Stereo Types: A History of Broadcasting at Deerfield -AM-FM-Internet, and Beyond...?

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Introduction

This is an ongoing tale of radio broadcasting at Deerfield Academy. It was originally created in December 2021 by Bob Dutton '70 and Charlie Trautmann '70 after their 50th reunion. They discovered that while there had been several iterations of "radio" at Deerfield, there was no unified record of what had happened, nor was there a repository for the rich body of stories by the players who had been involved along the way. They set out to create such a record.

It is their hope that this will be a "living history" and that others who have been involved in the past, present and future will add their contributions and update this document and accompanying materials in the Deerfield archives. Please send any comments, additional stories, photos, etc. to Bob (<u>rkdutton@gmail.com</u>) and Charlie (<u>ctrautmann@sciencenter.org</u>).

History of this document (see bios at end of the document)

- Original Document December 2021: Bob Dutton '70 and Charlie Trautmann '70
- Additional inputs re WGAJ: Mark Beaubien, '83, Jim Hemingway, Faculty (1983-1992)
- Updates on current "Deerfield Academy Radio: Jan Flaska, Faculty, (2005-today)

Major chapters in the story

- Amateur Radio operators ("Hams")
- Deerfield Radio Broadcasting (DRB) 1620 AM (1967 1970s)
- WGAJ 91.7 FM (1981 2009)
- 2018 present (as of December 2021): "Deerfield Academy Radio"; Streaming programs on mixlr.com (https://mixlr.com/deerfieldacademyradio)

More information on each of these iterations is available in the following sections.

Amateur Radio Operators ("Hams")

Deerfield Academy has had amateur radio operators ("hams") among its students off and on since the mid-1900s. Deerfield had a Radio Club with a transmitter and receiver station in the basement of the Arms Building (originally the Science Building) during the 1950s and 1960s, and although records are sparse, the original equipment was apparently donated by the parents of a Deerfield student, whose last name was Phillips and who died in service during World War Two. These parents upgraded the station in 1969 by purchasing a Heathkit single sideband transmitter kit for the Club, which was assembled by club president Charlie Trautmann '70. The Radio Club had previously served only its members, and any ham radio broadcasts they

made could not be heard on a normal AM or FM radio.

This photo shows students in the Radio Club room, in the basement of the Arms Building. They were probably studying for their ham license. Note the telegraph keys, used to practice Morse Code. The ham radio equipment is visible in the back of the photo, and the "QSL" cards hanging from the



wall above them are the post cards that hams often used to exchange with each other after a contact "on the air." (date unknown).

Quoting Wikipedia: "A QSL card is a written confirmation of either a two-way radio communication between two amateur radio or citizens band stations; a one-way reception of a signal from an AM radio, FM radio, television or shortwave broadcasting station; or the reception of a two-way radio communication by a third party listener ... During the early days of radio broadcasting, the ability for a radio set to receive distant signals was a source of pride for many consumers and hobbyists. Listeners would mail "reception reports" to radio broadcasting stations in hopes of getting a written letter to officially verify they had heard a distant station. As the volume of reception reports increased, stations took to sending postcards containing a brief form that acknowledged reception. Collecting these cards became popular with radio listeners in the 1920s and 1930s, and reception reports were often used by early broadcasters to gauge the effectiveness of their transmissions."

90.5 FM

RADIO STATION WPBH-AM DEERFIELD ACADEMY DEERFIELD, MASSACHUSETTS Phone PR 3-3618

Dear Sir:

In the past week the Federal Communications Commission has been kind enough to allow us to change our broadcasting to the Frequency Modulation band. This will be a big help to us because it will allow us to cover an area of about 50 square miles.

We are now in the process of finding a suitable transmitter. The FCC will allow us 10 watts of power maximum. We have received word that your station is of the low power variety, and we were wondering what kind of transmitter you use.

Would you be kind enough to send us the type and name of the manufacturer who makes your transmitter? If your transmitter was made by one of your engineers, would you please send us a complete diagram with the following information:

(a) type of antenna used

(b) total cost of construction

We wish to thank you for your trouble and efforts, and you may feel free to call upon us for any assistance that we may give you.

