LORAL
Data Systems

A Publication of EMR Telemetry

August 1992

the leading EDGE

Vol. 1, No. 2

A message from the vice president...

Gary Schumacher

As predicted, the worldwide market for telemetry along with other military and aerospace oriented electronics has been difficult. The market is diminished due to a combination of economic downturn and political uncertainty which result reduced or delayed programs and budgets. Despite these problems, LDS - Telemetry managed to finish the first Loral Fiscal Year (LFY) quarter ahead of our orders budget. This was due primarily to the booking of a $600K order for an O/S90 based system upgrade to the Royal Army Hebrides Range in the UK. The Hebrides Range is located on islands off of the northern coast of Scotland. Richard Fielding worked hard at making this one happen. Well done Richard!

In July, a major milestone was met with the completion and acceptance of the first installation of the O/S90 system by Martin-Marietta Corporation. This is one of three identical systems to be delivered to MMC for processing of Tital IV data. The first system is located in Denver. Additional systems will be located at the Eastern Space and Missile Center, Cape Canaveral, Florida and at the Western Space and Missile Center, Vandenberg AFB, California. At this time, the backlog of O/S90 based systems includes Sandia Labs, USAF at Edwards AFB, EG&G/NASA at Kennedy Space Center and the Spanish Air Force. The O/S90 has generally met with good response in the marketplace and a number of additional orders are pending. A marketing video which provides a high level overview of O/S90, has been completed and is now available for your use. Copies may be requested from your sales manager or directly from Jim Horvath.

In an effort to counter the market problems we are facing, considerable emphasis is being placed on expanding the number application areas which are being addressed. Currently in the civil space marketplace, we have been engaged in a number of joint marketing activities with Loral AeroSys. Loral AeroSys is located in Seabrook, Maryland near NASA Goddard Space Center. The primary business areas of AreoSys are in satellite mission control center design and operations. The objective of our joint marketing activities is to combine the AeroSys experience with the telemetry experience of LDS to address space opportunities. It takes substantial effort in each market segment to develop the market and applications knowledge necessary to penetrate the market area. We plan to continue these efforts to make the maximum use of our systems knowledge and marketing resources. ■

A message from Bud...

Bud Hinkel, National Sales Manager

Never Stop Trying

Sometimes an opportunity seems to far out of reach to even consider wasting time or effort on, but here is a story on why we should never stop trying.

Johnson Controls out of Huntsville, AL came up with a requirement for 30 bit syncs early this year. These units will be used to support SDI programs down range at Kwajalein. When Joel Weber first found out about the opportunity, his customer indicated a possible GSA buy for 720's. This hope quickly faded when the requirement changed for bit syncs with > 15 megabits performance. By March the competition had moved in and this sole source procurement was now going competitive. Joel's changes of winning dropped from high to low and DSI seemed to be a shoe in. One key issue that kept coming up was the requirement for delivery of all these units by August 1, 1992. As time moved on and no purchase was made, Joel kept reminding his customer of the risk of delivery if he went with the competition and was this risk worth the lower price. The customer was concerned, but he couldn't justify that delivery was worth the difference in price. Time kept moving and still no award. Joel has written this one off.

Now comes the good part. In a casual conversation with Earl Studenwalt in the hall, Joel made the statement that product orders could be improved if we wanted to become aggressive and bite the bullet. Earl never turns down a challenge and went to his boss (Dick Dobbyn) with the Johnson opportunity. We got a price that blew the competition out of the water. Because of the sensitivity of this issue, I can't give you all the details, but I will tell you that we won the job sole source and used delivery and price as our weapons for victory.

We can't always count on this approach and we can't always be this lucky, but giving up too early in the game will never make any of us a winner. Keep trying and eventually you'll get as lucky as Joel did on this opportunity.

When They Say "Your Competition Costs Less"

There are four responses that I find most appropriate to the objection that the competition costs less.

