



PRESORTED  
STANDARD  
U.S. POSTAGE  
**PAID**  
SUMMIT, NJ  
**PERMIT NO.8**

**ROUTING SLIP**

Review and Pass on as indicated

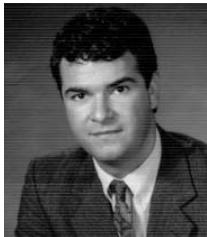
\_\_\_\_\_  
TO

\_\_\_\_\_  
TO

\_\_\_\_\_  
TO

# THE LONGO LETTER

SUMMER 2006



**CURRENT  
EVENTS**

Joseph M. Longo  
President

Longo and motors...the words are synonymous to many of our customers, however, in this issue you will be hard pressed to find much information related to electric motors. Our diversity in products and services, founded in the same quality tradition as our motor work, continues to be our strongest asset. We are enjoying double digit growth in the sales and service of our mechanical business thanks to those who have decided to give Longo a try for their fan and pump business.

Becoming proficient in a broad spectrum of equipment requires a significant investment in equipment and personnel. This commitment has become evident to both our customers and the manufacturers we represent. Two extremely successful examples are PXPUMPS and BJM Pumps.

**PXPUMPS**, an offshoot of PUMPEX, is a less expensive, high quality option for drop in



replacement pumps when compared to the traditional higher prices KSB, Flygt and ABS units.

**BJM** specializes in grinding and slurry applications. Their products have been extremely successful solving the nagging problem of dewatering areas that are susceptible to accumulated garbage and other tough refuse.

Also highlighted in this issue are motion and control equipment from

AC Tech/Lenza. This is a perfect fit for conveyor and other material handling applications. As a testimony to their products, AC Tech controls have passed the rigorous requirements of the United States Post Office (USPO) and they will be using AC Tech units for their new sorting machines.

With so many tools in our toolkit it may seem confusing as to what equipment we do service. Let me offer a suggestion...the next time a piece of operational equipment fails or needs service, think to yourself, "Let me call Longo, they'll fix it properly and on time!"

***We don't do everything, but what we do...we do well!*** If it is something that falls outside the scope of our work we'll tell you up front. Taking on work that we don't do just puts us in jeopardy and the bottom line...it wastes your time and money.

# If it ain't broke...

I happens to us all. Computer gets a little slow, car is hard to start...but they are functioning so if it ain't broke... However, before we know it, the computer crashes and the car won't start at all. Well the same thing happened to one of our customers, only it was a **10 ton vertical turbine pump**.

In November of 2005 we rebuilt a twin of this pump which was brought in during an outage. The shaft had developed a wobble and we did a 13 day turnaround on the rebuilding. (*"A pump is like a box of chocolates." story*) During the course of our repairs we discussed the possible inherent design problem in the pump and how it might apply to the sister pump. (*If it ain't broke...*). However, it was decided to leave the sister pump on the job.

Six months later the that second pump came in. *Only it was not during an outage and the 6" stainless steel shaft wasn't just wobbling, it had snapped.*

Knowing this pump inside and out, the disassembly and

diagnosis went quickly. A new shaft was spec'd out and one of our Longo Advantage suppliers machined a new one for us.

