

## FLASHBACK

### Chapter XVI: WESCON Clones Appear



Bruce Angwin

During the first year of ERA's joint sponsorship of WESCON with IEEE, 1974, WESCON experienced its first incident involving the nation's growing attention to sexual discrimination. Attendance at WESCON had, up to that time, been predominantly male with a small percentage of wives accompanying their husbands. As a courtesy, WESCON had waived the entrance fee for wives when accompanied by their husbands. On the second day of the 1974 show in the Los Angeles Convention Center I was sitting in the Show Office adjacent to the registration area when I saw a woman in a severely tailored suit coming across the registration area with large and commanding steps directly toward me. Right behind her was a short, mousey man trying desperately to keep up with her. With fire in her eyes she demanded to know why our policy was to charge an entry fee for attendees, but allow wives to enter free. She told me in no uncertain terms that, in her family, she was the engineer and that we were discriminating against her by calling her a wife with free entrance privileges. She loudly proclaimed that the LA Times, ACLU, the Mayor and a variety of others would hear from her. Since that fateful day the WESCON rules have allowed free entry to a spouse instead of a wife.

With ERA comfortably in place as a member of EEEI, WESCON's new parent organization, and with their local Chapters working well with IEEE's Sections in the Los Angeles, San Francisco, and New York areas, Don Larson finally was able to start his planned retirement after two decades as WESCON's General Manager. At the suggestion of Chuck Fetty, Bill Weber, had

been hired and spent 1974 in New York as EEEI's Eastern Region Manager, responsible for IEEE's last INTERCON. Bill had previously served as Ray Hall's predecessor in the Chicago ERA Headquarters and, later in 1971, while an employee of Compar in the San Francisco area, as Chairman of WESCON's Visitor's Services Committee.

In 1975 Don Larson retired and Bill Weber took over as General Manager of WESCON and EEEI. The next nine years saw a feverish growth in the WESCON influence throughout the country in major cities involved in electronics production as IEEE and ERA elements organized local shows and conventions in the WESCON image. Bill had a compulsion to become the nation's largest trade-show producer and proceeded to drive toward that goal. His first show was the new replacement for IEEE's INTERCON and NEREM show, ELECTRO, which opened in BOSTON in the Centennial year 1976, with Colonial marching bands, period drum and bugle corps, and much red white and blue bunting and flags. As had been proposed by Carroll Killen's IEEE Conference Committee, the WESCON format of volunteer Committees, an IEEE/ERA Board of Directors and a two-city annual rotation was used. The event was highly successful and EEEI's role as IEEE's show management arm was firmly established.

Bill wasted no time in expanding his role as EEEI Manager and encouraged meetings between local elements of IEEE and ERA in Chicago, Dallas and Atlanta. The success of WESCON and ELECTRO was overwhelming and a Board was formed with representatives from these three cities to create a new show, to be called MIDCON, and to rotate annually on a three-year cycle between the three cities. EEEI was designated as the management body and the first MIDCON opened on November 18, 1977 in Chicago.

The following year the EEEI Corporate identity, Electrical and Electronic Exhibitions Inc, was rechartered as Electronic Conventions Inc (ECI), the name it is known by today.

During the planning stage for the second MIDCON in Dallas in 1978, it became increasingly apparent that the three-city cycle contained unsurmount-

able problems. The distances between Chicago, Dallas, and Atlanta were great to support a cohesive voice. Board activity and the electronic interests in each city were not mutually compatible. Also, a one-year show in each city followed by a two year dry period before the next show destroyed any continuity or momentum between successive shows. It was decided that although not ideal, a two-city show involving Chicago and Dallas was preferable and the 1979 show returned to Chicago. A study committee to consider what to do about Atlanta was formed.

Meanwhile WESCON continued to grow, but was suffering increasing unhappiness from exhibitors regarding space limitations and the surly attitude of the LA Convention Center's pick-up parking attendants and other employees. We decided to try the competing Anaheim Convention Center and in 1980, for the first time since the 1952 show in Long Beach, moved the Southern California show out of the downtown LA area. We never returned.

With Bill Weber's insatiable appetite for forming new shows, ECI had established a criteria for the consideration of new sites. These included the area's electronics population, the existence of a strong IEEE and ERA presence, exhibitor interest, the proximity of a similar alternate city, and the staff's ability to assume the added work load. Atlanta was eager to conduct a show and conference but there was no alternate off-year city meeting all the requirements. The best was Orlando, Florida with its Space activities and a desire to become involved. The ECI Board decided to conduct a test and ECI staff members met with Atlanta and Orlando representatives to implement a show to be called SOUTHCON. Opening date was January 13, 1981 and, with some reservations, planning was started for an '82 show in Orlando. Time has proven that, paradoxically, Atlanta was the weak city and Orlando's SOUTHCON shows have thrived over the years.

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Flushed with success, Bill Weber then turned his attention to the Northwest and soon had plans going for Northcon in Seattle and Portland. By this time the ECI Board, and in particular Ed Landa, who had been overseeing its financial health, served notice to Bill that the constant formation of new shows should be curtailed for a time. Bill, however, was on a roll and looked for ways to circumvent the edict. He proposed that the increasing interest in computers needed serving by WESCON and that ECI should buy out a small show called Mini-Micro from its owner and founder Bob Rankin. Rankin had been a former Exhibit Manager for WESCON. Bill failed to disclose that Rankin had been trying to unload Mini-Micro for some time as he faced strong competition from other better financed shows. Also, Bill glossed over the fact that WESCON already had a computer oriented segment in its show that could be readily expanded. However, with the assurance that Rankin would assume the operational duties during the first year, the Board approved its purchase, only to find that Rankin actually had not made such an agreement with Bill. Further, the purchase turned out to contain only the name, what good-will still existed in a dying show and a few unproductive names on a mailing list. Although subsequent negotiations recovered some of the funds committed to the purchase, Bill had accomplished his actual objective and added Mini-Micro as a show-within-a-show to each of ECI's managed shows. Accordingly, Northcon opened in Seattle on May 18, 1982 with Mini-Micro as a companion show. This time there were three sponsors, IEEE, ERA and NWPCA (Northwest Printed Circuit Association).

Bill confided to me that his future strategy included the spinning off of each Mini-Micro to another date in each city, thus doubling the number of shows. Also, if the ECI Board didn't lift the embargo on creating new shows, he planned to turn each of the five major shows into an annual show in each of its two cities, thus again doubling the number of shows. He felt that through these subterfuges he could quadruple the

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number of shows, without technically violating the Boards edict. Although he subsequently did split WESCON's Mini-Micro into a show separated in time and location from WESCON, the rest of his plan failed to materialize before he left ECI.

Bill's final attempt toward expansion before his retirement in 1984 was to assume the management of two small IEEE/ERA shows that were already limping along. One was OHMCON in Detroit which ECI managed in June of 1983 and MAECON in Kansas City which ran in September of 1983. These two shows actually fell well short of the minimum criteria set earlier by ECI and, proving the validity of that criteria, lasted only the one year.

Bill Weber as ECI's General Manager was a charismatic and persuasive individual with a talent for building great dreams and was much like the fabled PT Barnum in his personality and actions. Under his rule ECI grew tremendously in all matters. Unfortunately however, the ECI Board felt these talents were overcome by his other actions while their manager and they came to a parting in early 1984.

*Next month: ECI forms a subsidiary corporation, ECM*

### Don Larson Award Presented to Myers

The 1992 Don Larson Award, Wescon's highest honor recognizing "meritorious and outstanding service" to the convention and exhibition, was presented to Robert Myers, editor of the BULLETIN. Myers has been active in many phases of Wescon for more than 15 years and this past year served as attendance promotion chairman for both IEEE and Wescon's other sponsor ERA. The award, first given to Larson in 1977, has been won by two other members of the Los Angeles Council - Bruce Angwin in 1980 and Ralph Lamm in 1985.