The first is apples to apples. This is an informal phrase which means **"are we comparing prices of products of comparable worth?"** Is the competition's "apples" the same as my products or "apples". Perhaps it's apples to oranges! It is important to make sure that the comparison between the competitor products and your products is a fair one. A fair comparison begins with benefits, then features. What benefits and advantages exist on your products versus the competitions? Are the benefits or the outcomes of the products the same? Does the competition offer less for the money than what you are offering? Are both price quotes for the same volume or quantity? It is very common to find that a customer will use a price quote from a competitor that involves less volume or less quantity than that you are quoting. And, the terms and conditions of the contract or sale may be entirely different. A competitors' terms may include much more restrictions in terms of credit, prepayment, or other contingencies of contracts. Ensure that there is an apples to apples comparison in terms.

Next, when the customer thinks that the competition cost less, you should take this as a signal that **you'll have to demonstrate how the value of products are much greater than the price differences that customer perceives.** This involves showing that there is in actuality very little price difference but much more value to be gained from buying from you. One of the techniques successfully used in showing that the value is much greater is to convince the customer that the difference between you and the competition is very small but that the customer's risk of going to the competitor is very big. It is important not to be overly negative when alluding to the fact that switching to a competitor is a big risk. Yet at the same time it is important to **show the customer that there is some risk when they are dealing with a new supplier.**

One of the most effective ways of showing this risk is to quantify how much it will cost the customer if they do not buy from you. This is a little bit like selling insurance. Demonstrating that the consequences of buying from a competitor and things not working out could mean a huge difference in their operation or their total satisfaction. **The best pricers know how to quantify for the customer the cost of not buying from them.**

Pricing for Results by John Winkler as seen in The Pricing Advisor.

the leading EDGE

The Leading Edge is a publication of Loral Data Systems, EMR Telemetry.

Managing Editor
Jim Horvath

Contributors
Gary Schumacher
Vice President of Marketing

Bud Hinkel
National Sales Manager

John Hodgkinson
International Marketing Manager

Tim Gatton
Product Line Manager

Jon Brown
Manager, FAA Program

Common Listening Problem

People who want to improve their own listening efficiency or develop subordinates' listening skills should try to eliminate these poor listening habits:

- **Tolerating or creating distractions.** External noise as well as internal distractions (lack of concentration) will impede listening.
- **Faking listening.** Poor listeners pretend to be paying attention when they are not.
- **Tuning out dry subjects.** Poor listeners quickly declare a message boring, develop a "who cares" attitude, and refuse to put forth listening effort.
- **Mentally disagreeing.** Some listeners cannot remain objective enough to understand a message before evaluating it.
- **Focusing on the speaker's delivery.** Poor listeners pay more attention to the speaker's voice and appearance than they do to the message.
- **Daydreaming.** The average person speaks about 175 words per minute but can think at a rate of over 400 words minute. Poor listeners do not use this extra thought speed productively.

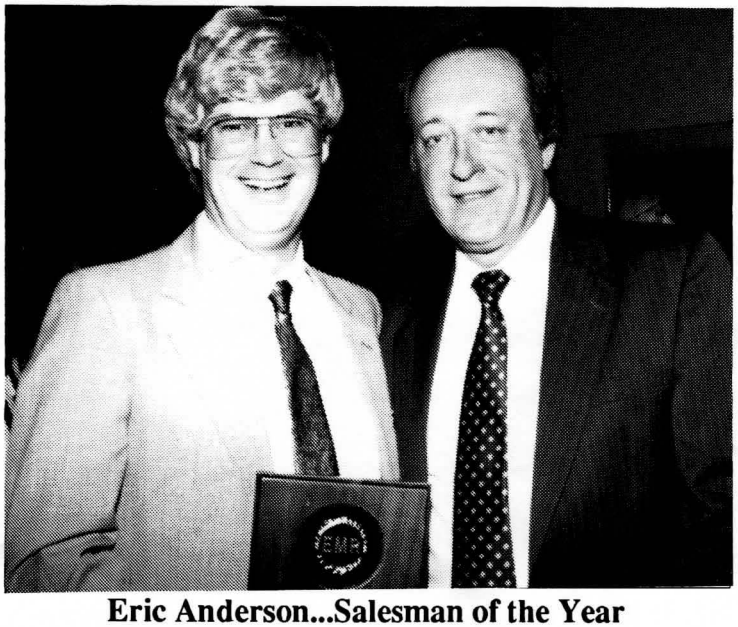
The Managers Desk Reference by Cynthia Benyman-Fink