Yours truly,

Truman P. Reed President

TR:sm

please send to Bob (<u>rkdutton@gmail.com</u>) and Charlie (<u>ctrautmann@sciencenter.org</u>)

There are fleeting traces of what might have been an earlier instance of an AM and/or FM radio station at Deerfield going back to the 1950s and beyond. This letter, apparently from 1956 offers a tantalizing hint, but we have not been able to come up with any other information. If any alumni have any information or pictures,



Deerfield amateur radio station in operation in the basement of the Arms Building, ca. 1968. From left to right: Bill Morine '69 (later became licensed as N2COP), Charlie Trautmann '70 (at the mike, WA1KXD), Bob Dutton '70 (front of the oscilloscope), Steve Esthimer '69 (standing, with plaid tie). Names of the other three students are unknown.



The former Radio Club room in 2021.

Deerfield Radio Broadcasting (DRB) - 1620 AM

Deerfield Radio Broadcasting was born on Spring Day 1967 on a table in the Radio & Electronics Club, in a space that is now a lounge in the northeast corner of the basement of the Arms Building (see photo above). The station consisted of a 100-mW transistor device built from plans in Popular Electronics magazine, along with a desk, an ancient turntable, and a microphone. It was a one-man show, with the disc jockey struggling to change records as he talked. The broadcasting range was several hundred feet at best, and the frequency was 1620 kHz (more or less) at the top of the AM band. Reception was great if one was standing directly under the antenna (which led to the creation of an antenna somewhat longer than called for by the design specifications... This project was mostly a one-day pilot event by the club members to gauge interest in the concept of Deerfield having a broadcast station. It was a success, however, and work began over the next year or so to create a "real" radio station. The people involved included freshman Bob Dutton '70, Charlie Trautmann '70, and several other members of the club. (Reference: The History of DRB (1969) by Steve Estheimer (69)

In January 1968 DRB (also known as "Deerfield Academy Radio" or DAR) came back on the air, broadcasting on a regular basis at 1620 am. Broadcast hours were limited to morning and evening, and the disc jockeys were inexperienced and undependable.

The technical side of the operation was handled by Charlie Trautmann '70 and Bob Dutton '70, who had been instrumental in the founding of the station the year before. In the weeks before DRB opened, these two were to be found in any spare moment in the Radio Club room in the Science Building.

The picture (left to right) below shows Steve Esthimer '69, Charlie Trautmann '70, and Bill Morine '69 in the "second generation" studio.



There they did the meticulous and intricate work of wiring and testing (and sometimes rewiring and retesting) of complex radio frequency (RF), audio, and power systems. As the year wore on, DRB found it challenging to build up a sufficient collection of current records, and consequently, student interest lagged somewhat, but it did not stop.

To function more efficiently and effectively as a "real" radio station, the club decided that a studio would be needed, with proper soundproofing and space. Accordingly, in the fall of 1968, the decision was made to separate the station from the Radio Club room in the basement of the Arms Building. Several locations were considered, and the group finally obtained permission to create a facility in a remote section of attic in the west end of the Memorial Building. Plans were drawn up by members of the club, and costs were

calculated. The administration generously agreed to fund the materials and labor for the studio, and in mid-February 1969, construction by the DA facilities department commenced. The new studio consisted of three small rooms and was completed a week later. The rooms included a DJ studio with double-glazed, soundproof window, a control room, and a record library.



Bill Bond, head carpenter in the Facilities Department, frames the new studio in the west attic of the Memorial Building. Brickwork and HVAC in the background.



Dan McKay '70, left, and Steve Esthimer '69, right, inspect construction of the new DRB studio in the third floor attic of the Memorial Building in Spring 1968.

The following weekend Bob Dutton '70 and Dan McKay '70 brought rollers, brushes, and several gallons of paint and painted and carpeted the studios.



The front entrance to the new DRB studio in the Memorial Building, 1969, looking through the outer (news) studio into the main studio

With the physical studio completed, the leaders of the station went into action. A committee of five - Steve Esthimer '69, Bill Morine '70, Dan McKay

'70, Bob Dutton '70, and Charlie Trautmann '70, divided the responsibilities for the operation of the station.

Dan McKay recalls: "It brought back memories of those early rogue days. The first that came to mind was of a couple of us slipping away one night from a school dance with a couple of Miss Hall's girls in tow in order to "show them the studio" but I digress.

"My involvement was on the programming side rather than the technical side. Those were the days of records and turntables. As I recall it, we had two turntables in the studio. While one record was playing, the DJ would cue up the next record and then hold the turntable still with his thumb until it was time for the next record to play and then release his thumb so that the turntable would turn and the music would start on cue. I think that at some point Bob may have devised a modification that allowed us to keep the turntable from spinning without manually holding it. This made life easier for the DJ but resulted in wear and tear to the turntables.

