

# Duane R Champion

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I am Director of Computer Technology and Assistant Chief Engineer at Penn State Public Broadcasting (PSPB). I perform a major role in maintenance, deployment, and management of new technology resources and services for broadcast and multimedia. My role ranges from initial inception and design of complex technologies to installation, use and training. I have extensive knowledge of broadcast and Internet technologies and their role in education. I have more than 25 years relevant technical and managerial experience. My background includes a Masters in Higher Education Administration and certifications with the FCC and the Society of Broadcast Engineers.

I consult with vendors, develop project timelines, purchase systems and meet deadlines. I work with faculty, management, peers in my field and students. I successfully train and hand off technologies to end users. I serve on various technology committees both internal and external to PSPB and Penn State University.

I was instrumental in the creation of PSPB multimedia and web development group. I promoted and incorporated Internet based media technologies into Penn State's Broadcast production and facilities. Through my efforts, PSPB now serves The Pennsylvania State University and its constituents with video streaming productions such as Pennsylvania Inside Out, Weather World, Penn State Athletics programs, and the 24/7 WPSU FM mp3 stream. Working hand in hand with PSU faculty, we created the web based Outreach production Better Kid Care and the online class for Applied Research Labs Graduate Program in Acoustics.

I investigate innovative technologies that benefit teaching and learning at Penn State. I designed, developed and implemented scalable proof of concept solutions enriching the teaching and learning experience. I extended the reach of educational content through distributed networking systems such as synchronous and asynchronous on line classes, storage area networks and networked based asset file management with Public Broadcasting core metadata content.

With the advent of digital television and the relocation of PSPB studios, I took on the role of working with consultants and assisting in the design and installation of the new digital facility. Part of my current work is directed to using digital television datacast and Internet technologies to bring educational materials to K-12 and the public. [See](#) my attached paper on "A Role for Pennsylvania Public Television in Emergency Training and National Homeland Security".

My community involvement includes serving as Chief Engineer for C-NET, Centre County's Government and Education Access Channel. I served on the technical committee during the foundation of The Country Store, a county wide community based internet project which evolved into [CentreConnect.org](http://CentreConnect.org).




I am a founding member and president of [Centre Of the Web, Inc.](#), and Champion Diversified Products, an A/V consulting service. I am active with [HHWA](#), Huntingdon Health and Wellness Association.

## Responsibilities and Accomplishments

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- \*Currently deploying web and datacast delivered educational content to WPSU region schools.
- \*Currently researching technical equipment database and history.
- \*Currently investigating Emergency and Disaster Recovery procedures.
- \*General Managers Employee of the Year Award.
- \*Orchestrated moving the PSPB network, master control room, and servers from Wagner to the new Outreach Facility and installation into new facility.
- \*Experience managing complex educational technology projects.
- \*Online course development and technical implementation.
- \*I2 link of live WPSX-TV to WSU conference.
- \*WPSX Innovative Technology award.
- \*Transitioned delivery ARL Masters Acoustics class from Picture Tel to the Internet.
- \*Created enhanced streaming product for web based classroom.
- \*PBS OnCourse engineering participant.
- \*CPB and University project: Reforging the Links participant.
- \*Created PSPB Computer replacement policy.
- \*Promoted streaming media to a viable PSPB production tool.
- \*Designed and created PSPB's first interactive WebTV content based upon a What's In The News children's production.
- \*Presented at the Ag Extension System Wide Days on Streaming Media technology.
- \*Technical Coordinator and contact for live remote ISDN streaming event from the Bethesda, Md. to Penn State. The Role of Public Service Media in the Telecommunications Age.
- \*Key and supporting role in leading and moving the Multimedia Unit to a creative functioning unit of PSPB.
- \*Arranged and coordinated Ag Extension Better Kid Care Streaming using G2 live multirate bandwidth server technology from satellite only delivery.
- \*WPSX/Corporation for Public Broadcasting Multimedia Project Team member.
- \*CentreLink(Country Store <http://www.countrystore.org>) Community Network Technical Subcommittee Chairman.
- \*Nominated for the VENTURE Award at the annual WPSX/WPSU/Educational Communications Awards Banquet.
- \*[Reforging the Links](#) - CPB and University owned PBS stations- I2, WebTV, Distant Education.
- \*Penn State Instructional Technology Interest Group member.
- \*WPSX Communications Team member.
- \*Satellite Downlink/Teleconference Quality Team member.
- \*Low Cost Technology Research Group member.



