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SoCal Public Radio Station Deals With Trains and New Infrastructure

BY DOUG JOHNSON
Director of Broadcasting
KPCC(FM)

PASADENA, CALIF. — KPCC(FM) is licensed to Pasadena City College, but since

FACILITY PROFILE

2000 it has been operated and managed by Southern California Public Radio through what is essentially a noncommercial version of an LMA.

SCPR is a member-supported public radio network that operates KPCC at 89.3 MHz in Los Angeles and Orange County, KUOR at 89.1 in the Inland Empire and KPCV at 90.3 in the Coachella Valley. It reaches approximately 680,000 listeners every week and is the most listened-to public radio news service in Southern California.

SCPR is associated with American Public Media in St. Paul, Minn., which owns and operates Minnesota Public Radio and other for-profit and nonprofit businesses.

KPCC's transition to SCPR management is a fascinating story. In short, KPCC's role as a college and community radio station prevented it from developing a coherent program schedule, which in turn kept it from becoming a significantly competitive station in the Los Angeles market.

After SCPR took over operation of the station, it established a program schedule based on public radio's signature programs, and began to build a significant local news department.

Capital and technical expertise from St. Paul were critical in the early stages of the transition, as was the recruitment of a new CEO, Bill Davis, a former manager of WUNC, Chapel Hill, N.C., and a vice president for programming at NPR.

REDESIGN

The station facility at Pasadena City College was not designed for a full-time news operation. KPCC quickly outgrew those cramped quarters on the lower level of KPCC's main library building, and made the decision to develop a new off-campus facility.

In order to ease crowding, many employees were moved to an office in downtown Los Angeles, which KPCC shared with American Public Media's Marketplace Productions. Eventually, only daily broadcasting staff was left at PCC, with most of the news, sales, development, marketing and management staff in the downtown office. As you can imagine, communication and co-ordination were huge challenges for us.

In 2005 we began looking for a new building suitable for broadcasting and large enough to house our staff in one location. Contractually we were limited to moving within the college's operating district in Pasadena, but its large and evolving business districts presented numerous options.

We established several criteria for our new broadcast center.

First, it needed to be large enough to accommodate the station staff, which had grown to about 80 full-time employees, and large enough to accommodate planned growth.

We wanted two large talk show studios with control rooms, a news host booth, production studios, editing booths and a master control studio for monitoring various tech systems and running the station during off hours.

We also wanted a large auditorium suitable for community and station events, as well as live or taped broadcast events.

Early in our search we found a two-story building with 30,000 square feet. It was located near downtown Pasadena and convenient to three major freeways, always an important consideration in Los Angeles.

There was a hitch, though. The fairly new Metro light rail line connecting Pasadena to Los Angeles ran immediately behind the building, with the tracks only a few feet from the back wall.

We hired Veneklasen Associates in Santa Monica to take vibration and noise measurements. They concluded the noise could be controlled successfully with appropriate

construction methods, so the decision was made to purchase the building.

The next few years were spent ramping up a capital campaign to raise money for the broadcast facility; securing architects, general contractors and integrators; and choosing broadcast technologies.

Architectural responsibilities for the project were divided. Design for the building itself was done by the architectural firm of Chu/Gooding in Los Angeles; studios were designed by the Russ Berger Design Group of Dallas.

Pasadena has a strict architectural and historical review board requiring new construction to adhere to the town's architectural heritage and image. Having a local firm made it much easier to interact with the city and guide us through the permitting process.

Given the challenge of building studios next to a light rail line, we wanted to use a top-level studio designer, and the Russ Berger Design Group has a well-deserved

reputation for excellent sounding broadcast booths. Its team monitored studio construction, paying close attention to the floating floor, designed to mitigate ground vibrations from the passing train.



We selected L.E. Waters of Los Angeles as the general contractor for construction. We had worked with L.E. Waters on construction at our downtown studio location, were confident in their work and had good management relations with the company.

By 2008 it was time to make key technical decisions. Some choices were clear. We already owned and used a robust ENCO Systems play-to-air system and were satisfied with

EQUIPMENT CHOICES

its operation and technical support. We upgraded to their new single RU workstations and added several more workstations for the larger facility.

