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## FINDING AID TO THE DONALD N. HEIRMAN PAPERS 1958-2014

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## Descriptive Summary

<b>Creator Information</b>	Heirman, Donald, 1940
<b>Title</b>	Donald N. Heirman papers
<b>Collection Identifier</b>	MSA 291
<b>Date Span</b>	1958-2014, predominant 1978-2011
<b>Abstract</b>	This collection contains materials that document the career of leading electromagnetic compatibility expert Donald Heirman. It consists primarily of meeting materials, correspondence, and research relating to global electromagnetic compatibility standardization as well as some artifacts, videos, and memorabilia from his time as a Purdue student.
<b>Extent</b>	24 cubic feet (47 mss. boxes, 1 large flat box)
<b>Finding Aid Author</b>	Tariq Mahmood
<b>Languages</b>	English
<b>Repository</b>	Virginia Kelly Karnes Archives and Special Collections Research Center, Purdue University Libraries

## Administrative Information

<b>Location Information:</b>	HR
<b>Access Restrictions:</b>	Collection is open for research. The collection is stored offsite; 24 hours' notice is required to access the collection. The majority of this collection has been digitized and digital surrogates are available for use, however due to copyright some digital surrogates may only be viewed in the reading room. Those items are marked with an (*). Consult a reference archivist for details.
<b>Acquisition Information:</b>	Initial donation made by Donald N. Heirman, November/16/2011 and he continues to donate materials to the collection.
<b>Accession Number:</b>	20111116, 20120125, 20120215, 20130809, 20120416, 20141201, 20150112, 20141223, 20150202, 20150715, 20151204.
<b>Preferred Citation:</b>	MSA 291, Donald N. Heirman papers, Karnes Archives and Special Collections, Purdue University Libraries
<b>Copyright Notice:</b>	The donor has assigned the copyright in his papers to the Archives; copyright in some items of the collection may be held by their respective authors or publishers. Consult a reference archivist for details.
<b>Related Materials Information:</b>	<p><i>Donald N. Heirman papers</i>, Purdue University Library Archives and Special Collections, 2015. Online Exhibit.</p> <p>Materials related to IEEE (Institute of Electrical and Electronics Engineers) are located at the IEEE History Center archives.</p>

## Subjects and Genres

### Persons

\*Heirman, Donald N. [1940-]  
\*Showers, Ralph M. [1918-2013]  
\*Bronaugh, Edwin L. [1932-2012]  
Hoolihan, Daniel D.  
\*Radasky, William  
\*Violette, Norman J. L.

### Organizations

Accredited Standards Committee on Electromagnetic Compatibility, C63  
American National Standards Institute  
Bell Telephone Laboratories  
Lucent Technologies (Firm)  
Alcatel-Lucent (Firm)  
AT & T (Firm)  
Institute of Electrical and Electronics Engineers  
International Electrotechnical Commission  
\*Don HEIRMAN Consultants  
Purdue University  
United States. Navy  
University of Oklahoma

### Topics

Purdue University – alumni and alumnae  
Electromagnetic compatibility.  
Electromagnetic compatibility--Standards.

### Form and Genre Types

Articles  
Artifacts  
Awards  
Certificates  
Clippings  
Conference proceedings  
Correspondence  
Digital moving image formats  
Presentations (communicative events)  
Reports

### Occupations

Electrical Engineering  
Electronics

## Biography of Donald N. Heirman

Purdue alumnus Donald N. Heirman is known for his involvement and leadership in developing and strengthening electromagnetic compatibility standards worldwide. He was born on August 16, 1940 in Mishawaka, Indiana and graduated from Mishawaka High School in 1958. He was awarded a State Scholarship to attend Purdue starting September 1958. He received his BSEE and MSEE degrees from Purdue University in 1962 and 1963 respectively. He met his wife, Lois Marlene (Smith) Heirman in the administration offices of Wiley Hall. The two married on campus in June 1963.

While at Purdue, Mr. Heirman was an honors student and a member of many student organizations including Omicron Delta Kappa, Tau Beta Pi, Eta Kappa Nu, and Phi Eta Sigma. He also registered for the Navy ROTC and was Commissioned Ensign in the US Navy upon graduation in 1962. After receiving his MSEE degree in 1963, he started his professional career at Bell Labs. He spent the first two years on military leave serving, as a Lieutenant, at the Office of Naval Communications in the Pentagon. He rejoined Bell Labs in 1965 but stayed in the Navy as a Research Reservist for the Office of Naval Research until 1985, when he retired as Commander.

Mr. Heirman's career at Bell Labs spanned over more than three decades until his retirement in 1997. Over this time, he took numerous EMC roles, the highest being the founding manager of Lucent Technologies (Bell Labs) Global Product Compliance Laboratory (GPCL). In this role, he was in charge of the company's major EMC and regulatory test facility and its participation in national and international EMC standardization committees. He also served as a senior EMC Consultant for Lucent Technologies.

Mr. Heirman has participated in national and international standardization activities in some capacity since 1974. He has been involved with organizations such as ANSI ASC C63, the IEEE, and the IEC's International Special Committee on Radio Interference (CISPR). He has contributed to the development of many EMC standards. He is a Life Fellow of the IEEE and an honored life member of the IEEE EMC Society and member of its Board of Directors, chair of its technical committees on EMC measurements, past EMCS president, and past chair of its standards development committee. He has also served as president of the IEEE Standards Association (SA), member of the SA Board of Governors, and member of the IEEE's Board of Directors and Executive Committee. Mr. Heirman has served as the chairman of CISPR and also the chairman of IEC's Advisory Committee on EMC (ACEC). He has also been a member of the Technical Management Committee of the US National Committee of the IEC.

Starting in 1997, Mr. Heirman briefly worked as adjunct professor and senior research scientist at the University of Oklahoma. He also served as the Associate Director of the University's Center for the Study of Wireless EMC. In this role he provided EMC consultation to graduate students, and the Center's founding organizations in their studies on EMC interaction between cellular phones and medical electronics.

After retiring from Bell Labs in 1997, Mr. Heirman started his own EMC consultation business – Don HEIRMAN Consultants. He serves as the President of Don HEIRMAN Consultants and provides EMC training and education consultancy. In this role, he organizes EMC Workshops and Trainings all over the U.S., provides training on standardization processes (employed by IEEE, IEC, and CISPR), and offers guidance on how to become involved in standards development activities.

Mr. Heirman's many contributions to global electro-technical standardization in the field of EMC have been acknowledged in the form of various awards. In November 2008, Mr. Heirman was presented with the prestigious IEC Lord Kelvin award - the highest IEC accolade. He has also received the IEEE Lawrence Cumming Award (1984), the IEEE Standards Medallion (1992), the IEEE EMC Society Richard R. Stoddard Award (1995), the IEEE Steinmetz Award (1997), the ANSI Finegan Award (2003), and the IEEE Goldsmith Legacy League award (2011).

He is a life member of the Purdue Alumni Association, member of the Purdue R. B. Stewart Society, and life member of Purdue President's Council. He received the Purdue Outstanding Electrical and Computer Engineer Award, in 2011, for his outstanding contributions to the field of Electrical and Computer Engineering. He is also a recipient of the Purdue Pinnacle Award (2011) for his extraordinary gift to Purdue University.