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- \*WPSX and the Center for Academic Computing Multimedia Group member.
  - \*WPSX Designated Computer Representative.
  - \*Pilots Middle Manager Team Member.
  - \*PSPB Team member award.
  - \*Transitioned local desktops and network to 100BaseT.
  - \*PSU Athletics event streaming.
  - \*Implemented and continued regular AVID editor maintenance.
  - \*Updated PSPB TAS on air automation systems from OS2 to NT and upgraded systems PCs with zero down time.
  - \*Significantly increased knowledge of computer networking systems and applications.
  - \*Significantly increased knowledge of Video SAN architectures, components and implementations.
  - \*Increased working knowledge of PSPB computer OS platforms; Mac, Win98/NT, W2K, XP, 2003, Unix, Novell.
  - \*Coordinated and transitioned PSPB (WPSX-TV and WPSU-FM) for Y2K.
  - \*Provided principal software and hardware support for all PSPB Administrative Computer Network, systems and software.
  - \*Personally implemented PSPB Web Interactive, Streaming Media, ATV and Enhanced TV applications serving as a "champion" for these technologies.
  - \*Provided remote sports production support for PSPB productions.
  - \*Researched and negotiated \$100,000+ SAN for AVID, Protocols, and Graphics productions.
  - \*Generating 24x7 interactive Web-TV content for WPSX-TV.
  - \*Working member of CPB/PBS Internet 2 committee.
  - \*Install and debug Avid/SAN network installation.
  - \*Coordinated and transitioned PSPB (WPSX-TV and WPSU-FM) for Y2K.
  - \*Transitioned local desktops and network to 100BaseT.
  - \*Implemented and continued regular AVID editor maintenance.
  - \*Promoted streaming media to a viable PSPB production tool.
  - \*Updated PSPB TAS on air automation systems from OS2 to NT and upgraded two of the systems PC's with zero down time.
  - \*Designed and created PSPB's first interactive WebTV content based upon a What's In The News children's production.
  - \*Provided principal software and hardware support for all PSPB Engineering Network Computer Network, systems and software.
  - \*Personally implemented PSPB Web Interactive, Streaming Media, ATV and Enhanced TV applications serving as a "Champion" for these technologies.
  - \*Technical supervision and streaming of the first PSPB Cablecast/Webcast for Y2K day from PSPB studios.
  - \*Working relationship with Center for Academic Computing Internet streaming and [Digital Media Group](#).
  - \*Provided PicTel training for 502 Keller users bringing down time spent supporting 502 Keller.
  - \*Provided remote sports production support for PSPB productions.
  - \*Researched and negotiated \$100,000+ SAN for AVID, Protocols, and Graphics productions.
  - \*Generating 24x7 interactive Web-TV content for WPSX-TV.
  - \*Working member of CPB/PBS Internet 2 committee.
  - \*Install and debug Avid/SAN network installation.
  - \*Laying Groundwork for On Air deployment of advanced interactive TV.



- \* Penn State Mastering Supervision program.
- \* Various Management Training Seminars.
- \* Group and Personal Skills Training.
- \* Computer Software and Hardware Training.
- \* Data Systems Seminars.
- \* Video Production Related Equipment, Cameras, VTR's, DAT, AVID training.

## Innovative Projects and Technologies

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- \* Penn State ARL Acoustics - developed online interactive live class.
- \* WITN internet and datacast delivery of educational content and integration of multiple complex software and hardware for delivery - CatDV, Kencast, United Streaming, Stellar One, Optibase, CPB metadata integration, Final Cut editing process for streaming production.
- \* Broadcast - NVersion automation, EmNet - Emergency Notification,
- \* Links Project - I2 Clip Express, Links presentation, WITN distributed sharing over I2 and datacast.
- \* WPSU - mp3 webcast stream.
- \* Avid/SAN - OSX integration.
- \* PSPB network, workstations and servers - Firewall, OIS and PSPB network separation, virus issues, network monitoring and updates.
- \* PPTN IP ATM network integration with WITF.
- \* PSPB user support.
- \* Webcasting for PSPB and client productions.
- \* Engineering Equipment and Maintenance Database design and deployment.
- \* Traffic Department discrepancy reporting database design and deployment.
- \* PSPB and others Listserv manager.
- \* PSPB Phone system administrator.
- \* PBS/PSPB First Class server administrator.
- \* Care for the over all daily operation of all employee computers and Administrative network.
- \* Care for the over all daily operation of all Technical Engineering network.
- \* Remote Production Technical Supervisor.
- \* Primary Pictel conferencing support for Keller and Mitchell Studios.
- \* Train and assist PSPB production and technical staff in the use of interactive and advanced television production tools and technologies.
- \* Research, recommend and purchase Broadcast Network systems, topographies, implementations, hardware and software relating to computer technologies.
- \* Participate in planning and implementation of PSPB DTV network integration.
- \* Direct On and Off line Editing solutions.
- \* Budget and management for PSPB new Computer replacements.
- \* Direct Engineering and Wage Payroll personnel in projects and work relating to IT.
- \* Provide principal software and hardware support for ALL PSPB Computer Network, systems and software. Including, Broadcast Traffic hardware/software, all Microsoft Office software/hardware such as FileMaker Pro and Production software/hardware such as Avid Editor systems and Streaming Media Encoding platforms and Broadcast automation and servers.



