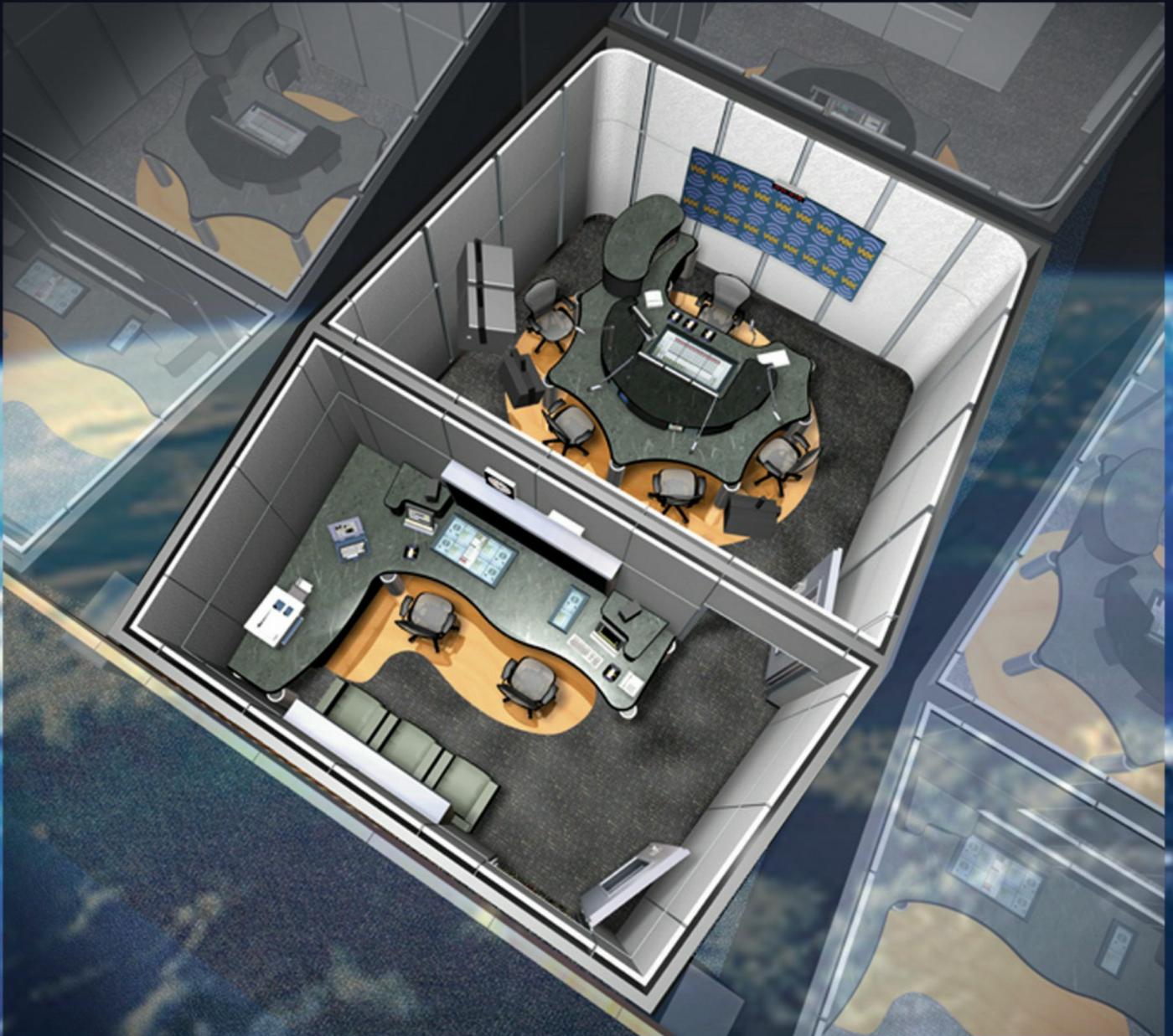




**BROADCAST CONSULTANTS FOR XM SATELLITE RADIO**

*Design and Custom Product Solutions  
for the financial and technical realities  
of 21st century broadcasting*