1992 Annual Sales Meeting... Orlando, Florida

The 1992 sales meeting was held in Orlando, Florida at the Radisson Inn Maingate, just outside Disney World. We had representation from 6 continents with a total attendance of 96 including spouses.

PCX and OS/90 demo's and classroom sessions were given on Monday along with a telemetry tutorial by Jud Strock. Tuesday morning was devoted to O/S90 and the afternoon was comprised of Portable Compace Mobile Telemetry Systems, the VLDS Rotary Recorder and the new Boeing Derived Airborne Systems. Tuesday evening we had an offsite dinner at Caruso's Italian Restaurant. Wednesday we had a plant tour in Sarasota, from 10 AM to 3 PM while the wives enjoyed a day at Saint Armands Circle, shopping and swimming in the Gulf of Mexico at Lido Beach. The Domestic salesman stayed in Orlando for meetings. Thursday covered systems and software products along with LLWAS (Low Level Windshear Alert System). Thursday ended with a cocktail party and Awards Banquet. The salesman of the year was Eric Anderson with 8.5 million dollars in sales. Joel Weber received a plaque for the most creative salesman. H. Nonaka accepting for Marubun received an award for 11.3 milion dollars in sales. H. Nonaka and M. Mizuno from Marubun received an award for 20+ million dollars in sales in '91-'92. J.D. Liu of Industrial Electronics, Taiwan received an award for 3.3 million dollars in sales. Harry Durrett received the award for outstanding sales in the Asia region. The final award of the evening went to Bud Thurmond for 35 years of dedicated service and the development of International Sales for EMR Telemetry. We are looking forward to even better sales meeting in Europe the week of April 19th to the 23rd 1993. ■

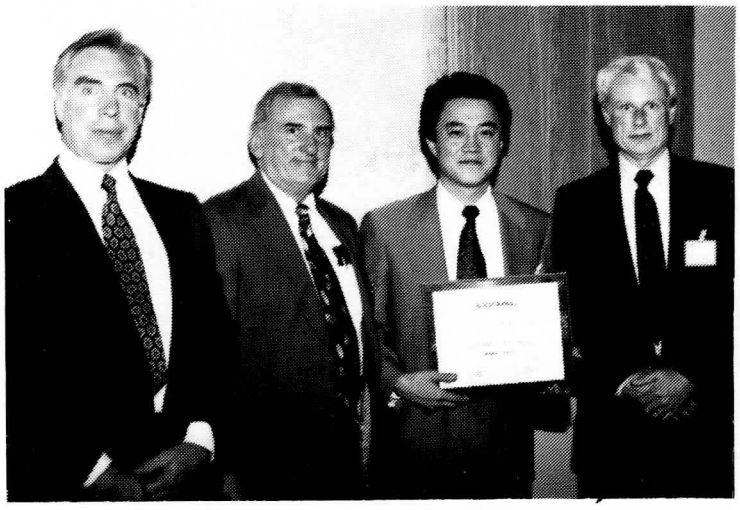
DOMESTIC AWARDS



Eric Anderson...Salesman of the Year and Bud Hinkel, National Sales Manager.

Joel Weber receiving Most Creative Award.