"I also recall that one of the issues we faced was to secure a source of current records. Several of us made a trip into Greenfield to a record store where we succeeded in convincing the store to loan us 45's of the current top 30 records. We made weekly trips to the store for a period thereafter to return those records that had dropped from the list and pick up those that had come onto it."

The new station, christened DRB, released the first "Hit-line 25:

DRB HIT-LINE 25 Week ending May 11, 1969

	1.	It's your thing	Isley Brothers
	2.	The Boxer	Simon & Garfunkel
	3.	Twenty - five Miles	Edwin Sterr
	4.	Gimme, gimme Good Lovin®	Crazy Elephant
	5.	Time is tight	Booker T. & the M.G."s
	6.	Nothing but a Heartache	The Flirtations
	7.	Goodbye	Mary Hopkin
	8.	Too busy Thinking about My Baby	Marvin Caye
	9.	Get Back	Beatles
	10.	These Eyes	The Guess Who
	11.	You've made Me so Very Happy	Blood, Sweat & Tears
	12.	Pinball Wizard	The Who
	13.	Will you be Saaying after Sunday	Peppermint Rainbow
	14.	Only the Strong Survive	Jerry Butler
	15.	Sweet Cherry Wine	Tommy James & the Shondella
	16,	The Composer	Diana Ross & the Supremes
	17.	The River is Wide	The Grass Roots
	18.	Day is Done	Peter, Paul & Mary
	19	. Love (can make you happy)	Mercy
	20.	Communications Breakdown	Led Zepplin
	21.	Where's the playground Susie	Glenn Campbell
	22.	Heather Honey	Tommy Roe
	23.	First of May	Bee Gres
	24.	Aquarius	Fifth Dimension
	25。	Do Your Thing	Watts 103rd St. Rhythm Band
DRB	HITBO	UND SOUNDS	
	I c	culd Never Lie to You	New Colony Six

The grand opening was on March 31, 1969. DRB continued to improve and grew steadily. The listening audience expanded, including townspeople and the Bement School, as well as Deerfield students and faculty. New additions to the record library were made weekly, largely through the generosity of Richard L. Swig '69, whose father was in the record industry. The station managers also trained underclassmen in various phases of the operation.

"The Gap": This chapter of the story ends in 1970 for the moment, with the graduation of Bob Dutton, Charlie Trautmann, and others in the class of 1970.

There are indications that the station continued to operate at least into 1973 based on this photo from the 1973 Pocumtuck (can anyone identify this "air personality"?) but little post-1970 documentation has been discovered to date. We're looking for alumni who graduated in the mid-1970s to help fill in this gap. Please contact us if you or someone you know can help! Please send any comments, recollections.

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additional stories, photos, etc. to Bob (<u>rkdutton@gmail.com</u>) and Charlie (<u>ctrautmann@sciencenter.org</u>).

Vignette: Technical details (DRB):

A group of students stayed at Deerfield over spring break in 1969 to finalize and install the equipment. Charlie Trautmann '70 provided the radio frequency gear, which consisted of a 1940s-vintage Meissner Signal Shifter, a tube-type variable frequency oscillator (VFO) running about 15 watts and having interchangeable coils that allowed it to transmit on various amateur radio bands. He modified the equipment to broadcast at the top of the AM band (1620 KHz, with 1800 KHz being the bottom end of the 160-meter ham band) and built a modulator to integrate with the audio signal from the studio.

To go with this more powerful transmitter, a larger and higher antenna was also installed, consisting of a half-wave dipole antenna (approximately 90 m long) strung high above the ground between a chimney of the Memorial Building and a nearby tree. This transmitter and antenna alleviated the signal strength problems of the station's prior iteration. In fact, the combination was so effective that DAR's signal was subsequently picked up by ham radio operators hundreds of miles away. Not all of them appreciated this "rogue transmission" or "pirate radio," as it was called at that time...

The system had a glitch.

The Meissner Signal Shifter, which provided the basic radio frequency carrier signal, evidently sent out a number of extraneous ("spurious") frequencies other than at 1620 kHz on the AM radio band. One of these signals fell within the 160-meter ham radio band, and the hams using this band were less than thrilled. One of them, Jim Hemingway, K1PBW, lived nearby and made the trip over to Deerfield in the late fall or winter of 1969-70 to track down the source of the problem (i.e., Trautmann and Dutton).