Mr. Heirman continues to be a key player and educator in the field of Electromagnetic Compatibility. For more details, refer to his CV which is available on his website: [www.donheirman.com](http://www.donheirman.com)

# Collection Description

## Scope

The Donald N. Heirman Papers (1958-2014; twenty four cubic ft.) documents the professional life and contributions of leading EMC expert Donald Heirman. The papers focus on Mr. Heirman's professional life starting with his engineering degree at Purdue. The bulk of the collection relates to his career at AT&T Bell Labs and his many contributions to EMC standards development. A few personal items showcasing life at Purdue in the 1960's also exist in the collection. Types of materials include standards development committees' meeting agenda, minutes and related correspondences; drafts of EMC standards and associated ballots; projects undertaken at AT&T Bell Labs; conference and seminar proceedings; printed presentations and video lectures; career photographs; awards, certificates and medals; and some amateur videos. The papers are organized into five series:

## Arrangement

### 1. Personal Materials, 1958-2013

The Personal Materials series is divided into the following subseries: Donald N. Heirman and Lois M. Smith Wedding, 1963-2010; Videos, 1961-2010; Awards, Certificates, and other Artifacts, 1958-2012; Papers and articles, 1975-2002, 2012-2013. Types of materials include Mr. Heirman's wedding pictures; videos, including Mr. Heirman's professional life history, and amateur videos showcasing life at Purdue University during the early 1960s; awards, certificates, and other artifacts, including medals, awards, pins, professional certificates, and career photographs; and some personal papers and articles by Mr. Heirman. Materials are listed in chronological order within each of these subseries.

### 2. AT&T/Bell Labs, 1967-2005

This series documents the professional career of Mr. Heirman at AT&T/Bell Labs. The series is divided into the following subseries: Global Product Compliance Laboratory, 1997; Research Papers/Conferences, Trainings, 1980-1996; Projects, 1974-2001. Types of materials include some news articles discussing Mr. Heirman's work, papers documenting his role as Manager GPCL, a few conference and workshop proceedings, and the major projects he worked on. A list of these projects is as follows: Telephone Testing, Human Exposure, FCC Part 15, Interference Suppression, OATS, Anechoic Chambers, Broadcast Services Emissions, ANTELOPE System Test, 2A Applications Processor Test Plan, Antennas, ABESS FCC Applications, TEM Cell, Normalized Site Attenuation, and Compliance Testing. All materials are listed in chronological order within each subseries.

### 3. Standards Activity, 1975-2013

The Standards Activity series documents Mr. Heirman's long association with professional organizations and his many contributions to the development of electro-technical standards in the field of EMC. The series has been divided into three subseries, each showcasing his involvement with the three major organizations: ANSI, 1982-2010; IEEE, 1976-2007; IEC, 1974-2009. Types of materials include agenda, minutes, and related correspondence for technical committee meetings; technical standard drafts, reports, and associated ballots; and documents related to the standards development process. All materials have been arranged in chronological order within each subseries.

#### **4. Courses/Lectures, 1981-2014**

The Courses/Lectures series is divided into two subseries: University of Oklahoma, 1994-2001; Purdue University, 2009-2014. Types of materials include lecture presentations delivered at the two aforementioned universities. Mr. Heirman held the position of Associate Director of the Oklahoma University's Center for the Study of Wireless EMC. Materials related to this role are also included. The series also contains some of Mr. Heirman's lectures at the National Technological University. Materials are listed in chronological order within each subseries.

#### **5. Don HEIRMAN Consultants, 1999-2011**

Mr. Heirman started his own EMC consultation business – Don HEIRMAN Consultants – after retiring from AT&T/Bell Labs. This series documents his work as the President of Don HEIRMAN Consultants and is divided into two subseries: Consultancy Work, 2003-2008; Workshops/Trainings, 1999-2011. Types of materials include business contracts, correspondence related to consulting projects, and various workshops held by DHC. Workshop proceedings and technical trainings are also included. Materials have been arranged in chronological order within each subseries.



## **Descriptive Rules**

Anglo-American Cataloguing Rules, 2<sup>nd</sup> Edition / Describing Archives: A Content Standard

## **Processing Information**

Most of the papers were digitally scanned by Conversion Technologies International Inc. before they were donated to Purdue. The scanned versions are available as PDF files. All physical papers have been housed in acid-free boxes and whenever possible, original order of the materials has been retained.

Most of the VHS cassettes have been digitized and are available as MP4 files and are listed in the finding aid as such. A number of floppy disks were also donated and archivists attempted to extract files using the forensic program, Bulk Extractor. Unfortunately, attempts to recover data were unsuccessful.

## DETAILED DESCRIPTION OF THE COLLECTION

### Series I. Personal Materials, 1958-2013

#### Donald N. Heirman and Lois M. Smith Wedding, 1963- 2010

##### Location   Title

- e-files01 Donald and Lois Heirman engagement and wedding photographs, 1963  
e-files01 Heirman, D. (2010). "Another Residence Hall Romance at Wiley." *Re-connect Purdue University Residence Hall Newsletter*

#### Videos, 1961-2010

##### Location   Title

- e-files02 Purdue life videos, 1961-1962  
e-files26 Campus Alive: The Purdue University Video Magazine (Vol.1, Issue 4), 1993 \*  
e-files03 Professional life history video, 2010

#### Awards, Certificates, and other Artifacts, 1958-2012

##### Location   Title

- 48 Quarterdeck Honors Society Mop, [undated] (Artifact)  
48 US Navy Armed Forces Communications & Electronic Association, Purdue University, Medals  
48 Purdue President's Council, Life Member Pin  
57 Purdue University, Pershing Rifles pledge board, [undated] (Artifact)  
57 Purdue University, Scabbard and Blade pledge board for academic achievement and leadership potential in the military, [undated] (Artifact)  
48 Heirman medals, awards, and pins, 1958-1962, 2011  
e-files04 Purdue University, 1958-1963, 1980s, 2001-2011  
57 Purdue University, Phi Eta Sigma pledge board for outstanding freshmen, 1959 (Artifact)  
48 Purdue University, Excalibur Club Presidential Gavel, 1961 (Artifact)  
FF1D12 Purdue University, campaign poster for President of Excalibur Club in Wiley Hall, 1961  
e-files05 US Navy, 1961-1962, 1978, 1985, 2000  
48 HKN Purdue Class of 1962 Battery, 1962 (Artifact)  
57 Purdue University, Tau Beta Pi pledge board for academic achievement in Engineering, 1962 (Artifact)  
e-files06 AT&T/Bell Labs, 1978-1982, 1991-1997  
e-files07 Career photographs, 1978-2012  
e-files08 IEEE, 1977-2011  
e-files09 Other endorsements, certificates, and memberships, 1989-2002, 2008-2012  
e-files10 Don HEIRMAN Consultants, 1997  
e-files11 ANSI, 1996-2003, 2009  
e-files12 IEC, 1999-2008

#### Papers and Articles, 2012-2013

##### Location   Title

- e-files14 Presentation by Heirman at Pittsburgh University titled "Archiving Professional Records," 2012  
39, f 5 IEEE Electromagnetic Compatibility magazine, Vol. 2, Quarter 4, 2013 (includes article by  
e-files14 Heirman titled "Your papers are Worth Saving")