\*Responsible for the primary depository of ALL (except business services stored locally) PSPB databases, working and archived documents.

## Professional Development Activities

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- \*Web TV Conference -Toronto. 2 days.
- \*Minerva MPEG Multicast encoding - arranged in house demo. 4 hours.
- \*DTV Express - Harrisburg. 2 days.
- \*PBS Engineering National Meeting and NAB 1999. 7 days.
- \*Web 99 - Penn State. 1 day.
- \*DTV Express - Philadelphia. 3 days.
- \*OIS Mac Training. 1 day.
- \*MERN/CIC I2 Video Workshop. 2 days.
- \*CAC NT Backup and Disaster Recovery. 4 hours.
- \*HP Data Systems Penn State. 4 hours.
- \*NT Security PSU. 4 hours.
- \*Apple Support Regional Meeting. 1 day.
- \*Understanding Diversity 1. 4 hours.
- \*Understanding Diversity 2. 4 hours.
- \*Reforging the Links - I2, WebTV, Distant Education - Madison, Wi. 3 days.
- \* Microsoft WebTV seminar - Madison, Wi. 3 days.
- \*Macromedia Web Tools Training. 2 days.
- \*Troubleshooting and Maintaining the Mac OS. 2 days.
- \*Technical Journal readings such as DTV, Networking, Computer Systems, Broadcasting, CMR, etc.
- \*Creating On Line Interactive Television workshop.
- \*Network+ Certification - pending.
- \*Network Security Seminar. 1 day.
- \*Continuing and Distance Education Information Retreat. 1 day.
- \*PBS Fall Technology Conference. 2 days.
- \*ATSC PSIP and Data Broadcasting seminar. 2 days.
- \*Digital Television 2000. 2 days.
- \*Streaming Media Conference - New York. 2 days.
- \*PBS Engineering National Conference - 1990 to present. 7 days each year.
- \*National Association of Broadcasters Conference - 1990 to present. 3 days each year.
- \*Reforging the Links II Presentation - Madison, Wi. 3 days.
- \*Capital Hill Day - National PBS. 1 day.
- \*IT Support Study Group. - PSU. 1 day.
- \*Mastering Supervision. - PSU.
- \*Performance Standards workshop. - PSU.
- \*PSU Digital Media Resource Group. - PSU.
- \*WGBH DAM Conference. - 3 days.
- \*Public Service Media Conference. - 2 days.
- \*PAB – Hershey. - 1 day.
- \*PPTN PEMA Meetings. - 4 days.
- \*Web TV Conference. -Toronto. 2 days.

- \*PBS/NPR Streaming Media Conference. 2 days.
- \*Microsoft WebTV seminar - Madison, Wi. 3 days.
- \*Macromedia Web Tools Training. 2 days.
- \*Troubleshooting and Maintaining the Mac OS. 2 days.
- \*Creating On Line Interactive Television workshop - Madison, Wi.
- \*Network Security Seminar. 1 day.
- \*Continuing and Distance Education Information Retreat. 1 day.
- \*PBS Fall Technology Conference. 2 days.
- \*ATSC PSIP and Data Broadcasting seminar. 2 days.
- \*Digital Television 2000. 2 days.

## Education and Employment

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M. A. Higher Education Administration 1979  
Maharishi International University, Fairfield, Iowa.

B. S. Interdisciplinary Studies  
UWEC/MERU 1976  
Eau Claire, Wi./Seelisberg, Switzerland

1976 - 1979. MIU, Fairfield, Ia. Video Production Engineer.  
1980 - 1983. WISC, Madison, Wi. Video Production Engineer.  
1984 - 1987. WSVN, Miami, Fl. Video Production Engineer.  
1985 - Present. Champion Diversified Products. A/V Consultation.  
1995 - Present. Centre Of the Web. President. Internet hosting and business services.  
1987 - Present. Penn State Public Broadcasting.

## On The Web

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[Penn State Quality Spotlight - ARL Acoustics.](#)

[Softv Demo of Web Presenter](#) Internet Explorer and PC only.

[Broadcast Engineering WPSX-DTV](#)

[Evolving the Links](#)

[National Educational Telecommunication Association](#)