INTERNATIONAL AWARDS



H. Nonaka...accepting for Marubun Outstanding Sales in excess of 11 million dollars.

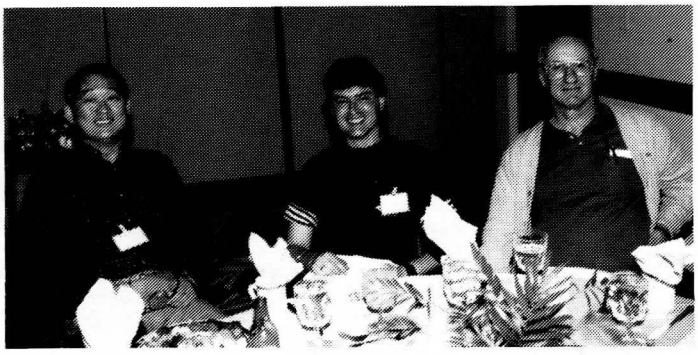
H. Nonaka and M. Mizuno...accepting for Marubun Outstanding Sale '91-'92 in excess of 20 million dollars.

J.D. Liu...Industrial Electronics for Outstanding Sales of 3.3 million dollars.

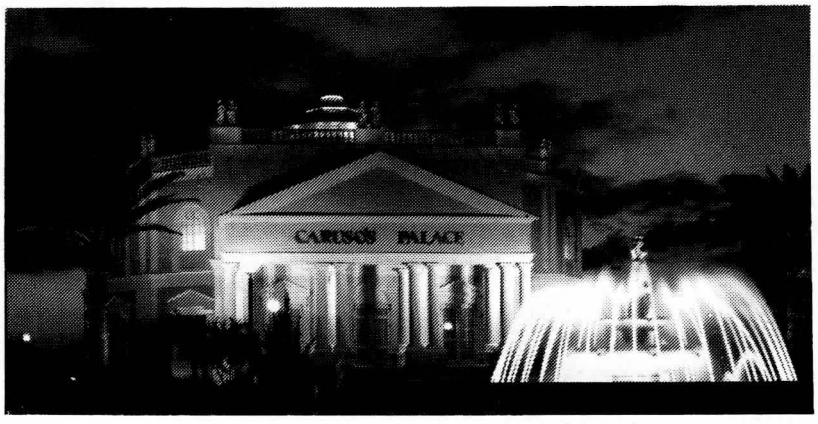
Harry Durrett...Outstanding Sales in Asia.

Bud Thurmond...35 Years of Dedicated Service.

WESTERN BARBECUE



CARUSO'S PALACE



AWARDS BANQUET

Product Line Input...

Tim Gatton, EMR Product Manager

Product News

In this quarters publication, I'd like to talk about bit syncs, PCX, 8715 and O/S90.

Bit Syncs - Over the last several months, we have been conducting a survey of telemetry users in both their requirements for bit syncs as well as future plans. In this way, EMR can invest in the next generation of bit syncs to closely match the customers needs with the pricing reality of today's bit sync philosophy.

It seems that 10 Mbps operation vers the majority (over 80%) of today's and tomorrows expected operational requirements. Clearly, Viterbi decoding and hi/lo Z requirements will be requirements. Our task is to see how these requirements can be addressed within the current product and systems philosophy that we have; i.e., O/S90 and PCX.

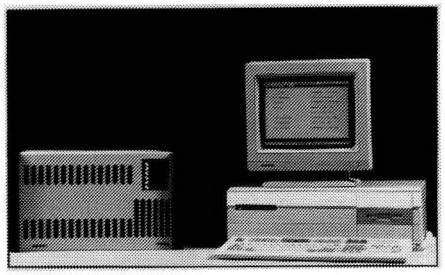
PCX - JNMarshall is near to completing both the software and hardware for PCX. Seems that their recent shipment of chips for the PIO and DMA boards was stolen from the boxes while the chips were in transit; therefore, we have run a little further behind than we anticipated.

Customer Support is developing new demo simulator which is more robust than the EXPRT simulator - it has various waveforms and frequencies. This will be installed into the demo system to make the demo look a bit more attractive.