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### Joint Meeting Hosts Founder Of Future Scientists/Engineers

The Los Angeles Joint Chapter of Engineering Management, Education and Professional Communication Societies and the Metropolitan LA Section will host a presentation by George Westrom, founder and Executive Director of Future Scientists and Engineers of America (FSEA) at a joint meeting January 21 at the Cask and Cleaver Restaurant in San Dimas.

Westrom will discuss the FSEA program for students in grades 4 through 12 which has grown from two chapters in 1991 to nearly 50 chapters today. He will explain how individuals and companies can participate in the FSEA effort.

The organization received the 1992 Achievement Award from the IEEE LA Council, the Individual Achievement Award from Region 6, the State of California Corporate Volunteer Award, a commendation award from the LA Board of Supervisors and a Points of Light Award.

### FSEA's Westrom Honored

The founder and Executive Director of the Future Scientists and Engineers of America, George Westrom, has been honored with the Individual Achievement Award for Region 6 for 1992. The honor was bestowed in connection with Wescon/92 in Anaheim in November.

Other Region 6 awards went to Erling Helfa of Seattle, community service; Tacoma Public Utilities, Light Division, large company; and Electro-Test Inc. of Pleasanton, small company.

United States Activities Board awards for Distinguished Literary Contributions went to Mike Martin and Roland Schinzinger, both of the LA Council.

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## Career Directions

*When the Student is Ready . . .*

*By Peter McGregor*

Two months ago Chuck Antoniak and Robert Gauger asked me if I would give a short presentation to other PACE committee members on my philosophy of finding another job. I agreed and to my surprise over 20 IEEE members attended the early morning session.

I told the attendees (as I have mentioned many times in past columns) to look upon themselves as products — "person-products" — that are to be marketed to the outside world. This product — you — is considered a high ticket item in the commercial world. In most cases salaries are over \$40k which is much more than the cost of an Accura Legend. Companies that sell high ticket items put an awful lot of effort into marketing their products (e.g., automobile market).

However, when I talk to engineers (some with MBAs) about how to conduct a job search, their attention is usually fixed on updating or improving their resumes. This is only a part of phase 2 (Preparing Product Promotion Package) of the job search cycle.

There are seven phases (January'92 BULLETIN):

1. Define the person-product
2. Prepare promotion package
3. Research the market — where does the product fit?
4. Distribute the product
5. Penetrate selected companies
6. Present the product (i.e., the interview)
7. Close the sale

The most important phases are 5 and 6.

I related to the PACE attendees recent cases of two laid-off engineers who "blew their chances of a job offer" with commercial companies. They didn't

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understand how to "price the person-product" (September/October'92 BULLETIN) during phase 7 of the job search cycle.

It's frustrating for me to hear these stories when I know this marketing error could have been avoided.

Remember, more money is spent on marketing a product than on the research and development of the product.

The message: spend as much time as possible learning how to market yourself.

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## LAC Announces Training For Novell Certification

The Educational Activities Committee of the Los Angeles Council will offer an extensive preparatory course for the Novell CNE Certification tests. The 10-week course, concentrating on Novell V2.2 with some discussion of Novell 3.11, will begin March 6 and continue on subsequent Sundays for 10 weeks.

Registration information and fee details are available from Dr. Zia Khwaja, the program coordinator, at (310) 860-4423. Dr. Khwaja has 25 years of academic teaching and research and industrial experience.

## FLASHBACK

*By Bruce Angwin*

Chapter XVII: More Chances



*Bruce Angwin*

WESCON never been with its unexpected students, especially when running San Francisco. I often had to contend with people who used the area in the crowd exhibition hall.

promote some outside activity or product. In 1981 the show was in Ball Hall, a low-ceiling underground exhibition hall. The show office was located behind one of the perimeter walls, way up an emergency exit to the street. A small window from the office opened onto the exhibition area, just below ceiling height, which allowed the staff seated at their desks, to look down at the show floor.

One day, shortly before closing time, a commotion developed in one of the aisles near the viewing window. A panorama view of the floor disclosed a person dressed in ballet costume, complete with a short pink ruffled skirt.

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## Flashback

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pink leotards, a tight satin blouse and wearing ballet slippers. A close examination proved that this was a man, deep in animated discussion with one of the booth attendants. Nearby, in similar garb was a woman who also sported a large straw hat and carried a shopping bag filled with exhibitors literature. Just then the closing bell rang and attendees started toward the exits, all except the two costumed characters. I went down to the show floor to try to find what weird activity these two were promoting and to ask them to leave as the show was closing for the day. Upon reaching hearing distance, I was surprised to hear the man, speaking in a strong bass voice, asking some rather complex and intelligent questions about a displayed electronic product. The obvious conclusion was that these were not actors promoting some event or product, but were valid engineers attending an electronics show in their regular dress. Such ended a "normal" day in San Francisco.

During the 70's and early 80's many changes occurred in the original WESCON organization and its operation. From a single show, produced by a Board and staff derived from the Los Angeles and San Francisco elements of IEEE and WEMA, its metamorphoses included the creation of an overall non-profit corporation, the replacement of WEMA sponsorship by that of similar elements of ERA from Los Angeles and San Francisco and the assumption of management duties of four clones of WESCON scattered among eight of the nations largest cities. The clones, of course, were ELECTRO, MIDCON, NORTHCON, and SOUTHCON.

The creation of a governing corporation, EEEI, with its own Board of Directors where the WESCON Board alone had been the ultimate power caused some friction and confusion at first. The WESCON Board members, each of whom was to serve a four-year term and was accustomed to exercising both administrative and operational authority over WESCON and the other shows it managed, suddenly found its operation limited to WESCON alone and its authority subservient to the EEEI Corporate Board. With the strong recommendation that candidates for the EEEI

Board should have previously served on the WESCON Board and with a couple of years to allow the situation to mellow, animosities soon disappeared and the overall structure again operated smoothly. In 1978 EEEI changed its name to ECI, Electronic Conventions Inc.

From the very earliest days, WESCON had several serious brushes with the IRS which, on occasion, challenged its non-profit status. If successful, each challenge would have virtually obliterated, through taxation, the surplus funds which its sponsors needed to support their publications, business offices, and other member services. Although expensive and time-consuming, WESCON had always been able to prevail with its claim that it was operating strictly of, by, and for its members (stockholders) in the non-profit purposes covered within its charter. In 1982 the IRS took a new tack by expressing the opinion that the management by ECI of shows owned by organizations other than ECI's owners constituted the generation of unrelated income which, from its magnitude, placed the entire ECI operation into a for-profit status.

Our lawyers felt that fighting this challenge would be risky and advised that, to protect WESCON's contribution to its sponsors, ECI should spin off the income derived from the management of shows other than WESCON into a separate, but related, for-profit corporation. This would not affect the surpluses available to the owners of the other shows and would shield WESCON from unnecessarily paying tax on its surpluses, as it would only apply to the fees charged for the management of the other owners shows.

Accordingly in 1983 a subsidiary Corporation, Electronic Conventions Management Co. (ECM) was chartered as a for-profit corporation responsible to ECI. By assigning WESCON to ECI and operation of all other shows to ECM, WESCON's non-profit income was completely protected. ECM's tax liability for net income was further reduced by transferring ECI's greatest single expense, its staff, to ECM. Although a separate corporation, ECM utilized the identical Board of Directors as ECI, thus greatly simplifying the overall operation. This meant, of course, that the Los Angeles and San Francisco IEEE and ERA organizations now were oper-

ating through three Boards of Directors, WESCON, ECI, and ECM. In addition, each of the ECM managed shows had its own Boards, chosen from its own membership but the ECM staff was now working on behalf of seven Boards, each of whom substantially changed its members annually. Even then its ability to communicate and work effectively with this ever-changing morass has been handled admirably.

