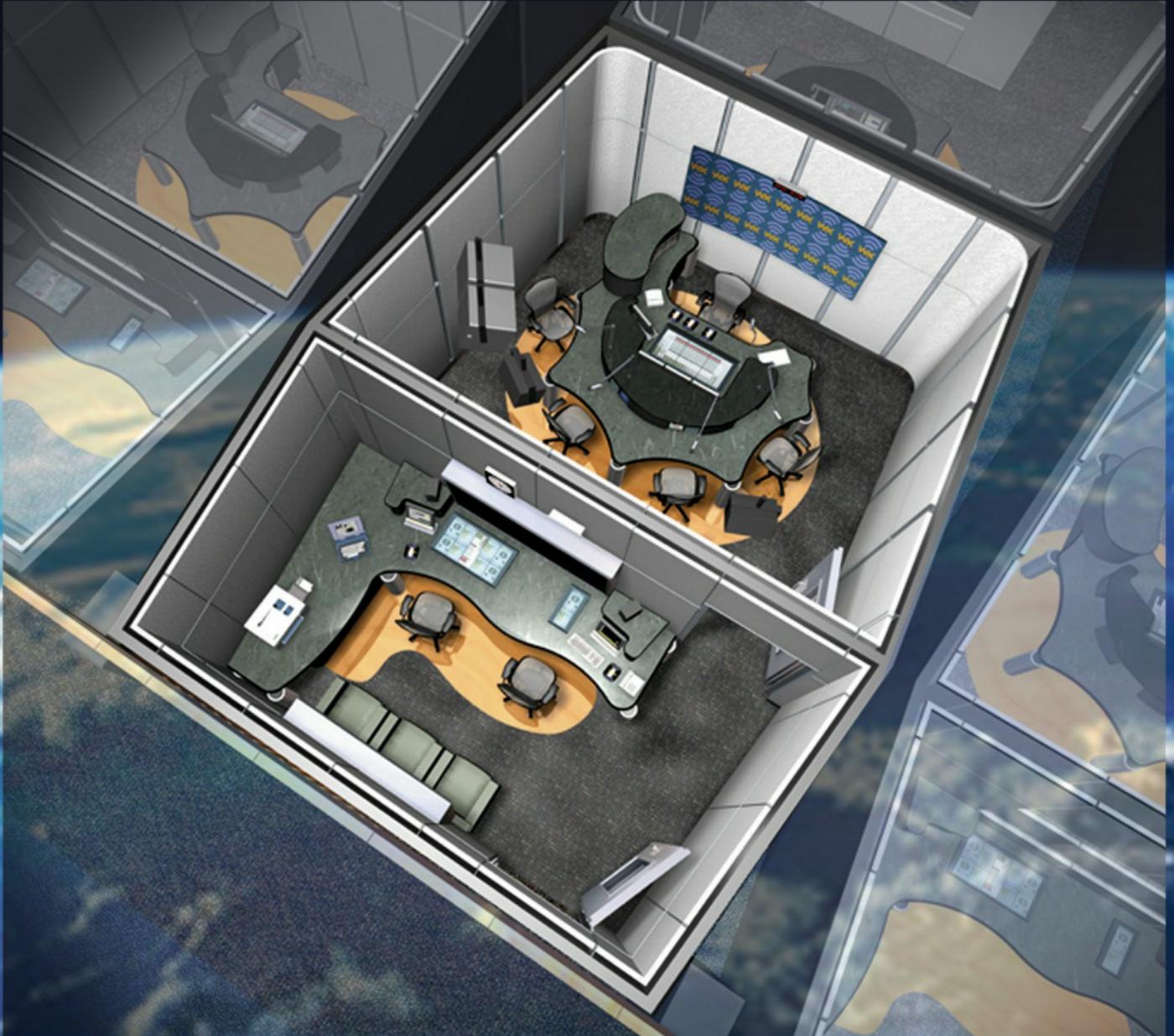




BROADCAST CONSULTANTS FOR XM SATELLITE RADIO

*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.*

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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.

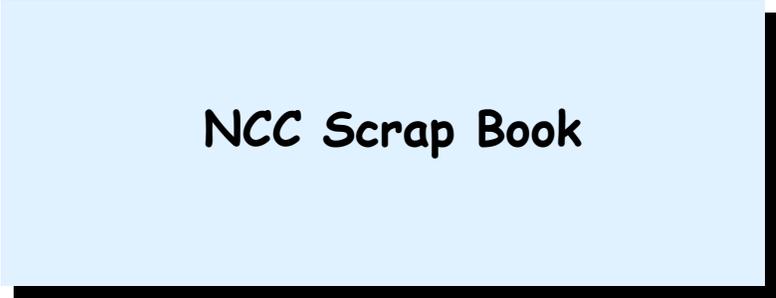
So if your project has special requirements that are unique to your situation, NCC is your best choice for the successful resolution of your endeavors. We are uniquely qualified to address both the common and the extraordinary.

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**

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

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

and many, many more