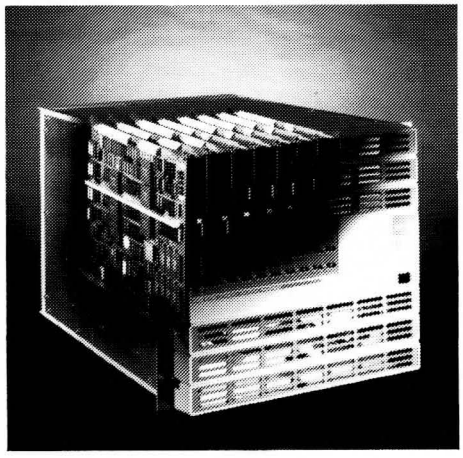
Also, before we ship the first unit we will benchmark the speed of a 386 versus 486 computer system. If the 486 has a noticeable improvement at a low cost, we will change the standard PCX from a 386 to a 486 system.

8715 - The newest 8715 which will be appearing in the Price Lists shortly will be the model -004, the open systems version of the 8715. The -004 will not have the fixed rear panel of the previous versions, but have a modular rear panel that will fit the open systems philosophy of significant flexibility without significant cost. In the future we will have an 8715 chassis with the disk and 1/4" tape drive installed inside - expected by the end of the Loral year.

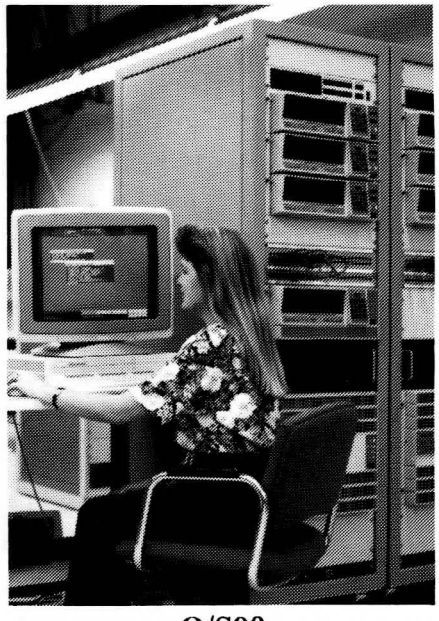
O/S90 - Several pre-packaged O/S90 configurations will be available shortly from the System Products Price List. These will include both DEC and SUN versions, in one to four stream configurations. There are versions using 720's, 8320's, 8470's and 6 of the 1702's (also known as the "bucket of bit syncs".) ■



PCX



8715



O/S90

Recent Systems Deliveries...

U.S. Army, Edwards Air Force Base

The third EMR 8715 Telemetry System has been shipped to the U.S. Army Airworthiness Qualification Test Directorate at Edwards Air Force Base, CA. This system is part of a general upgrade of the Army's old EMR 715 based Telemetry Systems. The three new 8715 based telemetry systems will be used in testing U.S. Army helicopters such as the AH-64 Apache attack helicopter, the OH-58 Kiowa observation helicopter, the AH-1 Cobra attack helicopter, and the UH-60 Black Hawk assault transport. The AH-64 Apache was the helicopter which was so successful in destroying tanks and other armored vehicles during Desert Storm. The third system will go into a portable shelter mounted on the back of a truck. The system will be used as a mobile telemetry system for performing helicopter testing at remote sites such as Cold Regions, Alaska and Yuma Proving Ground, Arizona. ■

(contributed by Mike O'Brien)

Aeronautical Research Laboratory (ARL), Taichung Taiwan

The second half of the Data Acquisition and Processing System (DAPS) has been built by LDS for the Taiwan Air Force ARL in Taichung, Taiwan. The system will process and display Real Time Data from Taiwan's IDF fighter aircraft. The Playback system delivered earlier will process data from analog tape recorders on board the aircraft. The Playback system provides redundancy for the Real Time system in the event of a failure during flight tests. System 90 was selected by ARL for their real time requirements to provide the capability to process data from two aircraft simultaneously. ARL has two Control Towers where each aircraft is monitored and data analyzed during flight. The 8715 Multiplex processor receives the PCM and FM data from the aircraft, processes, and distributes to the various users for safety of flight and engineering analysis. This system replaces an older Teledyne system which is no longer supported. ■

(contributed by Harry Durrett)

The International Word

LDS has been awarded a contract to upgrade the U.K. Ministry of Defense Missile test range located on the remote island of St. Kilda off the West Coast of Scotland.