Within the last year, the ECI Board has expanded the ECM Board by adding five more Directors to that Board, each chosen from a different non-owner organization. They are the American Electronics Association (AEA), Electronic Industries Association (EIA), National Electronic Distributors Association (NEDA), Institute of Electronics and Electrical Engineers (IEEE headquarters), and the Electronic Representatives Association (ERA Headquarters). Since these organizations represent the full scope of the electronics and power industries, it is hoped that the added benefits they can bring to the planning of the ECM managed shows will further increase their value and effectiveness in serving their owners and the profession. It will be interesting to follow the results of this move.

## Use of Electronics In Drug Interdiction

Representatives of the U.S. Customs Service will describe the use of electronics to halt drug trafficking at a meeting of the Los Angeles Chapter of the Aerospace and Electronic Systems Society February 18 at the Cockatoo Inn Restaurant in Hawthorne.

An extensive network of airborne surveillance and ground control and reporting is emerging to stop the flow of drug into the southwestern United States. Pipers, Citations, P-3s, AWACs and Blackhawk helicopters are in play by the Customs Service. The talk will cover the use of electronics in the effort.

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# Flashback

By Bruce Angwin

## CHAPTER XVII—Troubles in the East



Bruce Angwin

For the past year this column has covered, among other things, activities of the ECM staff, which is responsible for the development and production of WESCON. This same staff also produced NORTHCON, SOUTHCON, MIDCON and ELECTRO, all in the manner it had originated for WESCON. As with WESCON, during the development and production of these other shows, a number of unexpected things happened to add to the excitement and, sometimes, frustrations in putting a large trade show on the exhibit floor. This month we will relate one of the strange happenings while setting up ELECTRO, the international convention of the IEEE.

From its first year, 1976, through 1985, ELECTRO was held in alternate years in Boston's Hynes Auditorium and the New York Coliseum. Second only to Chicago's McCormick Place, the New York Coliseum was, perhaps, the most difficult facility in the country in which to hold a trade show because of the strong hold the NY labor unions had on its use and, in particular, because of the outrageous nature of its construction. It was virtually impossible to safeguard its use against intrusion and theft.

The Coliseum was a four-story exhibition structure attached to an office skyscraper. Its four exhibit floors were rimmed by a labyrinth of ser-



**NEW YORK SITE** — This is the face of the Coliseum, New York home during the late 70s and 80s of ELECTRO, sister trade show to WESCON in the East. It was a most difficult venue because of its construction and operating procedures.

vice offices, storage areas, concession facilities, food service and preparation areas and a network of corridors, elevators and passageways which allowed a multitude of access openings to the outside streets and the adjoining building. As a result, exhibit materials from its many shows would routinely and mysteriously disappear.

The union situation was equally difficult. Exhibitors would be forced to hire workers from as many as six different unions to have even a simple booth set up, and an exhibitor who attempted to circumvent the system took the chance of a major "accident" to his display, if not to himself.

The union shop steward who, by agreement with all the unions represented them on the floor, was a short, dapper individual, impeccably dressed, even sporting a tyrolian hat complete with a little brush in the hatband. His "enforcer" was a big, burly man in soiled workclothes who spoke with a heavy Italian accent and had a large red scar slashed across his left cheek — the personification of the prohibition era movie gangster.

My responsibility as Assistant General Manager was to interface with exhibitors, facility management,

labor, security and concessionaires. I soon found that by catering to the ego of the shop steward and recognizing and supporting the prerogatives his unions were contractually entitled to, regardless of how odious, a tenuous but friendly relationship developed between us.

In 1981, one of our exhibitors was a Southern California firm specializing in electronic instrument rentals. That year the company's exhibit manager was a young girl, enjoying her first job in that position. For her first year she planned an exhibit which featured the display of an expensive color TV set, to be the prize in a drawing on the final day of the exhibition. Her boss, however,

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**Flashback**  
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knowing the reputation of the Coliseum, strongly advised against the plan but finally agreed to allow her to proceed if she would assume full personal responsibility. The instruments, which were the heart of the display, were individually boxed and transported to New York in a company van. The TV set was placed in an unlabeled carton and included in the shipment.

Access to the Coliseum's second floor, location of the company's booth, was by a ramp at the rear of the building and trucks were able to drive up the ramp and onto the floor to unload. The instrument company's van arrived on the second day of set-up and

proceeded to the booth location at the center of the floor. By lunchtime, all the exhibit material had been unloaded onto a pile on the floor, including the unmarked carton. Only the young exhibit manager and her truck driver knew what was in the unmarked carton. The driver closed and locked the van and he and the exhibit manager went their separate ways for lunch.

Sometime later an hysterically tearful girl rushed into the show office and, between sobs, told us that the special carton was gone. She described her plan for the drawing and her insistence over her boss's advice that the plan be carried out. She was sure that when she phoned her boss in California, she would be without a job.

I immediately got hold of the union shop steward and related the problem. Surprisingly, he took our PA microphone and demanded that every union worker in the building immediately come to a designated area and, moments later, gave them just five minutes to see that the carton was delivered to the show office. The group broke and about a hundred workers began a frantic search of the many obscure closets and other hiding places in the building. A few minutes later the building fire alarm sounded, followed by a fire truck rushing up the ramp and onto the second floor. Smoke was pouring out of the locked door of the instrument company's van, parked alongside the company's pile of exhibit cartons. Forcing the door open, the fireman found a blazing pile of shipping blankets on the truck bed, and alongside was the missing carton.

A post-mortem disclosed that the truck driver, fearing loss of the TV set, had come back to the exhibit area and locked the carton in his van, then returned to his lunch. Apparently, someone had dropped a cigarette in his blankets before he placed them in the van and they had smoldered for a time before breaking into flames.

The union search was discontinued. The young exhibit manager's composure restored, the fire department finished its mop-up, the workers' intimidation of the exhibitors re-established, the shop steward winked at me and I returned to the many tasks involved in the production of a major trade show and convention.

Oh yes, the TV set promotion was a rousing success.

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## FLASHBACK

By Bruce Angwin

### Chapter XIX: The Russians Are Coming



Bruce Angwin

Since October of 1991, this column, **FLASHBACK**, has chronologically covered my recollections of the origin and development of IEEE offices in California, the LA IEEE **BULLETIN**, the SF IEEE **GRID**, **WESCON**, the relationships of the local IEEE Councils with **WEMA** and **ERA**, and the expansion of **WESCON**'s activities into the management of **ELECTRO**, **MIDCON**, **NORTHCON**, **SOUTHCON**, **INDYCON**, **MAECON**, **OHMCON**, and the various **MINI-MICRO**'s. As the chronology was documented, a number of interesting side-issues were recalled but, due to space limitations, were not included in the columns regular series. This month we'll start covering some of these events.

Chapter VI of **FLASHBACK** told of the strange conduct of Russia's delegation as they visited **WESCON** en route to the International Geophysical Year celebration in Colorado Springs. Although on the surface, the arrangements regarding their visit seemed to run smoothly, a bizarre series of events was occurring. Initially the US State Department had approached the **WESCON** staff with a request from the Russians to allow them to attend **WESCON** as special guests. We countered by suggesting that the Russian scientists in the delegation participate in an informal extra symposium to discuss electronics as it pertained to space travel. Remember that this was early in the space race and relations between the US and Russia were, at best, strained. Our request was, surprisingly, granted however with a further strange request from the State Department's representative. He, in confidence, asked me to allow one of his men to privately study our listing of **WESCON** registrants and, also to provide him with

a half-dozen badges containing fictitious names. He further asked that I tell no-one of these requests, even high governmental officials. His request was granted.

