INTEGRATING TECHNOLOGY AND ARCHITECTURE
“Our experience with the RLS team has proven that a partnership can be formed with like minded consultants, bringing the highest level of professionalism and service to the design process, resulting in a 10 year working relationship on Finance, Technology and Entertainment companies.”
– *Michael Garcia, Principal, Garcia + Francica Architects*

[ tech • no • lo • gy ] The practical application of knowledge.

RLS develops creative, cost-effective, and lasting designs for Data Centers, Voice / Data / Video Networks, Audiovisual Systems, and Media Facilities.

For over 25 years, we have provided our Clients with solutions for systems and infrastructure that employ a mastery of technology with technical program management to achieve successful project implementation. Combining expertise in program management, powerful budget modeling, detailed construction documents, and thorough construction administration, we incorporate technology designs into buildings that help our Clients’ operations to succeed.

We work for building architects, corporations, entertainment companies, educational institutions, and government. Our portfolio includes Data Centers, Broadcast Radio and TV Facilities, WebCast Studios, Distance Learning Centers, Film Screening Rooms, Labs, Corporate Campuses, Universities, Government Institutions, and most other facilities that house bipeds and inanimate objects.
Expertise

Technology Program Management
Our command of technology and the construction process keeps both “green field” and “fork-lift upgrade” projects on track, on budget, and aligned with strategic goals. We provide goal definition, cost control, competitive vendor selection, and implementation oversight.

Technology Infrastructure
Our infrastructure expertise encompasses over 30 million square feet of structured wiring systems and numerous Data Centers. If your project involves voice, data or video, chances are we’ve probably designed something just like it.

Network Design
We design powerful, secure, and resilient voice, data, and video networks. We develop tools that aid our Clients in evaluating the functional and cost benefits of emerging technologies such as VoIP telephony, 10 Gigabit Ethernet, and wireless networks.

Audiovisual Systems
Our 25 years of experience enables us to provide unbiased recommendations aligned with your requirements. Our portfolio includes Auditoriums, Conference Rooms, Libraries, Theaters, and Distance Learning Classrooms.

Media Facilities
We integrate all aspects of facilities design – acoustic and architectural design, power distribution, HVAC, lighting design, and low voltage cabling design. We have designed hundreds of Recording Studios, Radio Stations, TV and WebCast Studios, and Video Post Production Facilities that exhibit predictable performance.

“RLS was a true partner to my IT group and facilities team. They not only had a superb understanding of technology and the construction process, but they were our advocates to the rest of the design and construction team.”

– Lee Hsiao, Information Services Manager, Namco
Select Projects

Broadcast
KKSF, KYLD, KMEL, K101, KCMG, KPIX Newsroom, KTEH
Public Television Digital Systems Upgrade, NetApp
WebCast Studio & Demonstration Facility, UC Berkeley
School of News & Journalism

Civic
State of California San Francisco Civic Center Complex,
County of Alameda Server Room, Mystic Seaport
Technology Standards Consulting

Corporate Campus
Lucasfilm’s Letterman Digital Arts Center, Franklin
Templeton Bay Meadows HQ, Intuit Mountain View
Campus

Data Centers
AboveNet, BroadVision, Barnes & Noble (bn.com),
Lucasfilm Ltd., NetObjects, Fair Isaac & Company

Education
SFSU Campus Technology Infrastructure Upgrade, San
Francisco School District Technology Master Plan,
Stanford University Wallenberg Center for Learning

Entertainment
ESC Entertainment, Disney Vacation Club Presentation
Centers, ABC Executive Conference Center, Namco US
HQ Facility

Healthcare
St. Francis Memorial Hospital Technology Infrastructure
Upgrade and Surgery and Emergency Departments,
Hospice of Marin Corporate HQ, Contra Costa Health
Services Data Center, UCSF Parnassus Campus
Technology Study

Mid & High Rise
Wells Fargo Bank 33-story Corporate Offices &
Server Room, Adobe Systems Worldwide HQ,
Microsoft Silicon Valley Corporate HQ, Sony Northwest
Operations Center

Religious
San Francisco Chinese Alliance Church, Community
Presbyterian Church of Cupertino, Ephesians Church
of San Francisco, Saint Beulah Church of San
Francisco, San Francisco Christian Center, Sonoma
Christian Church

“Their rigor, experience and professionalism provided
significant value... I would not hesitate to recommend RLS to
other Companies and look forward to working with them
again in the future.”

– John Koenig, Former CIO of
Lucasfilm and Current Director
of Technology for Lawrence
Livermore Labs
Located in The Presidio National Park, the four-building, nearly one million square foot Letterman Digital Arts Center showcases RLS’ multi-disciplinary technology expertise.