The test range is managed by the Royal Artillery and is used to test a wide range of in-service weapons from the Skyflash air-to-air missile to the Sub-launched Harpoon anti-ship missile.

The entire range facility will be upgraded with LDS supplying a comprehensive system encompassing remote control of the antenna and receive system through telemetry data acquisition and processing.

The equipment to be supplied comprises a substantial O/S90 telemetry processor and workstation with a PCS PC-based display system as a front end.

The contract is a result of months of hard work by Richard Fielding, LDS's "man in the U.K." and many days spent on the bleak range head facility in less than perfect conditions.

Richard's team will also perform installation and commissioning of this system, we hope the weather keeps fine for him. ■

...John Hodgkinson
International Marketing Manager

On the Civil Aviation Front

1. We have mailed several packets of LLWAS literature along with an appropriate cover letter to each of the 12 around the globe. This was completed in May.

2. We are in process of doing a second "mailing" to the Directors of each country's Civil Aviation Administration who is a member of the International Civil Aviation Organization (ICAO). In this second mailing we have included an invitation to our booth at the two shows we are exhibiting at this year (a copy is enclosed with this publication).

3. Our full page LLWAS advertisement will be appearing soon in the ATCA Quarterly Journal, the ICAO Journal, and Jane's Airp Review. Jane's has also promised to provide each of our International Representatives a free subscription to the Airport Review. A copy of our ad is enclosed.

4. Jon Brown attended an FAA Regional International Briefing Session (RIBS) in Washington, D.C. on July 28. The principal speaker was the FAA's Representative, Mr. Don Schmidt, who is stationed in Singapore.

Mr. Schmidt told me he will welcome Loral's Representatives to meet with him concerning any business opportunities in his geographical area.

If anyone would like to interface with an FAA Field Representative, let us know and we will provide you with full details.

Jon Brown,
Manager FAA Program

SEPTEMBER 1992 LORAL Show Schedule & Special Events

SUN	MON	TUES	WED	THURS	FRI	SAT
		1	2	3	4 WORLD SPACE CONGRESS WASHINGTON, D.C.	5 DIVISIONS: LSIS LIRIS AERO SYS LDS LFS
6	7	8	9	10	11	12
13	14	15	16 SOCIETY OF FLIGHT TEST ENGINEERS MANCHING, GERMANY LDS TELEMETRY SEPT. 16-18	17	18	19
20	21 AIR FORCE ASSOCIATION SHERATON WASHINGTON BOOTH 1802	22 DIVISIONS: LDS-AK LIRIS LWDL LDSAZ LCS LAERO LC & CS LIDS LES LFS LDS-DATA REC.	23	24	25	26 AIR TRAFFIC CONTROL ASSOCIATION ARLINGTON, VA. LDS TELEMETRY
27 AOC SEPT. 26-OCT. 1, '92 SAN DIEGO LDS DATA RECORD	28	29	30			

OCTOBER 1992 LORAL Show Schedule & Special Events

SUN	MON	TUES	WED	THURS	FRI	SAT
				1	2	3
4	5	6	7	8	9	10
11	12 AUSA ASSOCIATION OF THE UNITED STATES ARMY WASHINGTON BOOTH 3110	13 DIVISIONS: LDS-AK LS & RS LCS LDS-AZ LWDL LDS LC & CS LAERO LFS LIBRASCOPE LEOS LIRIS	14	15 ITEA OCT. 13-15, '92 ALBUQUERQUE LDS EMR	16	17
18	19	20 AFCEA BRUSSELS BRUSELS, BELGIUM	21 DIVISIONS: LWDL TERRICOM	22	23	24
25	26 ITC SAN DIEGO, CA. TOWN & COUNTRY	27 DIVISIONS: LI CONIC LDS LS & RS AERO SYS.	28	29	30	31
AOC CALIFORNIA LDS DATA REC.						