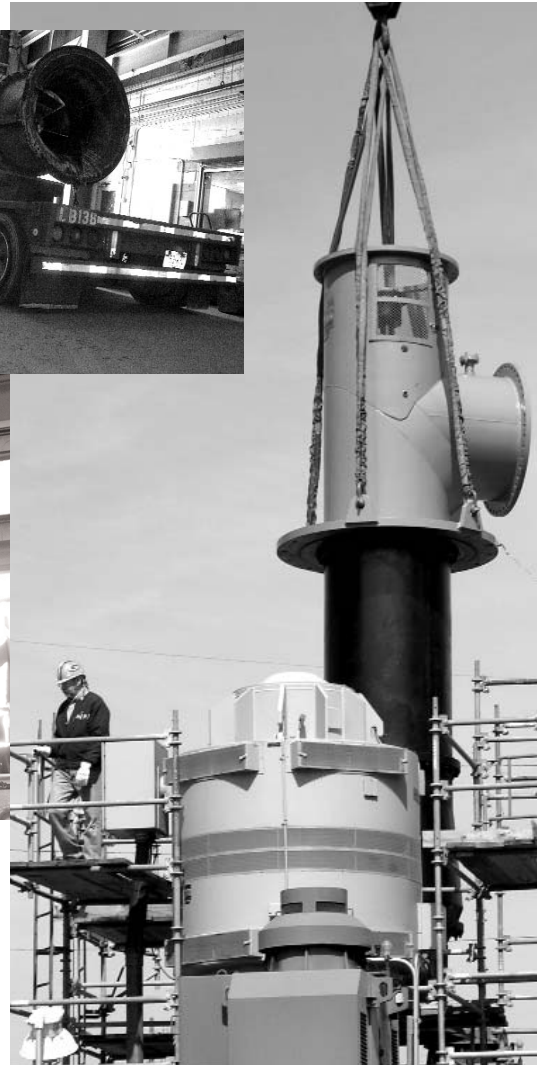
At the same time it was being made, we addressed the bearings, journals, etc., to bring this pump back to life. Having done the other pump just 6 months ago meant a quick turnaround once all the components were available.

## BIG LOSSES

Unfortunately, the cost of the repair was marginal compared to the hundreds of thousands of dollars per day of lost revenue since the repair was not being done during an outage. If the shaft had not snapped the repair time would have been shorter and less costly to the customer

## PREVENTION?

Since the pump was known to have a propensity to wobble, the client did attempt to monitor it. However, the difference between in-house vibration analysis and having someone like Longo come in and do an indepth program is two fold.



An outside program is usually more consistent in its methodology and its techniques/resources tend to be more extensive. Trained and experienced technicians can often provide insight not readily apparent.

Would a Vibration Condition Monitoring program have prevented the breakage? Quite likely. Monitoring at repeated intervals will detect even subtle changes in vibration and give advance warning of developing problems which could lead to ultimate equipment breakdown as happened in this case. Addressing the cause before

experiencing the effect will reduce repair costs and eliminate most catastrophic equipment failures.

In this case, it would have only postponed the end result, but it would have enabled the customer to plan an outage rather than experience a sudden shutdown. It might have minimized the huge loss of income and reduced the cost of repairs if it didn't actually save the pump





# Motion Control...



To meet our customers demand for motion control technology we work with AC Tech based in Uxbridge, MA. AC Tech provides this with a line of general purpose variable frequency drives, ranging from fractional horsepower to 250 HP, as well as offering the SimpleServo™ line, an innovative amplifier servo drive.

AC Technology, a recently announced the release of its SMVector Drive. With its price, its flexibility and a power range of up to 20 Hp, the SMVector drive excels in environments such as packaging machinery, food processing machinery, material handling/conveying systems and HVAC systems. The SMVector carries all the features required by demanding applications including four modes of operation (V/Hz, Enhanced V/Hz, Vector Speed, and Torque), high starting torque, auto-tuning, advanced low-speed control, and dynamic speed regulation.

The Model 940 PositionServo Drive is a high-performing servo drive with a simple, yet robust motion controller. Now you can program precise motion profiles with ease, simplicity, with low-cost and high performance. It allows you to deploy simple servo solutions for both centralized and decentralized applications; the 940 uses a BASIC-like motion-programming language to provide high-performance indexing and positioning, but it can also accept traditional drive signals (analog and step/dir) from a motion controller. The ethernet on the Model 940 allows our customers the complete package - ease of use, high speed connectivity, and low cost.

## EPM: The “Blue Chip” investment

The Electronic Programmable Module, EPM, allows you to copy a program from one AC Tech Sub-micro drive to another in less than two seconds with the optional EPM Programmer, and does not require the drive to be powered to perform the operation! This feature gives you the option to program AC Tech Sub-micro drives wherever it best fits your manufacturing process.

The EPM allows an OEM's factory parameters to become the drive's default parameters, providing a safe backup for OEM's machines.