As Prime Technology Consultant on the project, we managed the planning and design of multiple technology systems. Our involvement encompassed conducting needs assessments, complete design, preparation of construction documents, bidding and procurement, construction administration, and commissioning.

We developed an extensive Technical Program Document, created and maintained a detailed consolidated IT budget, and facilitated a competitive vendor selection process which ultimately affected a significant cost savings to the Client. In designing the network we also helped the Client make key technology and critical procurement decisions. This effort included the review of VoIP, TDM/PBX telephony, 10 Gb Ethernet, and the use of Wireless LAN technologies in a security-sensitive environment.

Our scope included:
- Structured Wiring System
- Data Center
- Audiovisual and Broadband Systems
- WebCast Studio
- Converged Voice over IP/Data/Video/Wireless Network
Working with Garcia + Francica Architects, RLS was selected as the Prime Technology Consultant for the A/E Team tasked with designing the new headquarters facility for this Interactive Video Game Engineering company. The facilities included several “technology intensive” spaces, such as a Server Room, IDF spaces, Labs, and Multimedia Conference Rooms.

RLS provided design, consulting and project management associated with the Server Room, Structured Wiring System, Voice and Data Network, and Audiovisual Systems. Our work also included the creation of a Technical Program Document, RFP preparation for a Converged Network featuring full VoIP implementation, administration of the Vendor selection process, and construction administration of all technical components.

The Audiovisual System featured various rooms that included Crestron control of numerous AV sources, computer interfaces, multiple gaming consoles, motorized projector lifts, and 7.1 surround sound. Room types included conference rooms, development lounges, a boardroom, and two reception area lobbies with custom curved projection screens utilizing geometric corrective projectors.
BroadVision’s corporate headquarters, located within the Redwood Shores Development, encompasses nearly 600,000 square feet of high-technology office space. RLS fostered BroadVision’s mission by providing design and installation oversight for a new voice/data cable plant and infrastructure network systems.

Additionally, RLS was responsible for design and specification of all building Audiovisual systems (a 1.8 million dollar budget), and a new WebCast Studio Facility supporting BroadVision University and Corporate Communications.

Complete scope encompassed:

- Voice/Data Cable Plant Design and Specification
- Data Center Design
- PBX Center Design
- Main Network Distribution Center Design
- WebCast Studio Supporting BroadVision University
- Audiovisual and Broadband Systems
- Construction Administration and Installation Oversight
As a testimony to the lasting value of our technology solutions: In 1991 we designed all of the building technology systems within Sony’s 650,000 sq. ft. facility and brought fiber to the desktops of nearly 3,000 users. Over a decade later, this infrastructure is still in place and has served a myriad of advancements in technology.

Scope Encompassed:

- Building cable tray and cable routing design
- Communications cable plant design for 1400+ voice / data stations
- Audiovisual Systems design consulting for 10,000 sq. ft. Conference Center, including video conferencing room and systems
- Building MATV and AV systems design
- Signal distribution, lighting design, and custom control software for the Employee Electronics Store
- Off-air signal distribution for the Consumer Service Center
- Design of Security Systems control console
- Complete construction documents for an Audio Lab / Studio
Stanford’s James H. Clark Center is home to the experimental Bio-X Program, which connects biology and medicine by allowing scholars from the Biological Sciences, Engineering, and Information Technology disciplines to perform collaborative research in one facility.

This forward-looking program demanded a facility that would utilize the best of today’s technology to engender interdisciplinary learning. RLS supported world-renowned architect Foster & Partners by creating integrated Audiovisual systems that complement the award-winning building design – and that ultimately help academics share information efficiently. In essence, RLS designed systems that blended with the architecture and exceeded client expectations for performance.

The project involved the construction of three, 3-story buildings comprising the Clark Center. Our effort on the project encompassed the integration of Audiovisual Technology Systems within an Auditorium, Classrooms, Labs, and Conference Rooms.
In the words of its President, James A. Donahue, the Graduate Theological Union (GTU) was created out of the belief that "the future of religious renewal and theological education in this world depends on the willingness of faith traditions to come together in the midst of differences."

GTU's Flora Lamson Hewlett Library is one of the largest theological libraries in the United States, possessing over 410,000 volumes and 285,000 microforms and other media. Necessitated by a growing collection and a demand for current technological resources, RLS was called upon to recommend and integrate technology systems within the renovated library.

We assisted the GTU in this endeavor by providing new Library Information Technology Systems including the design and engineering of:

- Voice / Data Cable Plant Infrastructure
- Data Center
- Telephone System (including Unified Messaging)
- Audiovisual Presentation Systems supporting a Community Training Outreach Program
Following the acquisition of several Broadcast Radio properties within the San Francisco and Los Angeles markets, Clear Channel Corporation undertook a campaign to consolidate the physical facilities of these properties.