**STUDIO, FACILITY & SYSTEMS DESIGN . TECHNICAL FURNISHINGS . CUSTOM HARDWARE & SOFTWARE  
PRE-ENGINEERED STUDIOS . PROJECT MANAGEMENT**

**NCC** *Northeastern  
Communications  
Concepts, Inc.*

*forty benford drive / princeton junction, new jersey 08550 / (609) 936-0006*

To Our Media Colleagues:

Thank you for your interest in NCC's professional services. As consultants, the most difficult question is one we are most often asked: to describe our company. Judging by our accomplishments, it is tempting to think that we might be architects, engineers, manufacturers, distributors, systems integrators, contractors, or software developers. But it would be more appropriate to identify us as a value-added think tank for the electronic media. The value we add comes from our ability not just to examine, research, report, and specify, but also to develop unique products and execute highly creative solutions to satisfy unique situations.

Our successes are often predicated on bucking the tide of conventional thinking. Human beings answer our phones. Customer service is not just what we promise, but the product we sell. We strive to comprehend and integrate all of the technologies that affect your ability to disseminate information and entertainment through the mass media, and to relieve you of this burden.

To demonstrate our global approach to assisting our media clients, we are proud to present a modest list of our achievements on the following pages of our NCC Scrapbook. Each of the projects it describes had no precedent beyond the creative thinking and research that is the hallmark of NCC's endeavors on behalf of its clients.

So if your project has special requirements that are unique to your situation, NCC is your best choice for the successful resolution of your endeavors. We are uniquely qualified to address both the common and the extraordinary.

We welcome the opportunity to make your project a success with the minimum of effort on your part.

Cordially,

*Alfred W. D'Alessio*

President, NCC Inc.



## NCC Scrap Book

### **ZOOM!**

Draw a box around any image with your Acrobat™ ZOOM tool,  
then click to see it full size.

**1979**



The day we hung out our shingle as A.W. D'Alessio Associates on East 38th Street, our complete armamentarium consisted of a brand new IBM Selectric typewriter, a white lab coat, a stethoscope, and a lot of patience.

Today, we still rely on them, especially the stethoscope, which we use right along side the most sophisticated FFT acoustic analyzers. Besides being a handy tool, it's also an appropriate symbol of what we do best — listening to both our clients and their environments.

**1981**



No, we didn't invent the typewriter. But a lot of secretaries were still typing on these when NCC became a vanguard in personal computing. In 1981 we bought our first workstation — an 8 bit, 6 MHz screamer with 8" disks, a CP/M operating system and a whopping 64K of memory.

By 1985 our competitors were still brushing the eraser crumbs off their drafting tables as we began offering not just CAD drawing, but 3D modeling and development.

**1983**



The focus of our original designs served the television and recording media. By 1982, we had taught a Gould 32 bit minicomputer to see and analyze human motion to assist orthopedic surgeons evaluate their patients.

The following year fulfilled our love affair with radio. We were the prime systems and architectural consultants for New York City's own WNYC. For fourteen years after opening day, the PR&E-equipped AM/FM facility stood proudly as the largest and most sophisticated in the city.

**1988**



Years ago, radio engineers figured out they couldn't build a good do-it-yourself console for less than they could by a great factory-made one. We figured that was a pretty good model for guaranteeing a faster, better, and easier way to build studios by factory fabricating them.

Our pre-engineered studio designs and systems engineering for WQXR in New York remains a paradigm in design excellence and became the hallmark of our association with quality and innovation.

**1989**



In *The King and I*, Anna patiently laments that "by your students you'll be taught."

And so it was, during NCC's eight year tenure as exclusive systems and acoustical consultants to CBS Radio, that we got some of our best ideas. There wasn't a type of radio business that CBS hadn't undertaken, and together we mapped a digital vision, unfettered by the limited foresight of manufacturers who rarely left the isolation of their factory offices to see what the world needed.