Last but not least, if your machine operates in several modes or processes different product, requiring the drive to be reprogrammed, you save time and eliminate errors by using AC Tech Sub-micro drives and switching pre-programmed EPMs as needed. You'll be able to stop wasting time and resources, reduce errors, and increase efficiency. Easily archive programs to a PC, perform job changes without reprogramming, save default parameters for the OEM's machine. Once you try the EPM way of programming your drive, you'll never want to go back to cumbersome traditional programming again.

The strength of the AC Tech product line is they are dependable and easy to program and install.

Longo has the resources and expertise to assist you in your motion control and drive projects. We can provide either drives and controls you need or develop a complete turnkey setup.



# PXPUMPS® USA

PX wastewater pumps encompass intelligent design, practical features and are extremely user friendly. The cost effectiveness of the PXPUMPS is based on:

- hydraulic and motor efficiencies
- interchangeability of major components
- improved serviceability
- reduced downtime

All PXPUMPS from 3.3-25 KW are supplied with "ECoFlu" cooling jackets. This feature ensures optimum cooling in conditions where overheating is likely to occur such as with inverted drive, low level sumps and dry pits.

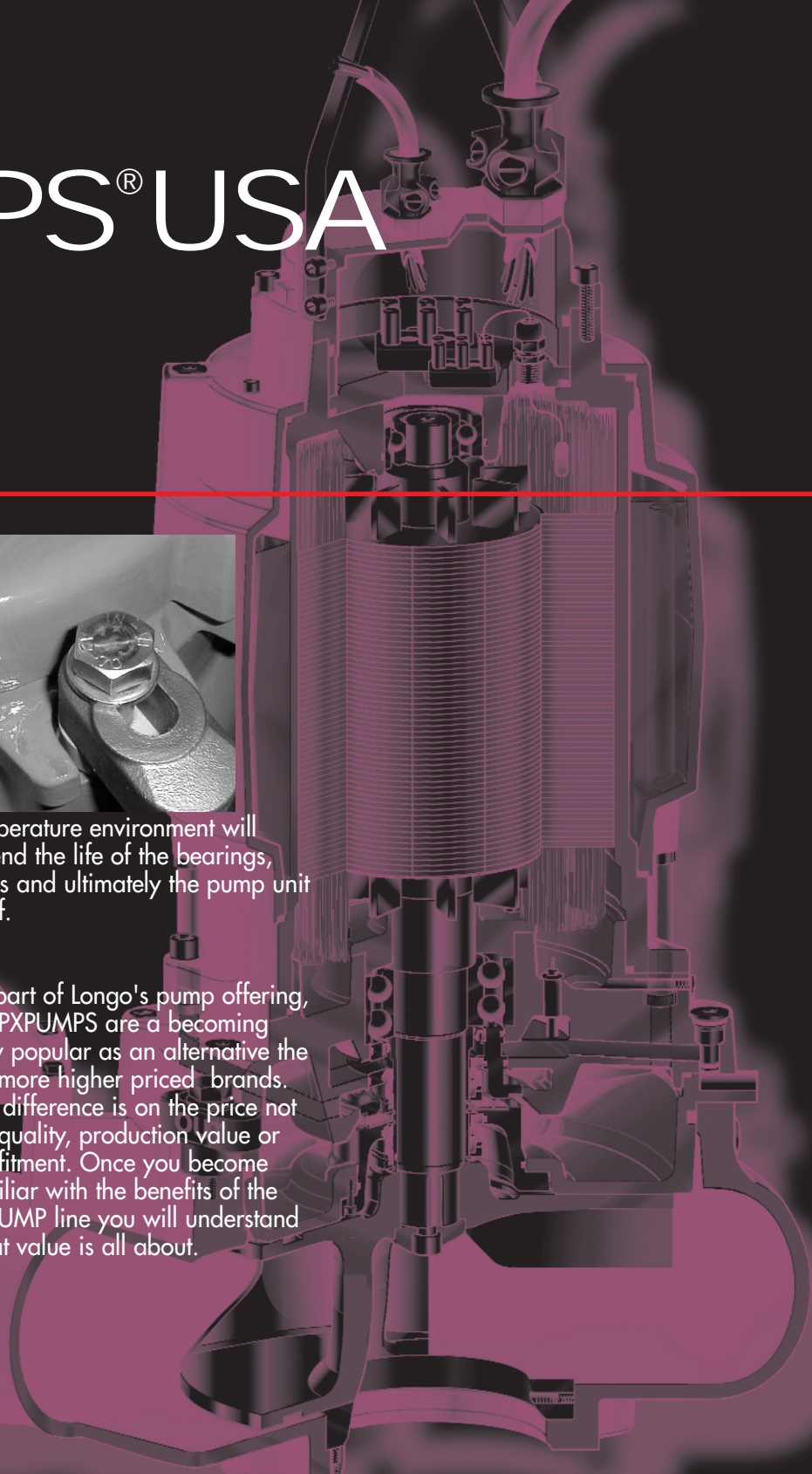
An internal impeller circulates a clean water and glycol mix through cooling passages surrounding the motor. The coolant absorbs the the heat and dissipates to either the liquid being pumped or to the atmosphere.