Shortly thereafter I was visited by a stranger who asked if we could talk in private. I closed the office door and he presented credentials identifying himself as an FBI Special Agent. He stated that the pending visit by the Russian delegation could draw the attendance of certain persons that the FBI had under surveillance and they wished to know which of these persons might attend and with whom they would talk. He asked to survey the list of **WESCON** registrants and also to have several badges prepared with fictitious names for use by his agents. Similarly, he demanded that no-one be told of the FBI's interest, especially other political or law-enforcement groups.

Over the next two days I had identical visits from representatives of the CIA, the State Police and the SF Police Department. In all, five different agencies studied the listing of **WESCON** registrants, received badges with phony names and tried to hide from each other as they surveyed the Russians and certain questionable visitors they were purported to attract. We never did hear how the hunt concluded.

Another of the **WESCON** involvement with Russia announced our production of an **ELECTRO** exhibition in New York. We were advised by the State Department shortly after Nixon's resignation publicized visit with **Nakita Khrushchev** that the Russians would like to exhibit some of their electronic capabilities during the show. We were told that **Electronorgtechnica**, the Russian governmental representative of their electronics industry would work through **Amtorg**, the Russian purchasing agency in New York. A meeting was arranged with **Amtorg** in the offices of our decorating contractor, **United Exposition Services** to discuss their participation. We assigned a four-booth, 40-foot exhibit space to them and proceeded to advise them regarding the exhibit rule and arrangements for receipt of their exhibit structure. We were then told that they actually had no exhibit structure but only had preliminary plans of an exhibit which they wanted us to construct for them.

**United** agreed to do the work and asked that the plans or a statement of their desires be rushed so the structure could be finished in time for the show. When **United** inquired about the financial arrangements they were asked to handle them and to bill **Amtorg** who would immediately pay each bill as it was submitted.

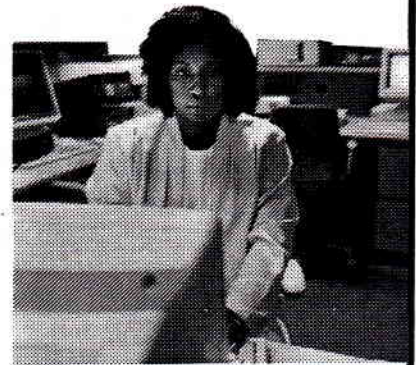
(continued page 12)

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## Flashback

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The US Patent Office was given as a credit reference. On inquiry, United was told that Amtorg, for a number of years, had an open order for every patent granted and published. They had a perfect record of payment. United agreed to take the chance.

As the show-time approached however, United was unable to get any information on the exhibit structure they were to build. I made several visits to Amtorg's office and finally was told that the plans had arrived. Rather than the conventional blueprints however, I was given a cardboard model of a structure with dimensions handwritten on the model in metric units! On hastily converting the model to construction drawings in english units, it developed that in the forty foot wide by ten foot deep area, the center twenty feet was fronted at the aisle line by a row of department store type showcases, backed by a carpeted area to the ten-foot high rear wall. A twenty-foot planter, complete with potted plants was to be attached along the length of the back wall about four feet above the floor and a rear-illuminated 5-foot by 10-foot picture box was to be centered above the planter. Instructions were to obtain a 5x10 foot colored transparency of the familiar photo of Nixon and Krushchev shaking hands to mount in the light-box. The remaining 10x10 foot areas at each end of the forty-foot exhibit area were to be enclosed in walls to make one a private conference area and the other a storage area.

Ted Shields, WESCON's PR genius miraculously found a colored photo of the handshaking event and had Kodak prepare and rush an enlarged 5x7 foot transparency copy to New York from Rochester. Two days before the show was to open, the Watergate scandal broke and Amtorg advised us that they would provide a substitute photo of a Russian electronics plant to replace the transparency.

As had happened in San Francisco, I had similar visits from the State Department, the FBI, and the CIA requesting a number of fictitious

badges and to be able to review the attendee listings.

On ELECTRO's opening morning, I made a courtesy visit to the Russian exhibit, along with a State Department representative. After observing the rather primitive electronic components being displayed in the showcases, we were ushered into the enclosed conference area to meet the Russian officials. There, amid greetings, acknowledgments and handshakes I suddenly realized that there had been thrust into my hand a large full tumbler of vodka and, in the other hand, a split of 7-Up. A quick glance from my State Department companion foretold the inevitable. Afterwards, I who normally drink not more than four or five cocktails in an entire year, somehow found my way back to my hotel room where I "rested" until I had to make an appearance at dinner affairs that evening. Somehow the mid-part of that day is missing in my recollections.

On the second day of the show I received an early phone call from a woman who stated that at 11:00 o'clock her "Commission on Soviet Jewry" would set up a picket line around ELECTRO in protest of the Russian treatment of Soviet Jews. On the most active day of the show, this foretold of disaster. I called the security chief who didn't seem to realize the seriousness of the situation. I then called the New York Police Department and was told not to worry, that they had already been informed. At 10:40 AM, a platform and PA system began to materialize on the sidewalk in front of the entrance to the Coliseum. Promptly at 11:00, about twenty persons carrying protest signs appeared and a hoarse-voiced man delivered a three-minute speech while a small crowd gathered amid popping flashbulbs and one TV camera recorded the event. Immediately thereafter the platform was removed and by 11:15 there was no sign that anything had happened.

At the conclusion of the show, I made my regular visit to the accounting department of our decorator, United Expo, to review the detailed billing for the three show days. In particular, the accountant wanted me to look at the expenses incurred by

Amtorg who had previously insisted that the bill presented to them contain no detailed breakdown but list everything collectively as "exhibit expenses". He showed me his detailed listing that United had accumulated over the period of the show that was to be summarized under the "exhibit expense" heading. There were cases (not cartons) of cigarette gourmet food, rare wines, expensive clothing accessories, jewelry, and long list of other expensive product along with the normal exhibit construction items. Apparently the Russians who planned and manned their exhibit in Capitalist America were fast learners.

## Microwave Group Probes Photonic Band Structure

Professor Eli Yablonovitch of UCLA will lecture on photonic band structure at a meeting of the Los Angeles Council Microwave Theory and Techniques Chapter Tuesday, April 27, at the Hacienda Hotel in El Segundo.

Dr. Yablonovitch will discuss 3-D periodic dielectric structures which are to photon waves what semiconductor crystals are to electron waves. That is, these photon crystals have a photonic bandgap, a band of frequencies in which electromagnetic waves are forbidden. Photonic bandgaps allow a new class of electromagnetic micro-cavities, making possible single-mode, high-Q electromagnetic cavities (of volume  $V \approx \lambda^3$ ) for short wave-lengths at which metallic cavities are useless.

The speaker, a professor of electrical engineering, has main interests in the fields of epitaxial lift-off technology and photonic band structures. Prior to joining the UCLA faculty, he was Director of Solid-State Physics Research at Bellcore.

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# FLASHBACK

By Bruce Angwin

## Chapter XX: Memorable People



Bruce Angwin

Writing this monthly column has evoked many fond memories of persons and events during my local involvement since 1944 with the IRE, IEEE, WEMA, ERA and WESCON. As the electronics industry grew over the years, I had the fortunate opportunity to meet and sometimes work with persons just coming into prominence, who were in the early stages of world-wide fame. This is one of the fringe benefits of volunteer activity.

I have already named a number of these now famous people, including Bill Hewlett, Dave Packard, Ronald Reagan, Generals Douglas McArthur and Omar Bradley, Lee DeForest, William Shockley, Mark Hatfield, Bill Lear, Dr. Arnold Beckman, Fred Terman, Simon Ramo, Edward Teller, a variety of western Governors, Mayors, and other politicians, Marlene Schmidt (Miss Universe), and from the entertainment world, Pamela Mason, Marjory Lord, Amanda Blake, Louella Parsons, Heda Hopper, Nancy Reagan, Mary Tyler Moore, and many others.

