

WGAJ 91.7 FM takes to the airwaves!

Broadcasting at Deerfield remained dormant from the early 1970s for about a decade, probably for the lack of technical capacity to keep the electronics functional. Although the AM station (DRB) went dark, the physical facility remained intact in the attic of the Memorial building.

In the early 1980s, several students became interested in creating a FCC licensed, non-commercial FM radio broadcasting station on campus. Mark Beaubien '83, Bill Kaufmann '83 (son of headmaster Robert Kaufmann), and Jeff Silverman '83 got the ball rolling. They submitted an application for an FM broadcast license to the Federal Communications Commission in spring of 1981, which was initially rejected on a technicality; they had mistakenly provided GPS coordinates in Greenfield, rather than Deerfield. They updated the application, and apparently it was approved within hours. WGAJ had passed the first of many subsequent hurdles. The first broadcast, at 91.7 MHz on the FM dial, hit the airwaves in early 1982.

The next problem was to find a better location for the station's studio. The logical place was the attic of the Memorial Building, starting with the remnants of the DRB facilities from the late 1960s. Unfortunately, there was insufficient heat and air conditioning in that attic studio, and the heat generated by the equipment proved problematic. On top of that, the fans cooling the auditorium below shook the room, which the mics and record players picked up. To add to the problems, the transmitter, as initially installed, was located in a small closet next to the audio console, which proceeded to pick up all sorts of RF interference. The real problem, however, was that the 100-Watt FM transmitter was feeding an antenna on the roof directly above the studio, which caused a lot of radio frequency interference to the studio audio console below.

In addition to managing the technical aspects, students were needed to run the business side of the operation. Mark Beaubien '83 and Bill Kaufmann '83 served as Station Co-managers; Jeff Silverman '83 was Technical Manager; and Eric Suher '83 was Business Manager.

Then, as recounted by Mark Beaubian, came a fortuitous phone call from someone who had worked with the previous Deerfield students who had built the AM radio station some years before. As it turned out, it was none other than Jim Hemingway, who was living nearby in Greenfield at the time and offered to help with the new FM station. This was probably the best thing that ever happened to radio broadcasting at Deerfield.

Mark continues: “Jim Hemingway was, and still is, an amazing radio engineer. At the time he came to visit WGAJ for the first time, Jim was chief engineer of WPOE in Greenfield, a 10-kW directional AM station on 1520 kHz. After taking a look at our setup, he helped us initially by cleaning up the FM transmitter interference to our Broadcast Electronics audio console. Later on, he helped to lay out a plan to move our 91.7 MHz transmitter and antenna up to a new location high atop Pocumtuck Ridge and to relay our programming up to this new transmitter site by microwave.”

Vignette - “To The Rock!” (Mark Beaubien)

Now, in the spring of 1983, the real fun began. We needed more money, as there was no tower up there at the Rock to put the antenna on or a building to house the transmitter and the STL (Studio-Transmitter Link). With great hope and enthusiasm, we reapplied to the FCC to relocate the transmitter. While at first it appeared it would be simple to use the same power level and frequency, in reality, locating the transmitter up 750' higher at the Rock meant that WGAJ's signal could be heard all over Franklin and Hampshire county. We were finally going to really put WGAJ on the map.

“Next, the station managers and Jim approached the town of Deerfield at a Selectmen's meeting with a win-win proposal: that we'd put up a tower on town land at the top of Pocumtuck Ridge and share it with the town's fire/police radios if the town let us use the land near the Rock to erect it. They took the bait and we started raising the money for a tower, a transmitter building, and the associated utilities . The tough part was the cost of the STL microwave link, which was \$10,000.

“This spring of 1983 was an ultra-blur as the work progressed. The station remained on the air during this transition.”