## Series II. AT&T/Bell Labs, 1967-2005

<u>Location</u>	<u>Title</u>
53, f 7	Bell Laboratories Record, December 1972 *
54, f 11	Bell Labs internal office announcements, 1974-1994 *
53, f 12	Bell Labs News (Vol. 18 No. 49, Vol. 19 No. 33), articles about TEM Cell installation, 1978, 1979 *
26, f 3	Manual on EMC measurements by Polarad Electronics, 1983 *
53, f 14	MMFG Newsletter, December 1988 *
12, f 1	Heirman in the news, 1988-2005
21, f 2	The New Yorker articles, National Institute of Standards and Technology technical notes and special publication, and FCC reports, 1989-2003 *
11, f 5	Bell Labs, view graphs, 1995
58, f 6	United States Council of EMC Laboratories Meeting, Chicago, May 1996 *
61, f 3	United States Council of EMC Laboratories, and American Council of Independent Laboratories, meeting materials, 1996-1998 *
29, f 3	United Kingdom Accreditation Service (UKAS), directory of NAMAS accredited laboratories, 1997 *
46, f 4	American Council of Independent Laboratories, Conformity Assessment Section meeting, Washington DC, February 1998 *
60, f 16	American Council of Independent Laboratories, Eastern Division Spring meeting materials, and EMC committee update, 1998-1999 *
60, f 17	American Council of Independent Laboratories, correspondence related to ACIL funding, and the MRA task force, 1998-1999 *
60, f 14	American Council of Independent Laboratories, Meeting materials related to revival of ACIL Institute, and TCB training, 1999 *

### Global Product Compliance Laboratory (GPCL), 1997

<u>Location</u>	<u>Title</u>
27, f 7	GPCL, application for accreditation through UKAS, 1997 *
28, f 1-2	GPCL, application for accreditation through UKAS, 1997 *
28, f 3-7	GPCL audit, 1997 *
29, f 1-2	GPCL audit, 1997 *

### Research Papers/Conferences, Trainings, 1975-2002

<u>Location</u>	<u>Title</u>
53, f 13	Multiple research papers written by Heirman (includes multiple papers authored by Heirman), 1973-1997 *
e-files13	Research papers and articles, 1975-1982, 1992-2002 (includes multiple papers authored by Heirman)
29, f 10	Abstracts of published papers, 1980-1983
53, f 6	Heirman, Donald N. "Education and Training of the Industrial Regulatory Compliance Test Team." IEEE International Symposium on EMC 18-20 Aug. 1981:365. Print. *
53, f 4	Heirman, Donald N. "Radiated Emission Testing to Determine Regulatory Compliance." National Communications Forum National Electronics Conference 4-6 Oct. 1982. Print.
53, f 11	AT&T Technical Journal Vol. 69 Number 3 and Vol. 72 Number 2, 1990, 1993 (includes two articles by Heirman) *
27, f 6	"1996 DFX Conference," AT&T, Orlando FL, June 1996 *
33, f 8	"Test House Workshop & Telecommunications Seminar," Australian Telecommunications Authority, Melbourne Australia, March 1996

- 34, f 1-2 "Test House Workshop & Telecommunications Seminar," Australian Telecommunications Authority, Melbourne Australia, March 1996, (includes a paper by Heirman titled "Current activities in the development of American National and IEEE EMC standards")

### Projects, 1974-2001

<u>Location</u>	<u>Title</u>
30, f 4	Testing of shielded enclosures, 1967, 1974-1977, 1980-1983 *
29, f 12	Broadcast Services Database, 1974 *
30, f 1-3	Broadcast Services Database, 1974 *
30, f 7	Background material for Anechoic Chambers, 1977-1982
29, f 5	Development of a TEM cell, 1977-1982
29, f 8	Radio frequency absorber for interference suppression, May 1978
4, f 3	HP/Bell Labs meeting on TEM cells, 1979 *
53, f 15	TEM Cell photographs, 1979 (one photograph shows Heirman working on the TEM Cell)
5, f 4-6	"Transverse Electro Magnetic Cell Seminar," IEEE New Jersey Coast Section
e-files15	EMC/Vehicular Technology Chapter, Holmdel NJ, June 1979 *
53, f 2	"Transverse Electro Magnetic Cell Seminar: Final Program," IEEE New Jersey Coast Section EMC/Vehicular Technology Chapter, Holmdel NJ, June 1979 *
6, f 4	"Special Measurements Seminar on Electromagnetic Interference Susceptibility/Emission Measurements using TEM Cell," Bell Labs and NBS, Holmdel NJ, September 1979
59, f 4	FCC, amendments of Parts 2 and 15 of the Commission's Rules, 1979-1989 (14 items) *
26, f 8	Western Electric's compliance with FCC rules part 15 (docket 20780), 1980
26, f 9	Normalized Site Attenuation, 1980 *
27, f 1	Normalized Site Attenuation, 1980 *
54, f 1	Large systems EMI testing, 1980 *
54, f 9	Heirman's comments on EMC LSSS, 1980 *
54, f 10	Memorandum regarding Western Electric's compliance with FCC Rules Part 15, August 1980 *
54, f 5	Open area test site: compliance measurements, funding documents, and a sketch, 1980- 1983 *
27, f 4	First Open Area Test Site submission to FCC, 1981
54, f 2	Large system EMC testing, 1981 *
54, f 6	Holmdel NJ test facility presentation, 1981 *
27, f 2	"Anechoic Chamber Measurement Techniques Workshop," Bell Laboratories, April 1981
30, f 6	"Workshop on Anechoic Chamber Measurement Techniques," Georgia Institute of Technology, Atlanta GA, April 1981
29, f 6	ABCS digital telephone EMC test plans and reports, 1981, 1982 *
30, f 5	AMPS cell testing, 1981-1983
29, f 7	Minutes of FCC Part 15 meeting, 1982
26, f 1	Antelope system test plan, 1982
26, f 2	2A applications processor test plan, 1982
26, f 5	Apache Based Emergency Services FCC applications, 1982 *
26, f 4	Reports, schedules, and manuals regarding antenna calibrations, 1982-1984 *
26, f 6-7	Antenna calibrations, 1982-1993
27, f 3	Antenna calibrations, 1983
54, f 4	Spherical dipole emissions source: user's manual, loan to NBS, and report on modifications, 1983-1987 *
29, f 11	Transfer of acoustic measurement facilities, 1984
54, f 3	EMC requirements for telephones, December 1985 *
3, f 5	"Compliance Testing of Large Distributed Systems to Meet Class A FCC limits," IEEE
e-files16	EMC/Antenna and Propagation/Vehicular Technology Chapter New Jersey Coast Section, Middletown NJ, November 1988 *