Also, I fondly recall involvement with a number of outstanding people, lesser known outside their smaller and more specialized groups. Abe Zarem was, and still is, a charismatic individual whose speech and bearing exude a rare sense of humor and bountiful intelligence. Abe was head of Electro-Optical Systems Co. and Southern California representative for the Stanford Research Laboratory, and could immediately capture and enthrall listeners and, in particular, the media, as soon as he started talking. One year, as Toastmaster of a WESCON Banquet, he participated in a press conference, called by the WESCON staff to preview the overall WESCON program for that year.

Sensing a story, one reporter asked Abe what he was currently working on and, without skipping a beat, Abe hinted at outer-space and missile defense programs, hot subjects for that period. The rest of the press conference was a run-away exercise in science fiction possibilities, perfectly controlled and executed by Abe to avoid security issues, yet whet insatiable appetites for the unusual and seemingly bizarre. The conference was a masterpiece in developing news stories, but was a dismal failure in covering the planned WESCON programs. Perhaps that talent is the answer to why Abe is, even today, sought after to address governmental and scientific bodies as an expert witness.



*Sponsor - Lee DeForest, inventor of the vacuum tube, was the sponsor of the DeForest Scholarship in the 1950s which was awarded to the winner of the WESCON Future Engineers Contest.*

In the area of aerospace, another favorite person in my listing of fond recollections is Dr. William Pickering. Bill was Director of the Cal Tech Jet Propulsion Laboratory, the organization most singularly responsible for developing our nation's space program from the area of Buck Rogers and Flash Gordon in the newspaper comics into actual reality. Bill, a gentle and patient soul, was always willing to lend some of his precious time to the support of volunteer activities if it would improve scientific and technical knowledge and performance. At the time I was Los Angeles Section Chairman, Bill successfully headed a program to create the Pasadena Sub-Section as well as to appear as a speaker at technical meetings and lend actual

satellite units to IRE and WESCON events to augment meetings covering the most popular subject of that day. His soft New Zealand accent and gentle nature belied the tremendous administrative and scientific ability of this space pioneer. In his modesty, his personal accomplishments are truly underappreciated.

Jack VanGroos was an active contributor to the early days of the Los Angeles Council (then the LA Section of IRE). He was one of the first manufacturer's representatives to cover his territory in a fully equipped bus to demonstrate the instruments he sold. Jack also owned a small business producing radio receivers tuned to the Bureau of Standards WWV stations in Ft. Collins Colorado and Hawaii to detect and process the time and frequency standards information they broadcast. The thing I remember most about Jack however is his off-beat sense of humor. As a hobby, Jack had a small print shop in which he printed stickers to attach to the covers of the literature he furnished with the instruments he sold. The stickers said, "When all else fails, resorting to the Instruction Manual may be found inevitable." He also printed a pack of calling-card size cards, one of which said, "The management respectfully requests that you and your party leave as quickly and quietly as possible." Jack loved to bribe waitresses to pass the card to his acquaintances when he found them in a restaurant, and gleefully watch their reaction before owning up to his deception.

Another memorable local pioneer was Fred Ireland. Fred was the factory sales-engineer for General Radio Co., (now GenRad) the premier manufacturer of high quality test equipment in the 40's and 50's (before H-P, Tektronix and others captured the market). This tall gentleman was known for his friendly and readily

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**LEADERS** — WESCON has drawn upon outstanding talent, volunteer and staff, in producing the premier electronics convention and exhibition. In this 1962 photo, Don Larson (left), WESCON General Manager, looks at plans with Ray Banks (center), IEEE Section Business Manager, and Walt Peterson, Program Chair.

## FLASHBACK

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available help to anyone in need. I remember, in particular, one incident. I was presiding over a LA Section Dinner-Meeting, moderating a one-on-one interchange between an audience of about 150 members and a panel of six speakers. Suddenly a member at one end of the front row in the audience fell to the floor and began thrashing around wildly on the floor — an epileptic seizure. I momentarily paused in startled silence during my discussion as all eyes turned toward the unfortunate member. Without pausing, Fred rushed to the members side, calling out to me to continue talking as he passed in front of the podium. He forced a fountain pen between the members teeth to prevent him from biting his tongue and then picked him up like a baby and left through a side door to a nearby lounge where he could recover naturally. In listening later to the tape recording of the

program, it was barely noticeable that anything unusual was happening. In his typical way, Fred had quickly and quietly prevented a potentially awkward disruption of the program and an embarrassing incident for an unfortunate member.

Not the least of my favorite IEEE characters are those unsung executives who have served the LA Council and its predecessor as Business or Office Managers. They have provided the continuity and specialized day-by-day services essential to the existence of the Council and not possible to obtain from the part-time efforts of the elected officers. This includes membership services, tax form preparation, meeting assignments, fiscal accounting, mailing list maintenance, publications editing and preparation, outside services contracting, record keeping, answering of phone and letter inquiries, report preparation and a myriad of other duties and services.

The first full-time Business Manager was Ray Banks, a technical writer who started as a BULLETIN Editor in 1956 and moved into the full-time managers position the following year. In 1959 Ron Tansky joined Ray as his Assistant through 1967. In 1971, after 13 years, Ray, a successful part-time science-fiction writer, decided that he wanted to devote full-time to his fiction endeavors, and Gerry Goldenstern headed a search committee to try to find a replacement for Ray. Gerry did such a convincing job of developing a job-description that he decided to take the job himself and served in that capacity for a full year. After he left, Judith Thunes who had acted as Gerry's secretary filled in until late 1972 when Rosella (Rusty) Miller was hired. After a year on the job, Rusty and her fiancée left the State following a weird set of personal circumstances which are best not chronicled here but would make a great super-market story. Rose Guy then assumed the responsibility through 1975 when the duties passed on to several inside employees until 1980. In July of that year Pat Cantley was hired and in January of 1983, Pat and the Council office separated from the WESCON office, moving to the present location in Torrance while The WESCON office moved to its own building near LAX. The present IEEE Office Manager, Diana Noble replaced Pat on January of 1987.

We should all salute those who agree to serve as head of the Council Office. Theirs is no easy task. Their immediate supervisors, the elected officers, change each year along with their different views of office procedures, priorities, and routines. In addition they must be familiar with and support the complex IEEE national structure as well as supervise and handle all local activities as noted above. Truly a complex and frustrating job. Without them, all activities within the Council boundaries would be hard-pressed to exist.

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## FLASHBACK

By Bruce Angwin

### CHAPTER XXI: SAN FRANCISCO BEHIND THE SCENES



Bruce Angwin

Producing a major trade-show and conference such as WESCON offers a wealth of behind-the-scenes occurrences which aren't apparent to the throngs of visitors after the show has opened.

Some are interesting, some comical, and some border on disaster.

Before the Moscone Convention Center was built in San Francisco, WESCON had to be shoe-horned into Brooks Hall, the Civic Auditorium and various hotels with a complex system of shuttle busses connecting all venues, not to mention the several special parking areas extending south to Candlestick Park and even the thirty miles to the Palo Alto area.

The limited exhibit space available also posed some major problems. For many years the number of required exhibit booths exceeded the space available. In addition to a priority system based on the number of prior shows an exhibitor had participated in, a qualification system also applied. Those exhibitors whose business and products were devoted exclusively to the electronics industry were assigned first. Then came those who were related to a broad scope of businesses which also included electronics, such as Time-Life Books, freight handlers, industrial complex developers, etc. As a result, the border-line exhibitors often made wild claims to try to justify their eligibility. One year we received an application from a firm claiming to offer tools to help electronics executives improve their creative performance. We were just able to find space for them but, upon their setting up the exhibit, we discovered they were actually planning to demonstrate and sell vibrating chairs.