The consolidation not only offered Clear Channel the opportunity to reduce operating costs by bringing together multiple properties within one physical location, but also provided the opportunity to upgrade each station with current digital production and Internet broadcast transmission.

RLS supported Executive Architects Hornberger + Worstell, Inc. by providing interior architectural, acoustic, and lighting design, as well as technical systems integration for the On Air, News, and Production Studios, and the Engineering areas within each of the stations.

We helped Clear Channel reduce overall operating costs by designing a Master Engineering Control Room within both the San Francisco and Los Angeles facilities. Since the Master Control Room centralized technical equipment serving the multiple stations located within each of the facilities, a single engineering team could support up to four stations. This enhanced operational efficiency and overall cost savings.
Combining expertise in architecture, acoustics, and systems design, we created the Zion Theater at ESC Entertainment. The Theater is made up of a film and digital video Screening Room and a Projection Booth.

The Screening Room is used primarily for viewing dailies, work prints, and pre-release 35mm films, such as *The Matrix Reloaded*, which was produced in the new facility. We set out to design a space for film viewing that would enable special effects designers to view critical elements of their created effects in an environment replicating a commercial movie theater.

Not only is the finished product technically suited toward special effects designers with its comfortable seating for 40-50 people and its high quality surround sound audio playback, Zion Theater is an ideal stage for presenting ESC’s finished product to current and prospective Clients.
Cal State East Bay (formerly known as CSU Hayward) called upon RLS to design a Distance Learning Center as part of the reconstruction of the Lower Mall within the campus library.

Creating a sophisticated Distance Learning Center requires unparalleled coordination between architecture and technology. Camera angles, sight lines, projection image geometries, acoustics, seating, and audiovisual components all must be impeccably integrated.

RLS supported CSU East Bay’s executive architect, VBN, by providing interior architectural, acoustic, and technical systems design for this truly visionary center. By creating a 3-dimensional model of the new facility, RLS helped the University’s Director of Distance Learning visualize the educational environment he strove to create.
E-learning, or Internet-enabled learning, is core to Cisco’s philosophy of delivering educational content to their employees and their Clients. The WebCast Production Facility was critical to this mission by creating a method for broadcasting live content to the Internet.

RLS was tasked with designing the entire Television Facility, which encompassed four separate Production Control Room/Studio areas, a Studio/Lab, an Edit Suite, an Audio Control Room, a Narration Studio, and a Compression Lab that are all electronically interconnected via a common Master Control Lab. The equipment complement in the Master Control Lab and Production Control Rooms ensured easy program interchange with other production groups and service bureaus - both internal and external to Cisco.

Working with Devcon Construction, RLS provided architectural and acoustic design, technical power system consulting, lighting design, and HVAC noise control consulting for this sophisticated facility.
Principals

Randy Sparks

After graduating from SFSU with a degree in Industrial Design, Randy began his career by developing an expertise in acoustics, lighting design, HVAC noise control, technical power distribution systems, and interior architecture. Following his chance encounter and ensuing apprenticeship with Jim Augustus (a.k.a Master of Network Infrastructure) he added structured wiring system design to his knowledge base.

As the founder of RLS, Randy has leveraged this interdisciplinary expertise to help constantly position us for the next wave of technology, and the integration of new technologies within architecture. He has been the lead on hundreds of projects over the last 25 years, including the Letterman Digital Arts Center, Wells Fargo Bank’s 333 Market Street High-rise, the SFSU Joint Library, St. Francis Memorial Hospital, KKSF, KYLD, KMEL, K101, KITS, KCMG, KTEH, KPIX, Cisco Internet Broadcast Studios, and other technically complex facilities.

Jim Augustus

Ever since that "chance encounter" with Mr. Sparks in 1991, Jim has been the principal designer of over 30 million square feet of technology infrastructure. Using science and his wits, Mr. Augustus has gained a reputation for playing the role of MacGyver on many of our more complex projects. He seems to be able to provide creative solutions to almost any challenge we come across.

In his prior life, he spent 15 years in integrated circuit design before moving on to DEC’s Western Research Lab, working in Ethernet Development. He uses this expertise to design and oversee the installation of world-class industrial computing infrastructure.

Jim's portfolio includes infrastructure and Data Center design for the Letterman Digital Arts Center, Sony’s Northwest Operations Center, and the Adobe World Headquarters in San Jose. When he's not thinking up new ways to effectively deliver photons and electrons, Jim hangs out at the Yosemite Sugar Pine Mountain Railroad where he is the Chief Engineer.
Clients