- 4, f 1 "Compliance Testing of Large Distributed Systems to Meet Class A FCC limits," IEEE EMC/Antenna and Propagation/Vehicular Technology Chapter New Jersey Coast Section, Middletown NJ, November 1988 \*
- 53, f 3 "Compliance Testing of Large Distributed Systems to Meet Class A FCC limits," IEEE EMC/Antenna and Propagation/Vehicular Technology Chapter New Jersey Coast Section, Middletown NJ, November 1988 \*
- 16, f 5 Antenna calibration round robin tests, 1991 \*
- 59, f 5 FCC, amendments of Parts 2, 15, 18, 25 and 68 of the Commission's Rules, 1992-1999 (12 items) \*
- 60, f 1 FCC, amendments of Parts 2, 15, 18, 25 and 68 of the Commission's Rules, 1992-1999 (12 items) \*
- 29, f 4 Health and safety issues associated with personal communications services, 1996
- 60, f 12 FCC Parts 2, 25 and 68, Presentations, correspondence, and amendments related to the US-EU Mutual Recognition Agreement, 1998 \*
- 60, f 5 US-EU Mutual Recognition Agreement and related documents, 1998-1999 \*
- 60, f 13 FCC, Telecommunication Certification Body meeting materials, 1999 \*
- 60, f 2 FCC, amendments of Parts 2, 15, 25 and 68 of the Commission's Rules, 2000-2001 (3 items) \*

### Series III. Standards Activity, 1975-2011

<u>Location</u>	<u>Title</u>
60, f 7	"A history of the evolution of EMC regulatory bodies and standards," Heirman Donald N. and Stecher Manfred, [undated] *
47	Audio Recording of Mr. Heirman presenting a paper on Harmonics, NTC, San Diego CA, 1974 (audio cassette)
29, f 9	Computer and Business Equipment Manufacturers Association meetings, 1984
22, f 3	Electronic Industries Association, surveys of compliance with EIA interference immunity standards, 1986-1988 *
60, f 6	"A European View," Slater Andrew, EMC Technology, September 1988 *
58, f 5	Romanchik, Daniel. "Changing Standards for a Changing World." Test and Measurement World Jul. 1990:163. *
58, f 1	Commission of the European Communities, Commission Green Paper on the Development of European Standardization Action for Faster Technological Integration in Europe, Brussels, October 1990 *
e-files17	EIA, draft of Standard IS-23 and related papers, 1990-2003, (includes a presentation by Heirman titled "Past Voluntary Immunity Initiatives")
23, f 3	Telecommunications Industry Association, technical reports, and drafts of standard PN-3210, 1993-1994 *
e-files18	FCC public notices, 1993-1996
17, f 1	FCC public notices, ASC C63 SC1 draft standards, and CISPR/A WG1 documents related to emissions testing in TEM waveguides, 1993-1998 *
32, f 2	Telecommunications Industry Association, ballot for standard 3210A, 1994-1995 *
46, f 3	Telecommunications Industry Association, Briefing on National Cooperation for Laboratory Accreditation, 1997-1998 (includes multiple presentations by Heirman)
60, f 15	European Telecommunications Standards Institute TC Electromagnetic compatibility and Radio spectrum Matters, Correspondence, 1999 *
58, f 8	AAES, Description, agenda, and registration information about the AAES briefing on disability access regulatory developments, Bethesda MD, October 1999 *
6, f 3	History of military EMC specifications, 2000 *
54, f 7	Transcript of Heirman's interview about "EMC in a high frequency world" with Compliance Engineering, December 2000 *
45, f 1	"Radio and Telephone Terminal Equipment (R&TTE) Directive Training Workshop," TCB Council, Rockville MD, July 2000 *
31, f 5-8	ASC C63, meeting materials for SC1, SC3, SC5, SC6, SC8, steering committee, USEMC Standards Corporation, and CISPR/A TAG, 2000-2003 (includes two presentations and one research paper by Heirman) *
4, f 6	North American Calibration Cooperation, Canada meeting, 2001 *
4, f 7	National Cooperation for Laboratory Accreditation, Operations Council Teleconference, 2001 *
4, f 8	Oklahoma University C63.18 seminar, and International Laboratory Accreditation Cooperation policy on traceability of measurement results, 2001 *
9, f 9	Correspondence with Congressman James R. Langevin, 2001 *
10, f 2-3	USNC/IEC Technical Management Committee, IEEE EMC society, and ACEC, meeting materials, 2005, (includes a presentation by Heirman titled "Update of Joint Task Force Activity Under CISPR/A Management")
58, f 7	Electromagnetic Energy Association (EEA), Mr. Heirman's presentation during the RFI session at EEA meeting, May 2013 (contains a presentation by Mr. Heirman titled "Standardization - let's all do the same thing")

## ANSI, 1982-2010

<u>Location</u>	<u>Title</u>
22, f 4	ASC C63, approval of formation of Subcommittee 5 of ASC C63, 1982-1989
e-files19	ASC C63 SC5, reports and comments on Immunity of Home Entertainment Devices, 1984-1996
21, f 6-7	ASC C63 SC5, immunity of home entertainment devices, 1984-1997 (includes a presentation and a research paper by Heirman) *
22, f 1	ASC C63 SC5, immunity of home entertainment devices, 1984-1997 *
22, f 6	ASC C63 SC1, drafts of standard C63.2 and related comments, 1985-1989 *
22, f 2	ASC C63 SC5, Cordless Telephone/911 WG documents, 1987-1989 *
22, f 5	ASC C63 SC5, EIA standards revision, 1987-1989 *
58, f 3	ANSI, Report on meetings between ANSI and European standardization organizations (European Committee for Standardization, European Committee for Electrotechnical Standardization, Belgium Standards Institute, and the European Commission), Brussels, March 1990 *
17, f 5	ASC C63 SC1, conducted emissions 40-80cm study, 1990-1995
58, f 4	ANSI, Report on meetings between ANSI delegates and European Committee, Reston VA and Brussels, April 1991 *
16, f 1	ASC C63 EMC, C63.16 ballots and working group documents, 1991-1992 *
24, f 3	ASC C63 SC1, meeting materials, project reports, and drafts of standards, 1991-1993 *
24, f 1-2	ASC C63 SC1, drafts, ballots, and meetings regarding standard C63.15, 1991-1994 *
25, f 1-2	ASC C63 SC5, FCC Compliance and Information Bureau, and American Radio Relay League, meeting materials and technical reports related to telephone interference, 1991-1996 *
61, f 2	USNC/IEC, formation of United States Coordination Committee on Electromagnetic Compatibility, meeting materials and correspondence related to US participation in IEC and ISO activities, 1991-1996 *
16, f 3	ASC C63 SC1 and SC8, documents related to measurements below 30 MHz, 1991-1997 *
15, f 3	ANSI ASC C63, subcommittee meeting materials, policies and procedures, 1991-1998 *
20, f 9	ASC C63, PINS forms, SC1 correspondence with FCC, 1992-1999 *
24, f 4	ASC C63 SC1, comments and ballots for standard C63.15/d3, 1993 *
32, f 3	C63 SC5, ballot for standard PN-3210 (TIA TR41.7.3), 1993
23, f 4	ASC C63 SC1, meeting materials, 1993-1994
22, f 7-8	ASC C63 SC1, meeting materials, project reports, and draft standards, 1993-1995 *
23, f 2	ASC C63 SC5, meeting materials, 1993-1995
33, f 5	C63 SC1, meetings and standards related to antenna calibration, 1993-1995 *
23, f 6-7	ASC C63 SC1, meeting materials, project reports, and drafts of standards, 1993-1996 *
33, f 2-3	ASC C63, SC1 meeting materials, and drafts of standards, 1993-1997 *
33, f 4	ASC C63, meeting materials, 1993-1997
32, f 5-6	C63 SC1, meeting materials, 1994 *
32, f 7	ASC C63 SC1 and SC3, meeting materials, and drafts of standards, 1992-1995 *
33, f 1	ASC C63 SC3, meeting materials, 1994-1995 *
20, f 1	ASC C63 SC8, meeting materials, and draft of standard for ad hoc testing of medical devices, 1995
23, f 5	ASC C63 SC1, meeting materials, 1995
61, f 1	United States Coordination Committee on Electromagnetic Compatibility, correspondence, 1995 *
e-files20	ASC C63 SC1, PINS forms, project reports, and correspondence, 1995-1996
17, f 6	ASC C63 SC1 and SC5, meeting minutes, membership information and project reports, 1995-1996 *
19, f 7	ASC C63 SC7, charter of a new standard, and draft of standard C63.17, 1995-1996 *
15, f 1	ANSI ASC C63, interpretation of figures 9(a) and 9(c) in ANSI standard C63.4-1992, 1996 *