Vignette: More Power!

The DRB signal was more powerful, and traveling greater distances, than anyone realized at the time. As told by Jim Hemingway:

"The Meissner Signal Shifter was putting out a 20 or 30 watt signal somewhere around 1730-1760 khz. What everyone on campus was listening to was a harmonic of the primary frequency. This campus signal, at 1620 kHz, probably had only 100 mW of power behind it. There was no interference with the 160 meter ham radio band (1800-1825 and 1975-2000 kHz). 160 meter hams shared the band at that time with buzzy Loran transmissions that were used by ships at sea for navigation, signals that were so strong that they probably covered up whatever additional harmonics of the Deerfield station that fell within the 160 meter band.

"However, the ham operators sure did notice the strength of the 1730-1760 kHz fundamental (main) signal right at the edge of their 160 meter band. At night DRB was reaching as far south as the Carolinas, which is not surprising given the quality of the dipole antenna in use and the amount of transmitting power DRB was running at that time.

"What prompted the older ham radio operators on 160 meters to reach for their phones to call the FCC was the music DRB was playing. When I first tuned in to your impressively strong signal just below the 160 meter band, you were playing Jimi Hendrix – "Are You Experienced" (or maybe "Foxy Lady") from the first Hendrix Experience album. I was living in an apartment next to Mt. Toby apartments on Route 47 in Sunderland and was on the air at the time when I heard these complaints from hams coming from all over the northeast. They unfortunately didn't appreciate Jimi Hendrix and his music. Some of them knew that the signal was coming from somewhere around Deerfield, and it didn't take me but a moment to figure out that it was coming from the Academy. And so I told them to put down their phones and let me investigate. I hopped into my old Willys Jeep station wagon - I was a grad student at UMass at the time - and drove over to Old Deerfield and tracked the signal to the DRB studio in the attic of the Memorial Building." "I think it was Charlie Trautmann who responded to my knock on the door. Having pioneered AM pirate radio during my senior year at the Hotchkiss School in 1963, I was of course very sympathetic to what you all were doing. But I quickly advised you to shut the station down immediately and, later, helped you do a bit of re-tuning of the old Meissner Signal Shifter transmitter. At any rate, the station was shut down without delay, and I was able to report back to those hams on 160 meters that the situation was taken care of, and that there was now no reason to call the FCC. Had they done so, the FCC would have been quick to react, given the fact that they had the staff at that time in Boston and elsewhere to locate, monitor, and notify pirate radio offenders."

As it turned out, coincidentally, Jim Hemingway was quite familiar with Deerfield Academy. His father was a member of the Class of 1938 and a classmate of Homer Frank Trautmann (W2MTR, W1GK), Charlie Trautmann '70's father.

DRB mysteriously closed down for several weeks, with station managers citing "technical difficulties."

Vignette - DRB gets a phone (Ext 310)!:

To promote call-in requests, DRB ran a phone extension cable from its prior location in the basement of the Arms Building to its new location in the attic of the Memorial Building. Trautmann and Dutton, on a spring break trip to Boston, picked up a cheap, used telephone for the station at a surplus electronics store . Unbeknownst to them, the used phone was defective and although it worked, caused an alert to appear on the Academy's switchboard in the main school building. According to Trautmann:

"One day, we found the phone was not working, and by tracing the line, we were able to determine that the problem was probably in the telephone switching room located in the basement of the main school building directly underneath the switchboard operator's room. So late one night, Bob Dutton and I slipped into the switching room through its unlocked basement window. We traced the DRB's line and found that the wires had been disconnected from a wire-wrapped connection block. We reconnected the wires and left. However, within a few days, our phone was again not working.

When we broke into the room for a second time, we not only reconnected the wires, but we soldered them - the only phone extension soldered among dozens of others connected via the wire-wrapped block."

"This display of hubris turned out to be a very bad idea."

"Several days later, the all-school intercom broadcasted an all-campus announcement in the middle of class (highly unusual) with the message: 'Bob Dutton and Charlie Trautmann: please come to the Dean of Students office immediately.' Everyone in the school heard the announcement and knew that there were only two possibilities. The first possibility, which we hoped was the case, was that some piece of electronic equipment, such as the campus PA system, had failed and the administration needed help fixing it. The second possibility was that we had done something very wrong and were about to get into some serious trouble.