By not using the liquid being pumped, the cooling system remains clean and not blocked by silt or blockage, a common problem in conventional jacketed pumps. A controlled



temperature environment will extend the life of the bearings, seals and ultimately the pump unit itself.

As part of Longo's pump offering, the PXPUMPS are becoming very popular as an alternative to the more higher priced brands. The difference is on the price not the quality, production value or the fitment. Once you become familiar with the benefits of the PXPUMP line you will understand what value is all about.





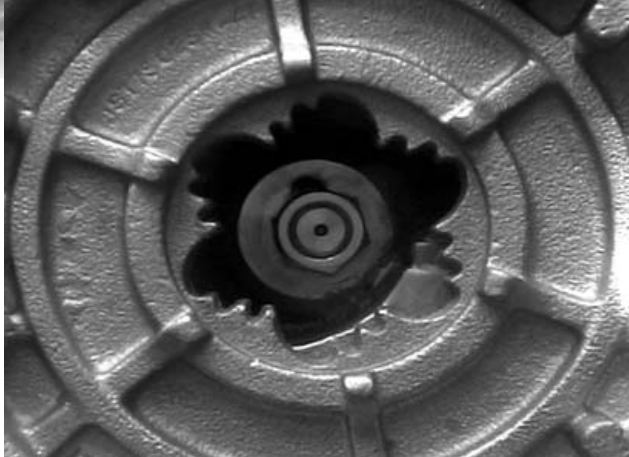
# THE PIRAHANA PUMP



Longo is pleased to add a new pump line to our customer offerings. BJM pumps out of Old Saybrook, CT has been serving the industry since 1983. They have been successful by supplying quality pumps at modest prices.

#### **BJM offers:**

- submersible pumps from ½ hp to 30 hp
- a series of portable pumps that can be carried by hand to a job site
- heavy duty pumps with an agitator that is used in slurry applications, Lime, Cement, Coal, Ash, Foods
- dewatering pumps
- a series of 316SS pumps for corrosion services
- pumps are available in 316 cast stainless steel, noryl, titanium and cast iron.
- a pump that can be hooked up to a truck or car's 12 volt battery and run it



The SK Shredder pumps are designed for:  
SCHOOLS  
BUS STATIONS,  
AMUSEMENT PARKS  
TRAILER PARKS  
SHOPPING MALLS  
AIRPORTS

The SKX model is designed for use with corrosive liquids where the iron oxidation contaminates the pumped liquid. Prime areas for this pump are  
AQUARIUMS,  
FOOD PAKAGING,  
HOSPITALS  
RESEARCH CENTERS  
MEAT PROCESSORS

One of BJM's more unique products is the **Monster Shredder Submersible** pump.

