
Folder 37. Introduction to maintenance and servicing 16-MD 498200-1

OVERSIZE
Artifact – Wing tip, ca. 1960’s
MD-80 Ozark Air Lines Drawing