“Jim's imagination and energy brought many new innovations during 1983, such as building an ingenious battery-powered console that allowed us to broadcast sports events remotely, on the road from other schools. This little

box interfaced with a telephone line and sent the sports announcer's voice back to the station so people at DA could listen to broadcasts of live games remotely, just like the pros. Several future college sports announcers were inspired by this part of their Deerfield experience. The catch for remote broadcasting was locating a "convenient" phone line that we could tap into. On one occasion, at Choate I think, WGAJ had to run the zip cord telephone line nearly a mile which had to cross a river (wider than the Deerfield River). During the broadcast of the game, a power boat came up the river and its prop cut our phone line."

"As the 'founding fathers' of WGAJ approached graduation, there was growing concern for the future of the station.

In June 1983, the headmaster offered Jim a faculty position in the English department, along with residency in Plunkett Hall. He lived and taught at Deerfield from the fall of 1983 to June of 1992, after which Wesley Brown, the Academy's comptroller, took over the responsibility for oversight of WGAJ. After that, Jim continued to support the station with whatever technical or electronic issues came up.

WGAJ moved to a new, spacious location and studio space in the Fall of 1988 just below its original location on the third floor during the late 1980s renovation of the Memorial Building. Jim spent much time during the summer of '87 building the state-of-the-art audio mixing consoles and equipment rack panels in both WGAJ's broadcast studio and the new recording studio.



Broadcasting from the WGAJ studio on the second floor of the Memorial Building (name of student unknown)



Student DJs (names of students unknown)

Altogether there were three new studios, the main studio pictured above and a news studio for WGAJ as well as one for recording and mixing program material, plus two other spaces - a separate recording booth and an entrance/lobby room that connected all of the separate studios. This complex also included Mr. Moorehead's architectural studio, which was next door to the recording studio. Jim ran a number of microphone lines into the architectural studio for recording string quartets, rock bands or other ensembles. Many Deerfield musicians, including Matt Scannell (Vertical Horizon), Class of '88, began their careers in the music industry in WGAJ's recording studio. WGAJ's new digs were nothing short of what was probably the best high school radio facility in the country.

Vignette - Follow the Money...

Creating and operating a radio station costs money. A LOT of money! It came from different places over time.

As told by Bob Dutton: “The school contributed the time and materials to build the original DAR studio in the Memorial building attic. Many thanks to Bill Bond (facilities supervisor) and his crew for creating a great studio out of an unused nook. The equipment came from various donations, augmented by the Radio Club budget. I don’t remember any funding directly from the school but DO remember that Miss Butterworth, the controller, allowed us “considerable freedom” in setting the Club’s budget and dues, and in allowing students to charge the dues on their DA credit cards (i.e. send the bill home to Mom & Dad). We had some major membership drives which were pretty successful.”

Another challenge was getting current music for the programming. DRB was fortunate to receive new additions to the record library weekly, largely through the generosity of Richard L. Swig ‘69, whose father was in the record industry. When he graduated this source dried up. Arrangements were made to obtain records from the local (Greenfield) music store, but this was an ongoing challenge.

According to Jim Hemingway, “WGAJ was on stronger financial footing than its earlier AM brother station, due largely to the strong support of the school's financial controller Mike Sheridan (a.k.a. Daddy Warbucks). Aside from funding, Mike taught Mark, Bill and others how to be general managers, and they claim that they learned more from Mr. Sheridan about economics than from many of their subsequent college courses.



A significant portion of the funding for new equipment also came from WGAJ T-shirt

sales. The popular shirts (see examples) were sold in great numbers, especially to new, incoming freshmen and sophomores every year through some very aggressive promotional campaigns directed and run by the WGAJ faithful. It was the 80's after all,



and

new students wanted to fit in, and once they discovered they could charge the T-shirts to their parents by signing one of those little yellow charge slips, sales really took off. The team conjured up some of the best artists and artwork we could find on



campus in the spring to design the T-shirts, and I always made sure the shirts were ready to go once school started in the fall.”