Needless to say, amid loud protesting, they were removed from the show and we became much more critical in the examination and proof of exhibit qualifications offered.

The minimum width booth at WESCON was 10-feet. We did, however, have several areas less than five-feet wide that were the result of having to provide open space around some pillars on which fire-extinguishers were attached. One exhibitor made a plea for three feet of such space which adjoined his regular booth space. We accommodated him only to discover that on opening day his twelve year old son was sitting behind a card-table, demonstrating a custom connector which he would mold to individual requirements using a simple plastic molding procedure. After a four-hour stint,

he packed up his material and furniture and left. His father later advised us that his son had booked the business he could handle before school opened again in six weeks.

Several manufacturers used demonstration vans to show their test instruments within their sales territories and liked to use them on the exhibit floor in lieu of a regular exhibit booth. Brooks Hall, then San Francisco's major exhibition hall however, could not accommodate vans and there were no nearby parking lots for their alternative use. This problem was solved in an ingenious way. Brooks Hall is an underground facility beneath the block-square park in the midst of the Civic Center complex. Exit stairs from the subterranean hall lead up to the

(continued page 7)

DEEP SPACE MISSION TO MARS (CAPTURE)			
ENGINE	FLIGHT TIME (DAYS)	FUEL CONSUMPTION (lbs.)	PAYLOAD (lbs.)
ION	115	1750	3750
MHD	5.0	3700	3600
ARC	5	4100	1400
* NUCLEAR	260	19000	16000
CHEMICAL	158		

INITIAL VEHICLE WT = 8500 lbs  
 FINAL NUCLEAR VEHICLE WT = 45000 lbs

**GUIDING FORCE** — Abe Zarem was a major influence on WESCON's technical program and its overall public image during the 1960s. At a briefing for bankers, the financial community and the press, Zarem, President of Electro-Optical Systems in Pasadena, explains a 60s-era program to probe deep space.

## FLASHBACK

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park sidewalk at intervals along all four sides. We made arrangements with the Mayor's office to cap a series of parking meters near each stairway and then sold the rights to the resulting curbside spaces to the van owners who directed attendees up from the underground exhibits to their special van exhibits.

To enter Brooks Hall you first enter the Civic Auditorium and then proceed down an escalator to a long corridor, then down a ramp to the Brooks floor. We had crowded all the booths into Brooks Hall it could hold as well as the main floor of the Auditorium, its side rooms and the first and second floor corridors. With all the space allocated there was still a demand for more so we decided to use the corridor at a level half-way between street level and the Brooks floor. Space was laid out per the building plans and everything proceeded well until, at set up, we discovered that nobody had noticed the corridor ceiling was only eight-feet above the floor. With standard exhibit back-walls constructed within a ten-foot by ten-foot limitation, the dozen exhibitors assigned to the corridor faced a dilemma. A crash carpentry program during set-up time to shrink the ten-foot walls to seven and a half feet was barely completed before show opening.

Because of exhaust problems, Brooks Hall does not allow gasoline driven vehicles on its floor two stories below street level. As a result the drayage and decorating contractors for the shows use propane driven fork lifts in moving heavy freight. At night during set-up time, the fork lift operators keep their propane tanks from being stolen by placing them on the floor and lowering the tines of the fork on top of them. One night I got an emergency call from our security director who had just made his periodic sweep of the show floor. One of the forks had been dropped onto the valve on the top of a tank and cracked its pipe. Propane, under high pressure, was leaking out and the entire hall was filling with gas. We rushed to the hall and, from a safe vantage point across the street,



**LA LEADER**—Gerry Goldenstein was Business Manager of the Los Angeles IEEE Council during its formative years and the early expansion of WESCON.

watched while firemen in gas masks entered the emergency exit stairways down to the hall. We envisioned the entire park becoming airborne if a spark were to be inadvertently struck. Fortunately they were successful and we then elected not to publicize the near spectacular end of that year's show even before its opening.

The City of San Francisco was unusually cooperative when WESCON occupied the Civic Auditorium and Brooks Hall, even blocking the street between the Auditorium and the park on top of Brooks Hall so we could register visitors in a large tent on the park grounds and allow the attendees to cross the street to the Auditorium in safety. One year, on the second day of the show, we suddenly found all streets leading to the complex blocked so nobody could even approach the Auditorium, the park, Brooks Hall, or any other building in the Civic Center. Soon helicopters filled the sky above and TV and news personnel and equipment filled the area. The saga of Patty Hearst was coming to an end. The FBI and SF police had just captured Patty nearby and were transporting her to the Federal Building on the other side of the park. Until the Mayor, Police Chief and FBI Special Agent finished speeches to the cameras and Patty was safely behind bars, WESCON had ground to

a halt for two scary hours.

Food available at convention centers, ball-parks, sports arenas and other public gathering places is usually barely edible at best. Such facilities hold contracts with concessionaires who have exclusive rights to the food service. One year the WESCON Board felt that they wanted something better at San Francisco and asked us to arrange a beer-garden theme with good food. One of the Directors in particular wanted to have a restaurant near his home cater the food. I first met with the regular SF Auditorium food concessioner and found he would allow outside food service only if we compensated him for his lost business. This consisted of paying him the full anticipated amount of his profits without his even entering the building. However he refused to let any one else use the kitchen or food service area in the Auditorium. We then convinced the restaurant owner to close his restaurant in San Mateo and truck an entire Haufbrau to San Francisco in portable warmers where the trucks would park alongside the back of the Auditorium and pass the food trays up to the second floor corridors which had been decorated as a beer-garden. WESCON attendees that year enjoyed a full menu of German Haufbrau food at low restaurant prices. The restaurateur and WESCON took a financial beating and both swore they would never again try that stunt.

Such is the fun of producing a trade-show and convention.

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## FLASHBACK

by Bruce Angwin

### Chapter XXII: Where Did The Students Go?



Bruce Angwin One of the pleasures of participating in IEEE activities and WESCON during the 50's and 60's was the close involvement with students that existed during that period. Electronic engineering as a profession was experiencing a strange oscillation following WWII. First, there was a shortage of engineers for the rapidly growing industry resulting in teams of recruiters visiting graduating college classes with offers of high pay and attractive perks to fill the shortages. As a result, high school grads saw electronics as a glamour profession and engineering enrollment soared. Four years later, as these students faced graduation, the demand reversed as a result of the excess supply and college engineering enrollments hit an artificial low. This cycle repeated several times as stability slowly resumed.

Recognizing that a healthy electronics profession required a constant flow of new blood at the bottom, the IEEE and WEMA, cosponsors of WESCON, embarked on several programs to attract worthy students to this growing profession. WEMA participated through scholarships and workshops while the IEEE enhanced its several student oriented activities.

Most colleges had IEEE Student Branches which their respective Sections encouraged and supported. In Cedar Rapids, Ohio, Ted Hunter, a Collins engineer, encouraged National support by originating and editing the IEEE Student Quarterly, a full-blown magazine distributed nationally to all Student Branch members. In Southern California, the LA Council carried all Student Branch's program material in the BULLETIN and also sponsored an Annual Student's Day as a regular



*Future Engineer — During the 1950's and 60's WESCON held Future Engineer competitions to encourage students in developing projects and presenting technical papers. Here, the famed Professor Frederick E. Terman congratulates Fred J. Swartz of Maquoketa High School, Maquoketa, Iowa for winning the Frederick Terman Scholarship for his best student technical paper at the 1962 WESCON.*

Council meeting shortly before Spring graduations. The day would start with a breakfast, followed by talks by leading electronics industrialists covering the realities of employment and advancement in the business world. Roundtables followed along with films and field-trips to local plants and ended with a banquet hosted by the participating companies at which the students were interspersed around the tables with employed engineers and executives. Clarence Radius, Engineering Dean at Cal Poly, San Luis Obispo, regularly brought his entire graduating class to Los Angeles for the valued event.