'When we arrived, it didn't take long to determine that we had not been called in to fix something. Bob Merriam, the dean of students, was fuming, as was the technician from New England Telephone who had been called in, for the third time, to fix the errant signal on the Academy's switchboard.

"As a result of our transgressions, Merriam issued us a stern warning and made us both turn in our extensive collections of keys to various buildings that we had amassed during the years while serving as audio/visual technicians."

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 midto 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.

Vignette: "Signing Off - Remembering WGAJ" by Brock Hines '79

From an article in the Fall 2009 issue of Deerfield Magazine (see full article in reference materials). Brock was one of several local DJs who did radio shows on WGAJ to keep the station active and on the air during school vacations.



Deerfield Academy Radio: Livestreaming to the Internet on mixIr.com (2018 to present [as of 2021])

After going dark again, this time for nine years, broadcasting at Deerfield emerged for a third time with the creation of an Internet streaming channel called "Deerfield Academy Radio." In a small, modest studio in the basement of the Main School Building, members of the Deerfield community take the initiative to serve as radio show/podcast hosts.





Trautmann '70, visiting the streaming studio in the basement of the Main School Building, 2021

There is no large cast or crew, no recognition or credit for being a host. Under the guidance of faculty member Jan Flaska, the station uses the MixIr streaming platform to publish radio shows recorded on campus, which can be heard both live and as archived programs at

https://mixlr.com/DeerfieldAcademyRadio. The first program in the archive, titled, "DA Mix," was posted on January 11, 2019. Programs are based on the interests of their hosts and run the gamut from live sports coverage to music to interviews with alumni and others. Previous shows have included Ms. Cornelius' and Ms. Mott's show "When I was Your Age," which investigated the adolescent lives of Deerfield faculty through music and Chijoke Achebe '19 and Dylan Bane '20's show "Bane & Achebe" which discussed politics. The motives for starting a show differ from person to person.

Vignette: "When I was Your Age"

Regarding the origins of her show with Ms. Cornelius, Ms. Mott said, "I was thinking about how I used to make mix CDs in high school and how I found myself, more and more this year, saying things like 'when I was your age.'" The basis of their show is straightforward: every week, a guest from the community speaks about their teenage years, telling the story through music.

When asked why music is the designated channel of storytelling, Ms. Mott said, "Music is a really good lens for both learning about our own pasts and our memories, and a great lens for learning about other people's pasts and memories and selves." While both Ms. Mott and Ms. Cornelius feel passionate about music, they both have agreed on a common goal: connect with new people on campus and bridge the gap between faculty and students. Ms. Cornelius said their overarching goal is to "grow together as a community." She added, "I think it's a way to learn things about people that you otherwise wouldn't really have an opportunity to learn about. Sometimes, it can feel like there's this distance between kids and adults, even though adults have had a lot of experiences that would allow them to really relate to kids. This show helps bridge that divide a little bit."

Vignette: "The Lost Art of the Mixtape"

Meanwhile, Mr. Stallings also hopes to bring together faculty and students with his radio show, which shares personal mixtapes created by friends. While music, especially playlists created by others, has been increasingly created for and distributed to larger audiences, mixtapes bring back a more personal element. Mr. Stallings's show focuses precisely on the personal aspect of music, showcased directly in the mixtapes his friends created for him while it was still popular to do so. His show, The Lost Art of the Mixtape, is a time-travel back to the past with carefully thought-out music. It was created for a simple, selfless reason: displaying good music.

"The simple goal is that, especially with the tapes I've exchanged with a friend of mine from college named J. Thompson, I've felt like they're so good," Mr. Stallings said. "I've always wanted to have an opportunity for more than just me to hear them —a mixtape is a personal thing, you give it to another person. I've always felt that it's a shame I'm the only one who gets to hear them." While Mr. Stallings is working to combat the onslaught of modern music culture with his own personal touch, his show works on exposing the Deerfield community to all different varieties of music. "The range covers everything from old country to singer songwriter stuff to hip hop to punk rock to hardcore punk rock: it really encompasses everything over time." Mr. Stallings adds, "I feel lucky to be in possession of some really well-curated music and to have the opportunity to say a few words about it. If people like listening to well-curated music, it's worth listening to."