- 15, f 2 ANSI ASC C63, revision of C63.4 by Ralph Showers, 1996 \*
- 16, f 6 ASC C63 EMC SC1, draft of standard C63.4-1996, 1996 \*
- 17, f 2 ASC C63 SC6, laboratory accreditation meetings, 1996 \*
- 17, f 3 ASC C63 SC7, ballots for C63.17/d2, 1996 \*
- 18, f 3 ASC C63 EMC, meetings materials and membership information, 1996 \*
- 21, f 5 ASC C63 Steering Committee, proposal for new emission testing method using dual-polarization BGF simulator, 1996
- 35, f 1-2 "C63 EMC measurement uncertainty workshop," ANSI ASC C63, NIST, and US Department of Commerce; Linthicum MD, April 1996
- 32, f 4 C63 SC5, meeting materials, 1996 \*
- 19, f 10 ASC C63 SC8, meeting materials, committee charter, and draft standards, 1996, 1997 \*
- 19, f 2 ASC C63 SC5, meeting minutes, and draft of EMC standard for military equipment, 1996-1997 \*
- 20, f 8 ASC C63 SC5, meeting materials, 1996-1997
- e-files21 ASC C63, drafts, ballots, and correspondence related to standard C63.4, 1996-1998
- 19, f 6 ASC C63 SC8, meeting materials, status reports, and drafts of standards related to medical and patient-connected devices, 1996-1998 \*
- 20, f 7 ASC C63 SC8, meeting materials, and related drafts of standards, 1996-1998 \*
- 21, f 1 ASC C63 SC6 and SC3, meeting materials, 1996-1998 \*
- 18, f 4 ASC C63 SC1, meeting materials, 1996-1999 \*
- 19, f 1 ASC C63 SC6, meeting materials regarding site to site reproducibility and laboratory accreditation, 1996-1999 \*
- 20, f 5 ASC C63, lists of standards, ordering information, and committee membership information, 1996-1999 \*
- 21, f 4 ASC C63 SC1, meeting materials, 1996-1999 \*
- 16, f 2 ASC C63 EMC, ballots for C63.17/d3 and C63.14/d1, 1997 \*
- 17, f 4 ASC C63 SC2, revisions of standard C63.14, 1997 \*
- 18, f 1-2 ASC C63 EMC, comments on and proposed changes to standard C63.4, 1997 \*
- 21, f 3 ASC C63 SC3, CISPR reorganization, proliferation of EMC standards, TC77 activity, and power-frequency harmonic standard, 1997 \*
- 23, f 1 ASC C63 EMC, Heirman's comments on the standard C63.4, 1997 \*
- 34, f 3 "General Requirements for the Competence of Calibration and Testing Laboratories," USEMC Standards Corporation, ANSI ASC C63, and NIST; ISO/IEC Guide 25 Workshop #1, Linthicum MD, October 1997 (includes multiple presentations by Heirman)
- 45, f 2 "EMC Measurement Uncertainty Workshop #4," USEMC Standards Corporation, and ANSI ASC C63, Linthicum MD, October 1997 (includes multiple presentations by Heirman)
- 53, f 8-9 "C63 EMC Measurement Uncertainty Workshop," ANSI ASC C63, IEEE EMC Society, and NIST, Glenview IL, April 1997 (includes multiple presentations by Heirman) \*
- 19, f 9 ASC C63 SC8, meeting materials, 1997, 1998 \*
- 19, f 3 ASC C63 SC1, meeting materials, standard drafts (MP-5 and ESD measurement uncertainty), and proposal for change of standard C63.2, 1997-1998
- 20, f 2 ASC C63 SC1 and SC3, meeting materials, 1997-1998 \*
- 15, f 4-5 ASC C63 EMC, ballots for various standards, 1997-1999 \*
- 32, f 1 ASC C63, meeting materials, and drafts of standards, 1997-2001 \*
- 16, f 4 C63 SC1, correspondence, and GTEM acceptance criteria, 1998 \*
- 19, f 5 ASC C63 SC1, meeting materials, 1998
- 20, f 4 ASC C63, Main Committee meeting materials, 1998 \*
- 58, f 9 ANSI, Reporter (January 1998, and February 1998), 1998 \*
- 44, f 4-5 "EMC Measurement Uncertainty Workshop," USEMC Standards Corporation, and ANSI ASC C63, Santa Clara CA, April 1998 (includes multiple presentations by Heirman) \*
- 54, f 13 "EMC Measurement Uncertainty Workshop," USEMC Standards Corporation, and ANSI ASC C63, Portland OR, June 1998 (includes multiple presentations by Heirman) \*
- 20, f 3 ASC C63, Steering Committee meeting materials, and Newsletter information, 1998, 1999 \*