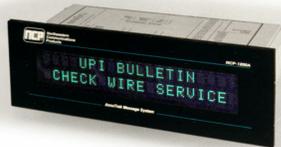
**1989**



NCC brought New York's first tapeless scoring studio on-line. It featured a New England Digital 64 voice Synclavier™ and a 32 track Direct to Disk™ System. Heavy duty stuff for its time, it's still cranking out TV promos and commercials that we hear every day.

(For musicians who didn't have an EE degree from MIT, the whole system could actually be operated from a 66 note MIDI keyboard controller. Imagine that.)

**1990**



For 3 days generator warnings flashed and rang in the power room as computers faithfully logged the event — but no one was there. On Tuesday September 17, 1991 the UPS batteries gave up, and AT&T launched the biggest telecommunications failure in US history.

An NCC Accutrak™ messaging system could have relayed the situation and complete instructions for a remedy to wherever the maintenance personnel may have been — even in the rest room!

**1991**



Our offices might be in the Big Apple, but our ideas are mostly down home. When we got to wondering why broadcasters were shelling out real money to buy and lug bottles of the planet's most plentiful gas, we developed our Drygen™ nitrogen generation system for maintaining peak performance from even damaged transmission line and wave guide.

That thinking won us Broadcast Engineering's Best of NAB Show citation

**1994**



In September of 1993, the Sony Warner Networks were just a concept and a business plan. Not even a sketch existed of how the studios might be laid out.

But by January 1994, the networks were fully operational. Thanks to Acoustic Systems pre-engineered studios and NCC's proven approach to facility design, the entire design-build-integrate cycle for this complete network operation was only four months — less time than it takes just to design do-it-yourself facilities.

**1995**



If you had to sum up what we sell in just one word, it would be enclosures. Some of them are soundproof and large enough to hold 100 people. They're made from steel composites — the most efficient sound barrier available.

For others that you can hold in your hand, or plug into a network, we've perfected applying a patented technology that enabled us to make small production runs of ABS plastic cases and enclosures for Musicam USA and Logitek without wasting the time or expense of injection molding.

**1995**



The first successful word processor was Wordstar.  
 The first successful news text editor was News Star.  
 The first successful news text and audio editor was the CBS Pace. It was about the size of a washing machine, ate Unix for breakfast, but set the pace for others to follow.  
 Advances in PC speed, audio cards, and operating systems allowed us to develop Pace Lite. With it and a laptop, a correspondent has portable access to CBS News venues and actualities, at his desk or wherever news is breaking.

**1997**



NCC's expertise in television systems came in handy for documenting a reliable systems and timing approach for integrating digital I/O's for the new WQHT studios in New York City.  
 And the timing was superb — WQHT was the first all-digital radio facility in the country. All that was left in the analog domain were the mics, headphones, speakers, transmitter, and the talent.

**1998**



The brightest idea CBS had since inventing the LP is the real virtual console. Since it replaces about 80% of hardware and wiring, it's more like a whole radio station.  
 We developed this fully addressable radio system to replace just about anything you could accomplish with routers, mixers, patches, and outboard gear. Limited only by the programmer's imagination, audio, telephone, news, and data can be seamlessly integrated and controlled in real time from anywhere there's an RJ-45 jack. Now that's Plug and Play. — and the future of radio technology.

**2001**



**XM HAS THE LARGEST RADIO PROGRAM CENTER ON THE PLANET !**

It was designed by one of the world's smallest consulting firms.  
 We're very proud of that.

**20??**



What will we accomplish this year?  
 While we have a very clear vision of the future, we have no crystal ball.  
 But we do invite you to write the next NCC milestone along with us.  
 We'll both profit from the experience!