Deerfield also invested in a first-class recording studio for WGAJ. Again, as told by Jim Hemingway: “It really was a very good and impressive facility with its TAC Scorpion 32 channel mixing console and an array of audio processing equipment, reverbs, equalizers and the like, and I was even able to install a ProTools audio system in a Mac II fx in the late 1980s and couple all of this to a Panasonic DAT (digital audio tape) deck as well as an 8 channel 1/2" Otari multi-track tape recorder. WGAJ really was a state-of-the-art studio at that time, and the student who made the most use of it was Matt Scannell '88, who along with his friend Keith recorded their first commercial record there in the early 1990s. I even used the studio to record some 'late night radio' shows with John O'Brien, head of the English Department for many years, reading poetry that I mixed with some of the music that was often heard on the 'Hearts of Space' network radio shows to DAT... pre-recorded radio shows which went on the air after campus curfew.

“But the rest of the faculty never really warmed up to using this GAJ recording facility except, perhaps, for the Fine Arts department when they needed some sound effects for a stage production. When the new Business manager pushed forward the sale of WGAJ's non-commercial license to WFCR and began dismantling the 3 studios, Mark Beaubien raced over from Turners Falls and rescued the TAC board and the racks of equipment including the audio consoles I built for the on-air studio from being thrown into a dumpster. Mark carried it all away where much of it now sits in storage in one of his storage barns. My guess is that much of the equipment in the GAJ recording studio would have been of great use to the recent advocates for the live streaming studio you visited during your 50th reunion had it not been so thoughtlessly discarded less than a decade before.”

Activity and enthusiasm for WGAJ and its recording studio peaked in the mid-to late-1980s and into the early 1990s, and then it began to fade, not long after Deerfield became coed and the Internet arrived. As the old song goes, “video killed the radio star,” as new technology and personal computers moved into school life. The Internet came to Deerfield in 1996 and quickly became an integral part of campus life in the next few years. Jim Hemingway retired from Deerfield in 1992. New technologies replaced the allure of being

a DJ on WGAJ-FM. Students and faculty gradually lost interest in the station and its recording studio.

Vignette: The End of the Line

On May 19, 2009, WGAJ made its final broadcast. Even though the school had decided to scrap the station several years earlier, Deerfield arranged the sale of the station's FCC license in the spring of 2009. Widespread use of the station, according to Student Activities Coordinator Timothy McVaugh, which was "at one time very popular," had declined, as fewer students owned radios and listened to the station.

According to Chief Financial Officer Joseph Manory '80, "There was a lack of interest on the part of students [in the station]...so it just didn't make much sense to continue to offer the program." In addition to a lack of student interest, Mr. McVaugh cited the cost of maintaining the station as a reason for its demise.

In July 2010 the Trustees of Deerfield Academy filed with the Federal Communications Commission to assign WGAJ's license to the WFCR Foundation, Inc., owner of WFCR-FM, a non-commercial radio station in Amherst, Massachusetts. The sale price was \$10,000. The FCC approved the sale on August 19, 2010. The station call letters were changed to WNNZ-FM, and it switched to a full-time NPR news/talk format. The WGAJ transmitter and antenna remain to this day (2021) at "The Rock" on Pocumtuck Ridge, housed in the same hut that Deerfield students built in 1983.

After the sale, WFCR had agreed to work with Deerfield students, promising that "there will be opportunities available for those interested in broadcasting to work directly with WFCR," according to Manory. He added, "Online video streaming may be a superior option for student broadcasting. Based on how technology has evolved, video streaming is where we would logically go, but there are issues to look into, such as the interest from students, the need for faculty support, the IT infrastructure required to make it work, and the cost of running such a program."

"I'm excited about what [broadcasting] can morph into...what it can become," added McVaugh. He added that the goal and challenge of such student-run

broadcasting is “to appeal to as many students, faculty,...and alums as possible.”

The opportunity to involve Deerfield students in the operation of WFCR, however, apparently never materialized, and to date there has been little or no interaction between the Academy and the NPR affiliate down the road.