In the early 50's WEMA used part of its WESCON proceeds to help support scholarship programs. Since the IRE, predecessor of the IEEE at that time, required that all IRE scholarship programs be concentrated through Headquarters, the Region sponsored a full Student Program as

part of their WESCON activities. Then, as now, an age limit of 18 years was a prerequisite for attending WESCON exhibits and technical programs. A complete but separate show-within-a-show was originated in 1957 and continued well into the 60's. That first year, each Section within the Region was invited to sponsor a high school student in the Future Engineers Show who would display an engineering project and present a technical paper on his project. Since the Region's Section extended through all the States west of the Rockies, including Alaska and Hawaii, transportation for the participating student and his teacher was provided by WESCON. Most part

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## FLASHBACK

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pants were local Science fair winners from their areas although this was not a requirement. In later years, students from any US Section were included.

The displays were laid out just like the regular WESCON booths with a table, backdrop, side-rails, furniture and identifying signs. The participant demonstrated his or her project and was present in the booth during the show hours. Since the display area adjoined the regular WESCON exhibit, a large audience attended although the student participants were not allowed in the WESCON exhibit area due to the age restriction, most being under 18 years old.

During several hours each afternoon the students presented their papers on their respective projects and also enjoyed several special luncheons and dinners in their honor.

The Future Engineers Show caught the fancy of two electronics giants and they agreed to lend their names to the program and participate in the awards ceremonies. Dr. Lee DeForest was known for the introduction of the third element in the vacuum tube, making detection, oscillation and amplification possible and opening a whole new era in electronic communications. He had returned to the Hollywood area shortly before his death and sponsored the DeForest Scholarships, worth \$2,800, for winners in the student exhibits. Likewise, Dr. Fred Terman, renowned educator and Vice President and Provost of Stanford University, sponsored the Terman Scholarships, also worth \$2,800 for the Student Papers Competition.

The Future Engineers Show was such a popular part of the 1958 WESCON that the then popular Bill Burrid live TV program named "City At Night" was slated to do a live pick-up from WESCON and had elected to start in the FES before proceeding into the larger WESCON exhibits. I hosted commentators Ken Grau and Stan Chambers as we moved down the aisles to observe interesting exhibits. No matter how

hard I tried, I couldn't get the commentators to by-pass the many fascinating student projects and one hour later the TV show closed without ever getting into the main WESCON exhibits.

Thirty years ago the monthly Council Meeting was the major local meeting with each Section taking turns sponsoring that meeting although each Section also met alone each month, usually in cooperation with one of its Group Chapters or Student Branches. The BULLETIN featured the Council Meeting with a related picture on its cover and also included, in the calendar section inside, the details on each Section, Group and Student Branch meeting for the month.

Today there are 17 Student Group Chapters and Branches active within

the Council. Unfortunately none of the Student meetings are publicized in the BULLETIN, although each Student IEEE member receives a copy. Each Student Branch is headed by a faculty counselor and all are represented on the Council Committee by a Student Activities Coordinator (currently Prof. Cockrun of Cal State Pomona). The Student Branches are active during the Southern Area Region 6 Conference each Spring through the Student Papers Competition, Micro-Mouse Competition and Device Demonstrations.

It's too bad that the close ties and effective communications that used to exist between the local student activities and the full membership of the Council have so eroded; and for that matter, between the Council and its various Sections. Let's hope these both improve.

## Space to Earth: Satellite Power

Rand Simberg of Rockwell International's Space Systems Division will talk to the Los Angeles Microwave Theory and Techniques Chapter Tuesday, August 17, on efforts to provide microwave-beamed power to earth from space. The meeting, at the Hacienda Hotel in El Segundo, will look at the results of trades and feasibility studies for putting an infrastructure in place to beam power from satellites.

With advances in computers and electronics, the realization of novel lightweight solar power satellite design concepts is possible, according to Simberg. He will talk of gravity-gradient power satellites requiring neither earth nor sun pointing, with steerable antennas to allow tracking of rectennas from non-geostationary orbits. Small demonstrations of these technologies are being developed at Rockwell, including manufacture of space power system components, such as solar cells, from lunar resources and the control of large, lightweight, active space structures.

Simberg is mission analyst, a supervisor in vehicle performance and systems engineering and a project manager for orbital systems at Rockwell, where he has led space transportation studies. He manages

the NASA Langley Research Center space station technology task order contract.

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## Home and Business Display Telephony

The telecommunications and computer industries are moving to bring the power and convenience of display-based interaction to users of such telephone services as call-waiting, voicemail and bank-account inquiry.

Screen-based telephony will be the topic of a panel discussion at an October 6 meeting of the Los Angeles chapters of the Communications Society and the Vehicular Technology Society featuring industry speakers describing the origins and status of work in this field and outlining the challenges ahead. The meeting, at the Culver City Ramada Hotel, will be co-sponsored by the Los Angeles Chapter of ACM.

Scheduled panelists include representatives from Bellcore, developer of the ADSI display-phone standard for the seven Bell regions, and phone makers Philips and Northern Telecom. The latter companies plan to offer consumer products supporting the standards and priced at below \$150.

## Foothill Section Sets Power Quality Talk

Robert J. Schuerger, area supervisor for the Electro-Test Learning Center in Phoenix, will discuss power quality at a meeting of the Foothill Section Tuesday, September 28, at Vince's Spaghetti House in Ontario.

Schuerger is an expert on power quality with articles and speeches to IEEE and NETA organizations. He will discuss concepts and terminology and common concerns and problems associated with power quality, along with their solutions. Practical power quality and harmonics case studies will be presented indicating measured symptoms and recommended solutions based on industry-accepted practices.

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## FLASHBACK

By Bruce Angwin

### Chapter XXIII: Trade Shows — Behind The Scenes



Bruce Angwin

Previous columns have touched on incidents which occurred during the development and operation of WESCON. Over the years, WESCON has become the model against which most other electronic trade shows are compared. WESCON is produced by the non-profit corporation, Electronic Conventions Inc. and its subsidiary, Electronic Conventions Management Co., both owned by the LA and SF Councils of the IEEE and the Northern and Southern California Chapters of the Electronics Representatives Association, ERA. The WESCON Board of Directors, ECM staff and hundreds of volunteers work each year to plan and implement the oldest and best known electronics show and convention in the

country. In addition, ECM is responsible for having helped create and producing a number of similar shows in major electronics production areas throughout the US for similar owners. These shows are faithful clones of WESCON although their local IEEE and ERA sponsors bristle when they are so identified.

Production of the shows is unique in bringing together a large technical society (IEEE) and a major trade association (ERA). The needs and offerings of the individual engineering professionals are covered by the technical sessions while those of the manufacturing organizations are met by the exhibition. Both are interrelated and mutually necessary.

The true glamour and excitement of creating and carrying out these shows is not always apparent to an outsider. In a show as large as WESCON, where over 1000 companies offer exhibits to 20,000 to 50,000 attendees, facilities and services are critical factors. The availability of suitable exhibition space and meeting and hotel rooms limit the venues and require advance reservations by at least ten-years to assure total use.



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of the host city's facilities. As the event approaches, arrangements must be made to supplement the normally available services of local transportation, parking, security, food service, set up and dismantling labor, communications and a variety of other needs which would otherwise be overwhelmed by the event.