- 31, f 4 ANSI C63, technical dictionary, and ballots for standard C63.15, 1998, 2002, 2004 \*
- 19, f 4 ASC C63 SC6, meeting materials, 1998-1999 \*
- 19, f 8 ASC C63, Main Committee meeting materials, 1998-1999 \*
- 20, f 6 ASC C63 SC8, meeting materials, and related drafts of standards, 1998-1999 \*
- 60, f 4 ASC C63, ballots for standards C63.12 and C63.4, 1998-1999 \*
- 18, f 5 ASC C63 SC8, C63.19 WG meeting minutes, and draft 6 of standard C63.19, 1999 \*
- 12, f 7 "Powerline Harmonics Workshop no. 4," USNC/IEC, and United States Coordination Committee on Electromagnetic Compatibility, Linthicum MD, May 2000
- 55, f 1-2 ASC C63, meeting materials for Steering Committee, SC6, SC8, SC1, C63, and USEMC Standards Corporation, October 2000 \*
- 9, f 4-5 ANSI ASC C63, ballots for and drafts of standard C63.15, and meeting materials, 2000, 2001 \*
- 9, f 7 USEMCSC, financial documents for Uncertainty Workshop, 2000-2001 \*
- 9, f 8 ANSI ASC C63, draft of standard C63.5, 2001 \*
- 59, f 1-3 ASC C63, meeting materials for SC1, SC3, SC5, SC6, SC8, steering committee, and USEMC Standards Corporation, May 2002 \*
- 31, f 1 ASC C63 EMC, meeting materials, 2002-2003
- 31, f 2 ASC C63 SC1, meeting materials, 2002-2003 \*
- 31, f 3 ASC C63, meeting materials for SC3, SC6, SC8, Steering Committee, and USEMC Standards Corporation, 2002-2003
- 12, f 2 USNC Technical Management Committee, meeting materials, 2003 \*
- 14, f 2 C63.7 Guide, 2003 \*
- 14, f 3 IEEE Standards Association, awards ceremony, 2003
- 14, f 1 ASC C63 EMC, Sub-committee meetings' materials, 2003-2004 (includes multiple presentations by Heirman)
- 6, f 7 "C63.4 workshop and Comparison workshop," Santa Clara CA, August 2004 \*
- 6, f 5 USEMCSC, Board of Directors teleconference, 2004 \*
- 5, f 7 United States Coordination Committee on Electromagnetic Compatibility, Technical Management Committee meeting materials, September 2005 \*
- 31, f 9 ASC C63, meeting materials for SC1, SC3, SC5, Steering committee, USEMC Standards Corporation, 2005 \*
- 43, f 1-2 "ANSI C63.10 Workshop: Testing Unlicensed Wireless Devices," USEMC Standards Corporation, ANSI ASC C63, and iNARTE, Northbrook IL, June 2010

## **IEEE, 1976-2007**

- | <u>Location</u> | <u>Title</u>  |
|-----------------|---|
| 38, f 6         | IEEE, Drafts of COMSOC standard 455 and PES standard 430, 1976-1984 *                                       |
| 39, f 2         | IEEE New Jersey Coast Section, meeting materials, 1977-1979   |
| 38, f 8         | IEEE, Draft of PES standard 472, ballot for PES standard P644, and draft of EMCS standard 473, 1978, 1985 * |
| 38, f 5         | IEEE EMCS Standards Committee, meeting materials, 1980  |
| 58, f 10        | IEEE EMCS, Board of Directors meeting materials, New York City NY, February 1980 *                          |
| 58, f 11        | IEEE EMCS, Board of Directors meeting materials, Seattle WA, June 1980 *                                    |
| 58, f 12        | IEEE EMCS, Board of Directors meeting materials, Baltimore MD, October 1980 *                               |
| 38, f 4         | IEEE Power Engineering Society, draft of standard 587, 1980-1982 *  |
| 39, f 1         | IEEE New Jersey Coast Section, copies of monthly publication "The Scanner," 1980-1984 *                     |
| 38, f 3         | IEEE EMC Society, ballots for standards 213-214, 1981   |
| 58, f 13        | IEEE EMCS, Board of Directors meeting materials, Washington DC, February 1981 *                             |
| 58, f 14        | IEEE EMCS, Board of Directors meeting materials, Boulder CO, August 1981 *                                  |
| 37, f 1-2       | IEEE EMC Society, ballots and comments for standards 187 and 285-299, 1982-1983                             |

- 37, f 3-5 IEEE EMCS Standards Committee, meetings materials and drafts of standards, 1982-1985
- 36, f 3-4 IEEE EMC Society, meeting materials and status of standards, 1983, 1984 \*
- 36, f 7 IEEE EMC Society, Standards Board meetings, 1984 \*
- 36, f 1 IEEE EMC Society, Board of Directors meeting, 1984
- 36, f 2 IEEE EMCS Standards Committee, meeting materials, and drafts of standards, 1984
- 39, f 4 IEEE Power Engineering Society, Draft of standard 430, 1984
- 60, f 3 IEEE EMCS, Board of Directors meeting materials, Tokyo, October 1984 (includes an article written by Mr. Heirman titled "1984 EMC Society Newsletter article noting Board of Directors meeting at the Tokyo 1984 EMC Symposium," and a copy of the EMC Society Newsletter Issue 122 1984) \*
- 37, f 6 IEEE EMC Society, ballots for standard 139, 1984-1985 \*
- 38, f 1-2 IEEE EMC Society, ballots for standard 139, 1984-1985 \*
- 36, f 8 IEEE Power Engineering Society, standard C37.90.2, 1985
- 38, f 7 IEEE EMC Society, ballots for standards 376 and 377, 1985 \*
- 39, f 3 IEEE EMCS Standards Committee, membership information, 1985
- 36, f 5-6 IEEE EMC Society, drafts and ballots for standard 139, 1986 \*
- 14, f 5 "Tutorial Session 2A of the IEEE EMC Symposium," IEEE EMCS, Denver, 1989
- 58, f 2 IEEE Standards Department, IEEE Statement on Improving US Participation in International Standards Activities, April 1990 \*
- e-files22 "IEEE International Symposium on EMC," IEEE EMC Society, Cherry Hill NJ, August 1991
- e-files29 "Electromagnetic Interference...A Global Engineering Challenge," IEEE EMCS, 1992 \*
- 12, f 6 "Electromagnetic Compatibility Symposium," IEEE, Dallas, 1993 (includes multiple presentations by Heirman) \*
- e-files30 IEEE EMC Society, Awards Ceremony, August 1996 \*
- 47 IEEE EMC Society, Standards Workshop, August 1996 (six VHS cassettes) \*
- e-files27 IEEE EMC Symposium, Austin TX, 1997 (contains video of Mr. Heirman receiving the Steinmetz Award) \*
- 60, f 9 IEEE Standards Association, email correspondence related to conformity assessment, 1998-1999 \*
- 10, f 4-5 [PARTIALLY RESTRICTED until March 2026] IEEE Standards Board meetings, 2000 (includes multiple documents by Heirman)
- 10, f 6 IEEE EMCS Board of Directors, IEEE EMCS Standards and Advisory Coordination Committee, IEEE EMCS Standards Development Committee, and IEEE EMCS Phoenix Chapter, meeting materials, 2000
- 11, f 1 IEEE EMCS Board of Directors, IEEE EMCS Standards and Advisory Coordination Committee, IEEE EMCS Standards Development Committee, and IEEE EMCS Phoenix Chapter, meeting materials, 2000
- 4, f 5 IEEE Standards Council of Canada, standard 1534 ballot results, 2001 \*
- 53, f 10 IEEE Transactions on Electromagnetic Compatibility, Vol. 44 Number 1, February 2002 (includes paper by Heirman titled "CISPR Subcommittee A Uncertainty Activity") \*
- 54, f 12 "CISPR Subcommittee A Uncertainty Activity," Heirman Donald N., IEEE Transactions on EMC, Vol. 44, No. 1, February 2002 \*
- 11, f 2-4 IEEE Standards Association activity, 2004 (includes multiple presentations by Heirman)
- 4, f 2 "IEEE Standards Association China Summit," IEEE, Piscataway NJ, August 2005 (includes multiple presentations by Heirman) \*
- 6, f 6 IEEE, Board of Directors meeting, June 2005 \*
- 8, f 4-5 "China Summit," IEEE, Piscataway NJ, August 2005 \*
- 12, f 3 IEEE Standards Association, briefing for IEEE President and President-elect, 2006-2007 (includes a presentation by Heirman titled "Interactions with OUs") \*
- 12, f 4 IEEE, Board meetings, 2007 \*
- e-files31 IEEE, Heirman interview, February 2015 \*