**NCC** ...Plan your next project with experts who can do it all!

**NCC PRODUCTS**

Custom Plastic Cases & Enclosures  
 Custom Furnishings  
 Acoustical Doors  
 Acoustical Windows  
 Decorum™ Acoustical Wall Panels  
 Pre-engineered Studio Enclosures  
 AccuTrak™ Message Systems  
 Loudspeaker/Video Monitor Brackets  
 Custom Analog & Digital Components  
 Storage Systems

**NCC PLANNING SERVICES**

Feasibility Studies  
 Fiscal & Budgetary Planning  
 Site Surveys  
 Value Engineering  
 Project Management & Scheduling

**COMPREHENSIVE STUDIO DESIGN**

Radio, TV and Recording Studios  
 Noise & Vibration Isolation  
 Systems Design  
 Furniture Design  
 Electrical Design  
 Air Conditioning & Mechanical Design  
 Photo-realistic Color Renderings

**NCC ACOUSTICAL SERVICES**

Noise Control Surveys  
 Room Tuning  
 Laboratory Testing

You're in Great Company at... **NCC**

|   |                                 |
|---|---------------------------------|
| <b>RADIO FREE ASIA</b>                                  | Washington, DC                  |
| <b>EFFANEL MUSIC</b>                                    | New York City                   |
| <b>WHITNEY HOUSTON CROSSWAY STUDIOS</b>                 | Mendham NJ                      |
| <b>HOWARD SCHWARTZ RECORDING</b>                        | New York City                   |
| <b>KAMEN ENTERTAINMENT GROUP</b>                        | New York City                   |
| <b>MIXED NUTS RECORDING/EAST SIDE AUDIO &amp; VIDEO</b> | New York City                   |
| <b>ABC RADIO NETWORKS</b>                               | New York City                   |
| <b>CBS RADIO and TELEVISION NETWORKS</b>                | Nationwide                      |
| <b>NATIONAL PUBLIC RADIO</b>                            | New York City                   |
| <b>NBC RADIO and TELEVISION NETWORKS</b>                | New York City                   |
| <b>XM SATELLITE RADIO</b>                               | Washington, DC                  |
| <b>ICELANDIC NATIONAL BROADCASTING</b>                  | Reykjavik                       |
| <b>UNISTAR RADIO NETWORKS</b>                           | Washington DC and New York City |
| <b>THE IMUS RANCH STUDIO</b>                            | Ribera NM                       |

|  |  |               |
|--|--|---------------|
| <b>KILT AM/FM and KIKK AM/FM</b>       | <i>Westinghouse Group W</i>            | Houston       |
| <b>KLYY</b>                            | <i>Big City Broadcasting</i>           | Los Angeles   |
| <b>KNX and KODJ</b>                    | <i>CBS Radio</i>                       | Los Angeles   |
| <b>KPIX, KCBS and KLLC</b>             | <i>CBS Radio</i>                       | San Francisco |
| <b>KYW, WOGL and WGMP</b>              | <i>Westinghouse Group W</i>            | Philadelphia  |
| <b>WABC and WPLJ</b>                   | <i>Capital Cities/ABC Broadcasting</i> | New York City |
| <b>WCBS AM/FM</b>                      | <i>CBS Radio</i>                       | New York City |
| <b>WFAN</b>                            | <i>Infinity Broadcasting</i>           | New York City |
| <b>WIBC, WTLC, WENS and WNAP</b>       | <i>Emmis Broadcasting</i>              | Indianapolis  |
| <b>WJR/WPLT</b>                        | <i>Capital Cities/ABC Broadcasting</i> | Detroit       |
| <b>WMAL and WRQX</b>                   | <i>Capital Cities/ABC Broadcasting</i> | Washington DC |
| <b>WNEW</b>                            | <i>Westinghouse Group W</i>            | New York City |
| <b>WQHT and WRKS</b>                   | <i>Emmis Broadcasting</i>              | New York City |
| <b>WQXR and WQEW</b>                   | <i>The New York Times Company</i>      | New York City |
| <b>WYNY</b>                            | <i>Westwood One</i>                    | New York City |
| <b>WBBO, WNJO, WPST, WHWH and WTTM</b> | <i>Jersey Radio Network</i>            | New Jersey    |

and many, many more