We also already used Digidesign Pro Tools as our primary studio DAW and upgraded to the Digi-Rack 003 in the new studios. Over the years we have tried many different CD players and burners and were



Top: Master Control

Left: Talk Show Booth

happy with Denon products. We had long experience with Electro-Voice RE27 microphones and chose to install them for guest positions, but decided to use higher-quality Shure SM32SL condenser microphones for the host positions.

In the end, the biggest decision, and the one creating the most debate, centered on control surfaces. We narrowed our choices to four and visited stations using those systems; each manufacturer visited us to make their pitch. We selected Axia Livewire, in part because our colleagues at Minnesota Public Radio recently had completed a \$50 million construction project using Axia, allowing us to build on their experiences.

We contracted with Harris' millwork division to design and build studio furniture. The designs included hydraulic adjustment for the host positions in key studios allowing for either stand up or sit down configurations.

The next technical hurdle was identifying and hiring a systems integrator. There are several good integrators in the area, but few had experience with the Axia systems. Since Axia is assembled more like a voice

and data network, traditional integration approaches do not work.

In the end we chose to work with Tom Nelson and his technical staff from Minnesota Public Radio. They had deep experience with Axia products, had recently completed a similar project and were familiar with our personnel and structure. Tom is a top-notch RF/studio technician and has general construction experience.

Having someone on staff who can read blueprints and converse with general and subcontractors (especially electrical contractors) was valuable. We also knew it would be a great experience for our local chief engineer, Lance Harper, to have an active role in building out a facility and knowing its internal structures.

MIGRATION

One of the biggest operational challenges was how to transition our various signal

paths to the new location without service interruption.

We settled on a temporary T1 connection between our new facility and the existing transmitter location. This allowed us to transition to the new building methodically. We began with early-evening test broadcasts from the new studios. Once we were confident we could broadcast from the new location, we began to increase broadcasts from the new building over a two-week period.

In early February of this year we made the permanent change to the new facility. That weekend we moved our Pasadena based staff to the new location. A week later we moved in the L.A. staff.

Once in the building our first issue was with our Pro Tools interface. With our old analog consoles it made little difference what the Pro Tools session parameters were set for. But with our new Axia consoles we set 24-bit/48 kHz as our default digital reference. This required all Pro Tools sessions to be set to the same configuration.

News sessions worked well with this system setup, but many of our reporters and producers needed access to old sessions with noncompliant session parameters. We quickly sorted out the transfer protocols within Pro Tools and came up with a tutorial, but for a few days we had some unhappy content producers.

It's been eight months now and we have sorted most of the gremlins from the studios. The only ongoing issues we have are related to problematic KVMs and buggy call-screening software that randomly drops data. Most of the technical teams have returned to their former responsibilities, feeling withdrawal from an exciting

LESSONS LEARNED

Here are a few lessons I learned from this experience.

1. Be careful of soft "plug-in" or "place-holder" numbers in the budget planning phase. These have a way of becoming hard numbers over time, with the budget manager holding you accountable for the costs.
2. Manage expectations with your staff long before transitioning to the new facility. At monthly staff meetings I reported on the project status and always included design or functionality cuts made due to budget restrictions.
3. Locate a secure area on the job site for equipment storage and staging. We were given this piece of advice from our Minnesota colleagues and took it to heart. We created a large caged area in our underground parking lot. Unfortunately the contractors needed to get into the space to reinforce beams for the new auditorium construction. Within days a brand-new Honda portable generator was stolen from the "secure" storage.
4. Involve a high-level IT network administrator. For several months after going on the air with our Axia system we experienced unusually high traffic on our corporate network. Eventually we discovered that some of the ports on our Cisco switches were configured incorrectly and data packets from the system were flooding on to our corporate network.
5. As soon as you begin broadcasting from a new facility, you move directly from the construction phase to the maintenance and troubleshooting phase, whether or not your building is actually finished; ours was not.
6. You can plan to the finest level of detail only to discover your on-air/production staff will have requests you didn't consider. Monitor placement, chair types, keyboard trays, speaker locations, etc. Understand that changes in design are inevitable; this will help reduce stress.

construction project.

I have said to more than a few people how much I would like to start a new project applying all the lessons I have learned so I

could avoid the pitfalls. The general contractor superintendent summed it up best by saying, "There would just be a whole new set of problems you didn't count on."