For a three-day show in the middle of the week, the show staff arrives a week earlier to supervise and adjust the orderly receipt and set-up of the exhibition and assure that meeting room facilities and services are satisfactory. Sometimes unforeseen events affect this process.

One year, while starting to operate ELECTRO in New York, the ECM staff packed its exhibitor files, the critical master floor plan, literature, event tickets and all other show-office supplies in two large air-freight containers for delivery to the New York Coliseum, site of the show. The staff arrived Wednesday evening and early Thursday planned to unpack the containers, which should have been on the show floor, to start move-in. The containers were nowhere to be seen. A check with the airline disclosed that they had arrived in the New York area on schedule the previous day. Apologetically the airline admitted that it had lost them. After a frustrating period of two fruitless days, they were located in a New Jersey warehouse where they had been delivered after being inadvertently picked up by another shipper. Only the application of a crash set-up program and the creation of a head-full of grey hairs allowed ELECTRO to open on time.

The following year, ECM faced an undesirable circumstance. NORTHCON in Seattle and ELECTRO in Boston were scheduled in successive weeks, the result of the new shows having insufficient time to reserve appropriate dates. Most

large exhibitors truck their exhibits between show sites and take, at best, 2½ days to set up and 1½ days to dismantle. Since most of the largest exhibitors are of national scope and usually book large exhibit space at both shows, ECM guaranteed that special means would be found to allow them to close a show on Thursday evening in Seattle and open with the same exhibit on the following Tuesday in Boston.

We identified in advance those exhibitors planning to utilize both shows. On setting up in Seattle their empty shipping crates were stored in a separate, easily accessible storage area. In the meantime the exhibitors empty vans began the several day cross-country trip to Boston. As soon as the Seattle show was underway, half the ECM staff flew to Boston and started that show's layout while the other half remained in Seattle. As soon as Seattle closed on Thursday evening, the first crates to be delivered for packing were the special ones and they were rushed to the Sea-Tac airport where two chartered DC-10 air freighters were waiting. Friday evening they flew cross-country and Saturday were delivered to Boston's Haynes Auditorium, just meeting the requisite two days for set-up. Although the plan ran smoothly, any glitch at all would have doomed the ELECTRO show that year in Boston.

## Radar Imaging Topic For Buena Ventura

High-resolution radar images involving observations of complex objects by sensors using wavelength and spatial diversity will be examined by Dr. Dean R. Mensa of the Naval Air Warfare Center at Pt. Mugu at a meeting of the Buena Ventura Section Thursday, September 16 at the Marriott Courtyard in Camarillo.

The talk, "Toward a Unified Viewpoint of Radar Imaging," will review the fundamentals of various imaging techniques and develop equivalences by using notions common to them with the objective of providing physical insights, interpretations and analogies. A fundamental understanding of the processes involved applied to a common viewpoint should remove the mystique surrounding these important topics and place them within the repertoire of techniques available to practicing electrical engineers. Augmenting the discussion will be a number of examples derived from simulated and experimental data.

The speaker will emphasize that when diversities result from sequential observations, the images are synthesized from measured data from computer algorithms. The principles underlying imaging techniques are expounded from different viewpoints.

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## Flashback

by Bruce Angwin

### Chapter XXV: Finis



Bruce Angwin

This is the final column of this two-year series, covering the growth and development of the Los Angeles Council and its many sub divisions and activities over the past century.

During that period the original Los Angeles Section grew through expansion, up-grading and innovative development into a multi-faceted and complex organization of geographic and technological compo-

*Wescon . . . provided most of the procedures and formats of modern electronics shows and conventions*

nents to serve its thousands of members and the included electronics industry. It also developed an operating partnership with its counterpart in San Francisco to represent the Region, along with parallel Chapters of the Electronics Representatives Association, in forming and operating its non-profit corporation, ECI, for the purpose of producing the pioneer electronics trade show and convention, WESCON. ECI also manages other similar events through its subsidiary corporation, ECM, nationwide for IEEE and ERA. WESCON had been the model for the multitude of horizontal and specialized trade shows now

## Funding the Dream: Hope Versus Reality

The Caltech-MIT Enterprise Forum, Tuesday, January 18, will offer a special panel of investors, lenders and entrepreneurs who will examine the hope and reality of technology business planning. The evening event will take place at Caltech's Baxter Auditorium.

In a twist of enterprise Forum practice, a panel of experts in technology business financing will square off with experienced entrepreneurs who have raised funds and lived with the consequences. The two-hour presentation will dig for the good, bad and ugly of "funding the dream," examining contract research SBIRs, private placements, customer alliances, stra-

tegic partnerships, bank financing and venture capital.

According to one Enterprise Forum panelist, "you need three things to grow your business: money, money and more money." But securing a reliable and appropriate funding source can be a treacherous and time-consuming task. Whatever the source, each extracts its due in interest, equity and limitations on future actions.

The panel will seek to identify the most appropriate funding source for specific businesses and how to get needed funds and how to live with the consequences.

# Happy New Year

May 1994 Be Healthy  
and Enriching



## FLASHBACK

continued from page 1

operating and provided most of the procedures and formats of modern electronics shows and conventions. WESCON, through the surpluses generated, makes possible the Council's Business Office and the Bulletin.

All of these activities are made possible through the volunteer efforts of a relative handful of dedicated volunteers. Unfortunately, due to pressures generated by the industry's turn-down over the past several years (some call it a recession), the amount of time that capable volunteers can donate to Council's activities has lessened and the resulting weakening of positive and aggressive growth has been evident.

*All of these activities are made possible through the volunteer efforts of a relative handful of dedicated volunteers.*

Only by participating in these volunteer efforts can one discover the hidden benefits. Aside from the pleasure of developing a plan and seeing it come to fruition, the valuable contacts made with ones peers and the personal stature and recognition gained outside ones immediate work environment are immeasurable.

In writing this column, I've enjoyed re-living the hundreds of events which filled my half-century of IEEE activity. Some were memorable, some better forgotten, some comical, some inspiring and some frightening. I cherish the multitude of new friends and acquaintances the activ-

ities produced, many who in their subsequent careers became legends in the profession. This column has resulted in phone calls and letters from many old friends with whom contact had been lost over the years. It also stimulated a few suggestions that the columns space in the BULLETIN might be better used for more complete meeting announcements. Maybe so ???

*Only by participating in these volunteer efforts can one discover the hidden benefits.*

Before closing this final set of columns, I can't resist one more anecdote: For a number of years WESCON was held in the Los Angeles Convention Center. The main exhibit area was cooled by an air-conditioning system which pumped cold air through large pipes, with drilled outlets, suspended between the ceiling and the lighting fixtures and painted black to blend in with the black ceiling. A large undeveloped area in front of the Center was used for parking.

One year, a week before WESCON was to open in the Center, a heavy rainstorm hit Los Angeles and for several days torrential rains covered

the area. The day before opening the rain stopped but the parking area was a small lake. Any car trying to park would sink hub-deep in mud. The solution was to take over the Coliseum parking lot a mile away and run a continuous parking shuttle bus between the two locations. As WESCON opened, the weather suddenly became very hot and the resulting evaporation of moisture in the saturated ground created an oppressive mugginess in the air. As the air in the Center became uncomfortably humid, we asked the building engineer to step up the air conditioner to compensate. Shortly thereafter, several exhibitors rushed into the show office with the report that it was raining in their exhibit booth. Looking out the second-story window from the show office into the hall, we saw the area was covered in fog, indoors! The air conditioner had lowered the moist air temperature below the dew-point and it had condensed on the cold supply pipes, picking up the accumulation of dust on their tops and then rolled down and finally dropped onto the exhibits below. It was raining mud. A quick reversal of the air conditioner setting soon stopped the rain but the exhibitors will long remember the day it rained inside the Los Angeles Convention Center.

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