NYCT Rail Control Center

The Programming Committee headed by John Michelsen presented a unique view of NYC developing a world class transit system.

John Michelsen

David Weiss, our presenter spoke about the progress being made since 1992 when the concept was born. The new NYCT Rail Control Center (RCC) building is on the site of the old 54th Street Bus Depot, which was demolished in 1996. David has been with the NYCTA for 12 years and is now the Senior Director of Project Planning.

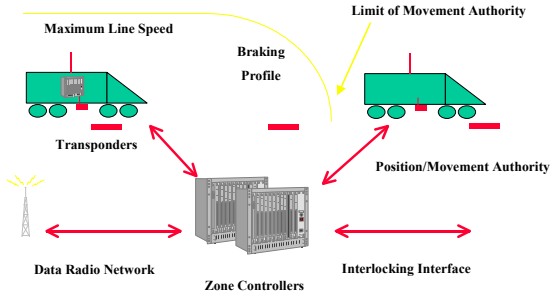
David M. Weiss
NYCTA Senior Director

The foundation was built in 1997. The RCC measures 375' by 140' on 3 levels.

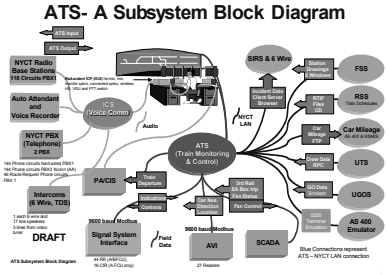
The New Rail Control Center

It contains an operating theater with 40,000 sf of column free space. The new RCC will contain several new technology systems including Automatic Train Supervision (ATS), a SONET/ATM communication system; Communications Based Train Control (CBTC); and a Station Information Management System (SIMS) with public address. The IRT will be the first line with Automatic Train Supervision (ATS).

Concept CBTC System Operation



ATS provides automatic routing and dispatching; transportation rule monitoring; real time train monitoring and control; integrated communications at the console; and the data source for the customer information signs. Completion is scheduled for 2005. NYCT is already working on the design of the next phases.



The ATS will enable NYCT plans to provide real-time customer information through the train monitoring function. Information will be passed on to the new Station Information Management System's public address component.

The CBTC will enhance safety by providing continuous over-speed control, safe train separation,

and interlocking control. It will increase operating flexibility and provide smoother stops at stations.
The SIMS provides public address at stations, customer information signs with real-time information from ATS, customer help points where customers can get information and CCTV.

Operating Theatre – Work Consoles

There will be integrated voice communications which are to be centralized. Remote locations will be tied in to master towers, yard towers, dispatching offices. The operating theater is multifunctional with several platform levels.

Operating Theater

There were many implementation issues that go along with transitioning from a decentralized, manual system based in towers and field offices to a centralized, automated system based in the Rail Control Center with electronic connections to other computer applications. Project Implementation Teams (PITs) have been established to assure we're ready and in place when the time comes.
Training over 1000 people to operate and maintain the new software based system is critical. This requires facilities, courses, and trainers.
Organization and Staffing issues are involved. Operating and Maintenance plans are being developed. New Rules and Procedures, including Records Retention, must be developed. In addition, other support groups, such as timekeeping, train and crew scheduling, and reporting are also affected.
The key issues for the 12 year plan was to allow sufficient planning to define and specify all requirements, deliverables, monitor and approve intensive prototyping, GUI, interfaces, commercial software vs. site developed software, and ownership issues.

Mr. Weiss is an active member of the IEEE in the Vehicular Technology Society. He is now the Chair of the Student Activity Committee and President of Camp Sussex, Inc. a charity that brings 600 kids to camp each summer.

Alan Osborne, Chairman of the PES/IAS NY&LI Chapter, who has greatly enriched our programs and in general the PES/IAS section during the past year, said his farewells as he retires to Florida at the end of November 2003.

Media Concentration: How regulatory law and public policy have served to transform today's telecommunication industry. A one day seminar by: Peter Lubell, IEEE Life Senior Member.
Just as the newsprint market in U. S. cities has evolved into a single, or dual, provider marketplace, so has federal regulatory law and public police served to restructure the telecommunications industry in all its current attributes. Wired and wireless telephony, radio and television broadcasting, cable and satellite TV, and Internet services. Learn how almost 100 years of U. S. federal regulation of the telecommunications industry has evolved and adapted to the current divers technologies of today's electronic media marketplace. Understand the options and opportunities that are afforded by recent regulatory and policy decisions. Although this course is focused on policies and practices in the U. S., some attention will be paid to the growing impact of globalization as it relates to our domestic telecommunications economy. For further information about this one-day short course to be given on Friday, April 2nd at The Cooper Union contact the office of Continuing Education at www.cooper.edu/ce or by phone at 212 353 4195.

IEEE Confers Life-Fellows Member Status to Dr. A. Mayer Sasson

Dr. Sasson became a fellow member in 1994 and joined the elite ranks of IEEE Life-Fellows this year, January 2004. Dr. Sasson is a senior project manager at Con Edison and works in the Energy Markets Policy Group.