## IEC, 1974-2010

<u>Location</u>	<u>Title</u>
e-files23	Heirman's review of CISPR annual meetings, [undated]
60, f 8	"CISPR Subcommittee A Uncertainty Activity," Heirman Donald N., [undated] *
2, f 5-6	IEC CISPR/A, Secretariat documents, 1975-1989 *
3, f 1	IEC CISPR/A, Secretariat documents, 1975-1989 *
1, f 6	IEC CISPR/A, meetings material, 1979-1995 *
2, f 1-4	IEC CISPR/A, Central Office documents, 1980-1994 *
1, f 4-5	IEC CISPR/A, Secretariat documents, 1989-1995 *
49, f 1-3	IEC CISPR, Standard CISPR 16-1 and related amendments, 1993-1999 *
1, f 7	IEC CISPR/A Working Group 1, IEC CISPR/A Working Group 2 and IEC CISPR Plenary Assembly, meeting materials, 1996-1998 *
49, f 4-8	IEC CISPR, Standard CISPR 16-2 and related amendments, 1996-2003 *
e-files24	IEC CISPR/A WG1, drafts of standard related to emissions testing in TEM waveguides, 1997-1998
27, f 5	ISO/IEC, draft of standard ISO/IEC 17025, 1999 *
12, f 8	"IEC EMC Standardization Workshop," IEC Central Office, IEC ACEC, and DHC, Baltimore MD, October 1999 (includes a presentation by Heirman titled "ANSI ASC C63 Subcommittee 1 Activity")
13, f 1	"IEC EMC Standardization Workshop," IEC Central Office, IEC ACEC, and DHC, Baltimore MD, October 1999 (includes a presentation by Heirman titled "CISPR 22 and ANSI C63.4")
43, f 5	"IEC EMC Standardization Workshop," IEC Central Office, IEC ACEC, and DHC, Baltimore MD, October 1999 (includes a presentation by Heirman titled "ANSI ASC C63 Subcommittee 1 Activity") (Copy 2)
44, f 1	"IEC EMC Standardization Workshop," IEC Central Office, IEC ACEC, and DHC, Baltimore MD, October 1999 (includes a presentation by Heirman titled "CISPR 22 and ANSI C63.4") (Copy 2)
60, f 11	IEC, Bits & Bytes Vol. 18, and E-tech, 2000 *
49, f 9	IEC CISPR, Standard CISPR 16-3 and related amendments, 2000-2003 *
50, f 1-2	IEC CISPR, Standard CISPR 16-3 and related amendments, 2000-2003 *
8, f 2-3	IEC Technical Committee 77 and IEC ACEC, meetings materials, 2001 (includes a presentation by Heirman titled "CISPR Basic Standards") *
13, f 5	CISPR SC I WG3, drafts of standard related to emissions from IT equipment, 2002 *
50, f 3	IEC CISPR, Standard CISPR 16-4, 2002 *
13, f 2-4	CISPR, Working Group meetings, 2003 *
51, f 3	IEC CISPR, Standard CISPR 16-1-5, 2003 *
51, f 7	IEC CISPR, Standard CISPR 16-2-4, 2003 *
52, f 2	IEC CISPR, Standard CISPR 16-4-2, 2003 *
52, f 4	IEC CISPR, Standard CISPR 16-4-4, 2003 *
50, f 10	IEC CISPR, Standard CISPR 16-1-3, 2003-2004 *
52, f 3	IEC CISPR, Standard CISPR 16-4-3 and related amendments, 2003-2004 *
51, f 4	IEC CISPR, Standard CISPR 16-2-1 and related amendments, 2003-2005 *
51, f 5	IEC CISPR, Standard CISPR 16-2-2 and related amendments, 2003-2005 *
52, f 1	IEC CISPR, Standard CISPR 16-4-1 and related amendments, 2003-2005 *
50, f 4-6	IEC CISPR, Standard CISPR 16-1-1 and related amendments, 2003-2006 *
50, f 7-9	IEC CISPR, Standard CISPR 16-1-2 and related amendments, 2003-2006 *
51, f 6	IEC CISPR, Standard CISPR 16-2-3 and related amendments, 2003-2006 *
50, f 11	IEC CISPR, Standard CISPR 16-1-4 and related amendments, 2003-2007 *

- 51, f 1-2 IEC CISPR, Standard CISPR 16-1-4 and related amendments, 2003-2007 \*
- 8, f 1 CISPR/I Working Groups 2 and 3, meeting materials, 2005 \*
- 52, f 5 IEC CISPR, Standard CISPR 16-4-5, 2006 \*
- 3, f 4 IEC CISPR, meetings materials, 2009 (includes a presentation by Heirman titled "CISPR Report") \*
- 53, f 5 Heirman, Donald N. and Stecher, Manfred. "History of CISPR." In Compliance Magazine Jun. 2010: 36-41. Print. \*

## Series IV. Courses/Lectures, 1981-2014

<u>Location</u>	<u>Title</u>
54, f 8f	"EMC Engineering: A Cost Effective Approach to the Control of Noise in Electronic Systems," The Center for Professional Advancement, 1981-1982 *
33, f 6	"International EMC Requirements and Conformity Assessment and the European community EMC Directive Approach," Heirman, Donald N., National Technological University, July 1993
33, f 7	National Technological University, Course evaluations, 1995 *
56, f 2	"Introduction to Medical Directives Seminar," TUV Rheinland, 1993 *
9, f 2-3	"International EMC Standards, Requirements, Measurements, and the European Union Approach," The Center for Professional Advancement, Amsterdam, July 1996 (includes multiple presentations by Heirman)
40, f 1-2	"EMC Design and Electromagnetic Interference Mitigation," The Center for Professional Advancement, Amsterdam, July 1996 *
40, f 3-4	"EMC Design and Electromagnetic Interference Mitigation," The Center for Professional Advancement, Amsterdam, July 1997 *
35, f 6	National Technological University, course evaluation correspondence, 1996 *
40, f 5-6	"International EMC Standards, Requirements, Measurements, and the EU Approach," The Center for Professional Advancement, Amsterdam, May 1998 (includes multiple presentations by Heirman) *
40, f 7-8	"International EMC Standards, Measurements and the EU Approach," The Center for Professional Advancement, Amsterdam, July 2001 (includes multiple presentations by Heirman) *