Deerfield Academy Radio shows share the common goal of uniting the school community, whether it is through faculty laughing about the music they used to listen to in high school, sportscasts, hand-picked music from those close to Mr. Stallings, or interviews with alumni and community members. All archived shows are available free on deerfield.edu/radio.

(Source: The Deerfield Scroll - Abby Persons '21 Staff Writer, November 8, 2019)

That's a Wrap - at least for now...

As Abby wrote in her article, "Deerfield Academy Radio shows share the common goal of uniting the school community..." Her words apply equally to the original DRB some 50 years ago and to the "Deerfield Academy Radio" of today (2021). But the journey continues as we write this, and we invite comments and updates from others in the community, then and now, to keep the story alive and growing as the technology evolves: From ham bands to AM to FM to podcasts and the Internet to ??? The future lurks just around the next corner!

Biographies

- Mark Beaubien, '83:
- **Bob Dutton '70**: Bob Dutton '70, a/k/a "Mr. FixIt", shared many experiences, along with often unpredictable bursts of fame and infamy, with Charlie Trautmann in the Radio & Electronics Club, which spawned the original "DRB 1620 on your AM dial". He learned much in the classroom, but perhaps more in exploring "behind the scenes" (the "soft underbelly"?!) at DA. From there he went on to MIT, majoring in Electrical Engineering, then earned his MBA at Babson. He worked for 40 years for GTE, which became General Dynamics, starting as an Engineer and meandering into technical training and field service developing and installing international satellite-based phone systems before crossing to the "dark side" and becoming "one of them" (management), and ultimately retiring as CIO.
- Jan Flaska, Faculty, (2005 today):
- Jim Hemingway, Deerfield Faculty (1983-1992): Jim moved to Amherst to attend grad school at the University of Massachusetts in the Fall of 1969. He was finally able to put his undergraduate and graduate work in English to good use when Bob Kaufmann hired him in 1982 to teach English, coach soccer and skiing, be a corridor master on Plunkett East 1 and of course watch over WGAJ-FM. Not long after he retired from Deerfield, Mark Beaubien '83 convinced him to put his tech hat back on and come and work for him as a technician/engineer at Yankee Environmental Systems in nearby Turners Falls. Jim currently lives in Shutesbury, just a few miles away from Deerfield, Amherst and the Greenfield/Turners Falls area of Western Massachusetts.
- Charlie Trautmann '70: After graduating from Deerfield, Trautmann went to Amherst College, where he was given a job, as a freshman, repairing hi-fi equipment by none other than Jim Hemingway, the head technician at The Listening Post, Inc., a small stereo shop in Amherst. Jim worked there part-time while he was a grad student at U-Mass. Trautmann later became a registered professional engineer, professor, and science museum director after obtaining degrees in physics, geology, and engineering from Amherst, Stanford, and Cornell. He lives with his wife Nancy in Ithaca, NY and continues to hold a general-class ham radio license. He has served as

director of the Sciencenter Discovery Museum and as professor in the departments of Civil & Environmental Engineering and Psychology at Cornell.

Epilogue: Lessons Learned from Broadcasting at Deerfield

- Since its beginning, DA broadcasting has been primarily driven by student interest in broadcasting, rather than by the school administration interested in pushing out content or training people for futures in communications.
- The various phases of DA broadcasting have reflected in large part the technology of the time. Because of changes in technology (AM to FM to Internet streaming), and normal student turnover, both the operations and hardware associated with each episode have been transient.
- Faculty involvement is key for continuity given the transient nature of student participation (there was no continuity after Phase 1, Phase 2 survived throughout Jim Hemingway's involvement but only briefly beyond, and Phase 3 requires Jan Flaska's involvement as noted during an interview of the authors by two students in December 2021)
- It requires significant funding for facilities and staff supervision to broadcast, regardless of the underlying technology. Support and sponsorship from the school, and particularly the controller, is critical.
- As access to technology has become more mainstream, DA broadcasting activities have shifted from "providing the technology" to "communicating content." Deerfield students interested in broadcasting initially went into technical-scientific-engineering fields, while more recent graduates involved in broadcasting have gone into business and fields less focused on the technical side of communications.
- One of the key benefits that DA offers its students is the chance to take an idea, find support to pursue it, and gain the experience of starting up an enterprise. Broadcasting at DA has been highly successful as a learning laboratory, probably well beyond the value of the content that was broadcasted.