

## Relocating FCAD's Shared Audio Facilities Has Provided Ryerson With One Of The Worlds Top Educational Audio Environments

**From: Office of Program Director, Operations and Technology, Rogers Communications Centre**

**September 1, 2008** – The inventory related to the recent reorganization of the Faculty of Communication and Design's (FCAD) Shared Audio production labs and associated networked based audio facilities show that Ryerson University's audio facilities are amongst the countries largest and provide one of the top educational audio training and production environments globally. FCAD's audio production capabilities were found to be comprised of a bevy of interconnected labs with many having advanced audio production capabilities. Shared Audio has over fifty audio production computers of its own, five multi-track audio mixing control rooms and an additional nine recording studio's used to record, mix and edit voice, music, radio programs, hybrid radio/television content and produce sound effects for movies and television by employing the Foley process. There are and additional six servers employed to support a number f automated services associated with it. There are few educational operations in the world that can match Ryerson's converged facilities in terms of audio, video and its Internet and mobile production capability. The facilities, which were recently reorganized operationally under the Rogers Communications Centre (RCC), have come about partially as a direct result of the departure of JAZZ FM from the third floor of the RCC.

The relocation and construction of FCAD's Shared Audio Production Facilities, that have occurred over the past year, involved much more than simply picking up and moving existing facilities. The old JAZZ FM space, which was designed specifically for audio recording and production, allowed a number of existing facilities to be placed in the appropriate acoustic environment. However, the relocation of the facilities proved to be more challenging than originally envisioned. The space lacked the infrastructure to build a modern audio recording studio and Internet Radio station because everything, right down to the original Ethernet cables that were placed into the walls when the building was constructed, were stripped out and removed when the former occupant left the Rogers Communications Centre.

Adding to the complexity of the project is that FCAD's facilities have to be designed to meet a variety of production needs that emerge from all of Schools where the curricular need covers just about every discipline associated with the field of audio production. In addition to the production facilities the plan also required the relocation of Ryerson's Student Produced Internet Radio and Interactive Technologies station (SPIRIT). SPIRIT is a 24 hour radio/television hybrid environment. Hence the work had to address both the lack of infrastructure and the modernization of SPIRIT that would fit both today's production needs and tomorrows emerging media paradigm.

The build that is nearing completion addresses FCAD's next generation of audio production needs as follows. The inventory of labs that are currently under construction or are operable for Shared Audio use include;

- IMA-302 - Recording and Mixing Facility
- RCC-348 - 7.1 Mixing and High Definition Audio For Video Suite
- RCC-346A and RCC-346B - Foley Studio and Mixing Theatre
- RCC-346C, RCC-346D, RCC-346E and RCC-346F - Personal Production Suites
- RCC-340C, RCC-342 and RCC-344 Multi Track Recording Complex
- RCC-164D Personal Shared Audio Work Stations
- RCC-168 - Transfer Stations
- Virtual Audio Production Lab
- Sound Effects Server
- FCAD Media Server System

Various feeder labs include;

- RCC-224 – Advanced Media Lab I
- RCC-229 - Broadcast Multimedia Lab
- RCC-357 - Hybrid Computing Media Lab
- RCC-359B - Visual Computing Lab
- MIDI Production Suites
- Bill Lawrence Studios

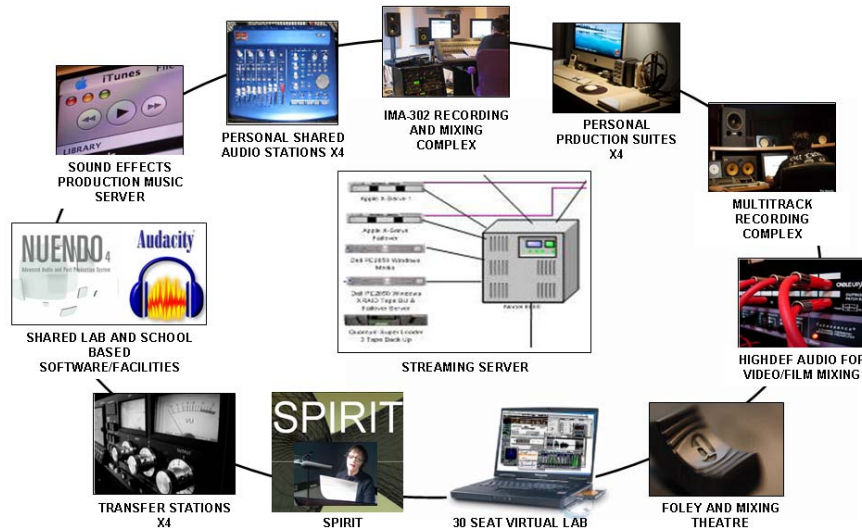
For the entire Third Floor RCC complex the following infrastructure items are underway;

- A modern Ethernet based IT network to provide network services to all rooms in the complex.
- A dedicated IP based Production Level Audio Transport system that will deliver 16 stereo pairs (8in/8out) to each room over a single network cable. This technology will eliminate the need to run a multitude of individual audio cables between each room. Because it's IP based it will also allow for interconnection of facilities, some spread across the University, to be interconnected using computer networks and wiring.

**For Ryerson's Ryerson's Student Produced Internet Radio and Interactive Technologies station (SPIRIT)**

SPIRIT is being reborn in an era of IP based audio transport. It's rebuild will extend its radio automation beyond live to the Internet to include the automatic creation of Podcasts, as well as the delivery of other forms of on-demand downloadable content. The station will be constructed as a modern Radio/Television hybrid that will provide HDTV quality video distribution to a new campus wide television station –RUTV—that is integrated into Ryerson University's Digital Signage Initiative. The new SPIRIT will include;

- The incorporation of a newly acquired Studer OnAir 2500 Production Mixer.
- An upgrade to its iMediaTouch software and hardware to truly develop web based podcasts as a normal part of SPIRIT's automated workflow.
- A room layout that's inclusive of video as an equal partner to its audio counterpart. The layout creates quality camera angles with the intent of producing high definition television content.
- Upgraded furnishings, Kino Flo lighting and wall materials so the stations "look" will be in tune with today's visual language.
- A six camera remotely controlled robotic high definition camera system that will allow for a variety of production scenarios between SPIRIT's control room and studio that integrates via HDSDI interconnect to other RCC based video facilities.
- Lighting, which will be integrated employing a "Lighting Truss", that respects the acoustic characteristics of the RCC's third floor studio's by mounting lighting, camera's, plasma displays etc. to the truss piping instead of the specially built acoustical walls that are found in the complex.



Information on Ryerson's Shared Audio Facilities, including extensive documentation on its hardware and software can be found at <http://www.rcc.ryerson.ca/technology/audio.htm>

Information on SPIRIT can be found on their Internet Radio website at <http://www.spiritlive.net/>

More information on the Rogers Communications Centre, the shared FCAD facilities it operates and the specifics of the labs that it operates can be found at [www.rcc.ryerson.ca/technology/index.htm](http://www.rcc.ryerson.ca/technology/index.htm)