## University of Oklahoma, 1994-2001

<u>Location</u>	<u>Title</u>
55, f 4-5	"Forum #1 EMC Challenge – Medical Wireless Device Interaction," University of Oklahoma, HIMA, and CTIA, Dallas TX, September 1994 (includes a presentation by Heirman titled "Basic EMC Design Considerations and Impact") *
44, f 2-3	"Forum #2 EMC Challenge – Creating Tools for the EMC Challenge," University of Oklahoma Center for the Study of Wireless EMC, Dallas TX, October 1995 (includes a presentation by Heirman titled "EMC Challenge Testing Facilities") *
35, f 4-5	"EMC Forum #3," University of Oklahoma Center for the Study of Wireless EMC, The EMC Challenge: Focus on Solutions, Washington DC, September 1996 *
46, f 1-2	"EMC Basics," University of Oklahoma Center for the Study of Wireless EMC, Norman OK, June 1996 (includes multiple presentations by Heirman)
41, f 2-4	"Forum #4 New Advances in Wireless EMC – Industry Applications," University of Oklahoma Center for the Study of Wireless EMC, Dallas TX, October 1997 (includes multiple presentations by Heirman) *
41, f 1	"Forum #5 Advances in Wireless EMC – Broad Applications," University of Oklahoma Center for the Study of Wireless EMC, Arlington VA, October 1998 *
54, f 14	"On-Site Medical Device Immunity Testing," University of Oklahoma Center for the Study of Wireless EMC, Norman OK, May 1998 (contains one presentation by Heirman titled "Review of C63 Activity") *
e-files28	"Don Heirman Seminar: Electromagnetic Compatibility Basics," University of Oklahoma, 1998-1999 (six lecture videos) *
41, f 5	"On-site Medical Device Immunity Testing," University of Oklahoma Center for the Study of Wireless EMC, and USEMC Standards Corporation, Washington DC, November 1999 (includes multiple presentations by Heirman) *
45, f 4	"On-site Medical Device Immunity Testing," University of Oklahoma Center for the Study of Wireless EMC, and USEMC Standards Corporation, Washington DC, November 1999 (includes multiple presentations by Heirman) (Copy 2) *

- 55, f 6 EMC Frequency Research: Cellular Telephones and their Affect on the Human Brain, University of Oklahoma Center for the Study of Wireless EMC, March 2001 \*
- 56, f 1 EMC Frequency Research: Cellular Telephones and their Affect on the Human Brain, University of Oklahoma Center for the Study of Wireless EMC, March 2001 \*

**Purdue University, 2009-2014**

<u>Location</u>	<u>Title</u>
e-files25	ECE 479 course material, 2009-2014 (includes a presentation by Heirman)

## Series V. Don HEIRMAN Consultants, 1999-2011

<u>Location</u>	<u>Title</u>
7, f 4	Book of abstracts for the 16th International Zurich Symposium on EMC, February 2005 *
14, f 4	IEEE EMC Transactions, research paper submissions, 2007 (includes multiple papers by Heirman) *

### Consultancy Work, 2003-2008

<u>Location</u>	<u>Title</u>
5, f 1-3	Don Heirman Consultants, special projects, 2003-2004 *
6, f 1-2	(DHC business), 2004-2007 (includes a couple of presentations by Heirman) *
12, f 5	<b>[RESTRICTED]</b> Don Heirman Consultants, business contracts, 2004-2008

### Workshops/Trainings, 1999-2011

<u>Location</u>	<u>Title</u>
55, f 3	"Measurement of Radio-Noise Emissions," USEMC Standards Corporation and ANSI ASC C63 EMC, Seattle WA, July 1999 (includes multiple presentations by Heirman) *
34, f 4-5	"Bluetooth/Spread Spectrum Workshop," H&H Enterprises, Baltimore MD, August 2000 (includes a presentation by Heirman titled "Overview of SAR and MPE Requirements for Spread Spectrum Devices")
43, f 3	"Bluetooth/Spread Spectrum Workshop," H&H Enterprises, Baltimore MD, August 2000, (includes a presentation by Heirman titled "Overview of SAR and MPE Requirements for Spread Spectrum Devices") (Copy 2)
34, f 6-7	"TCB Workshop," H&H Enterprises, Baltimore MD, February 2000 (includes multiple presentations by Heirman)
42, f 1-3	"TCB Workshop," H&H Enterprises, Baltimore MD, February 2000, (includes multiple presentations by Heirman) (Copy 2)
35, f 3	"SAR/MPE Requirements and Testing Workshop," H&H Enterprises, Salt Lake City UT, May 2000 (includes a presentation by Heirman titled "Overview of SAR and MPE Requirements")
42, f 4	"SAR/MPE Requirements and Testing Workshop," H&H Enterprises, Salt Lake City UT, May 2000 (includes a presentation by Heirman titled "Overview of SAR and MPE Requirements") (Copy 2)
53, f 1	"EMC Brasil 2002: A Colloquium and Exhibition," IEEE EMC Society, Sao Paulo Brasil, November 2002 (includes a presentation by Heirman titled "Global EMC Standards for Emissions") *
4, f 4	"Measurement of EMC Between Mobile Phones and Hearing Aids," USEMC Standards Corporation and ANSI ASC C63 EMC, Cedar Park TX, December 2003 (includes a couple of presentations by Heirman)
42, f 5	"Measurement of EMC Between Mobile Phones and Hearing Aids," USEMC Standards Corporation and ANSI ASC C63 EMC, Cedar Park TX, December 2003 (includes a couple of presentations by Heirman) (Copy 2)
6, f 8-9	"The World of EMC Standards and their Relationships," IEEE EMC Society Milwaukee Chapter, Milwaukee WI, March 2004 (includes multiple presentations by Heirman) *
56, f 3-4	"The World of "EMC Standards," NARTE, September 2004 (includes multiple presentations by Heirman) *
45, f 3	"Calibration of Antennas Workshop," USEMC Standards Corporation, and ANSI ASC C63, Hillsboro OR, August 2006 (includes multiple presentations by Heirman) *
3, f 2-3	"High Power Electromagnetic Threats: High Altitude Electromagnetic Pulse, Intentional Electromagnetic Interference," INARTE and DHC, Gaithersburg MD, December 2009
8, f 6	"VCCI International Forum," VCCI, Tokyo, February 2009 (includes a presentation by Heirman titled "Proposed Changes to C63.4 to be Included in 2009 Version") *

- 9, f 1 "VCCI International Forum," VCCI, Tokyo, February 2009 \*
- 9, f 6 Proceedings of VCCI International Forum, VCCI, Tokyo, February 2009 (includes one presentation by Heirman titled "Proposed Changes to C63.4 to be Included in 2009 version")\*
- 60, f 10 VCCI, presentations titled "Introduction of broadband antenna for site attenuation measurement," and "Recent movement in VCCI." September 1999 \*
- 1, f 1 "The World of EMC Standards and its Impact," DHC, Woburn MA, Spring 2010 (includes multiple presentations by Heirman)
- 1, f 2 "The Latest Developments in Global EMC Commercial and Military Test Standards: A Colloquium and Exhibition," IEEE EMC Society Seattle Chapter, Seattle, June 2010 (includes multiple presentations by Heirman) \*
- 1, f 3 "Measurement of Radio-noise Emissions," US EMC Standards Corporation and ANSI ASC C63 EMC, Fort Lauderdale FL, July 2010 (includes multiple presentations by Heirman)
- 1, f 8 "Measurement of Radio-noise Emissions C63.4-2009;" US EMC Standards Corporation, ANSI ASC C63 and EMC; Costa Mesa CA; August 2011 (includes multiple presentations by Heirman)
- 7, f 1-3 "High Power Electromagnetic Threats: High Altitude Electromagnetic Pulse, Intentional Electromagnetic Interference," INARTE and DHC, Lombard IL, March 2011 \*