*The Shredder is available from 1 HP to 20 HP so it is adaptable to most any application. It is the answer to a whole variety of nasty situations where manual cleanout is too frequent and too costly...*

*The chopper cuts solids between the edge of the impeller and its cutter bar like an ax. Continuously ripping solids with its 360 degree action, the Monster can devour everything from plastic toys and soda cans to fibrous vegetables and sanitary napkins.*

# Switchgear Seminar packed!

The recent switchgear seminar was very popular, to the point where we were really overbooked. Bill Gerhold, Longo Switchgear Specialist, always puts on a great presentation. We also were fortunate to have a representative from Cutler Hammer discussing the latest trends in safe switchgear testing: remote rack removal systems.

With all the regulations involved, any mistake or "incident" no matter how harmless become an event to the regulatory people. The presentation was not merely verbal, but an actual demonstration of the equipment along with a good Q&A session.

## Art Evans pumps 'em up

The Pump Seminar on May 10 was another event thanks to Art Evans and his knowledge of pumps, real world pump problems and some damn interesting experiences. A good interactive audience made the seminar really worth while with specific problems and more importantly...no BS answers.

Attendees were provided with a complete package of pump information including a complete hard copy of the presentation. Among other Longo material each person received one of the popular Longo toilet stress relievers! *Again, everyone felt it was time well spent!*

---

---

**If you are thinking about attending one of our remaining seminars you don't have to wait to be invited...you can e-mail [jernst@elongo.com](mailto:jernst@elongo.com) right now and grab a seat!**

## HOW TO CONTACT US.

• Wharton Corporate Center  
1 Harry Shupe Blvd.  
Wharton, NJ 07885  
(973) 537-0400  
(973) 537-0404 Fax

• Linden Facility  
1625 Pennsylvania Ave.  
Linden, NJ 07036  
(908) 925-2900  
(908) 925-9427 Fax

• New York Facility  
(212) 929-7128  
(212) 633-9534 Fax

• E-Mail  
[info@elongo.com](mailto:info@elongo.com)

• After Hours-24/7  
Longo Emergency Response  
System  
(973) 537-0400

Motor / Pump Sales  
(973) 537-0400 Press 1  
(973) 537-0420 Fax

Switchgear Sales  
(973) 537-0400 Press "3"  
(973) 537-0415 Fax

Repair Services  
(973) 537-0400 Press "1"  
(973) 537-0420 Fax

Engineering Services  
(973) 537-0400 Press "3"  
(973) 537-0415 Fax

Field Services  
(973) 537-0400 Press "4"  
(973) 537-0420 Fax

Predictive Maintenance Services  
(973) 527-0400 Press 2  
(973) 537-0404 Fax

Small Motors  
(973) 537-0400 x 777  
(973) 537-1768 Fax

**Please visit our website... [www.elongo.com](http://www.elongo.com)** for the latest information on products and services available from Longo... plus the latest case histories and product literature.



# PROFESSIONAL seminar SERIES

**2006 Professional Seminar Series Schedule**



## September 13: Motors Bensalem, PA facility

Longo will present a thorough overview, including maintenance and troubleshooting suggestions. Theory combined with real world solutions makes this a must session for engineers and maintenance professionals alike.

## October 11: Vibration/Infrared Wharton, NJ facility

Real world uses and problem solving you can use, as well as an equipment overview. Learn how to make these techniques an integral part of your predictive/preventive maintenance program.

## SPORTS QUIZ

1. What was unique about a 1968 game between the Mets and Astros?  
a. There were 59 total strikeouts in the game  
b. They went 23 scoreless innings  
c. 17 players were ejected due to a brawl including both team's managers  
d. There were no fans in the stands
2. Who was the first player that played his entire career in the Negro Leagues, and was inducted into the MLB Hall of Fame?  
a. Satchel Paige  
b. Larry Doby  
c. Jackie Robinson  
d. Josh Gibson
3. Mets fans know of Al Leiter's devotion to a particular musician from his home state. Al will regularly warm up to songs by said musician. Who is he?  
a. Bon Jovi  
b. Tom Petty  
c. Bruce Springsteen  
d. Bob Dylan
4. Game 5 of the 1999 NLCS, remembered most for Robin Ventura's Grand Slam Single, is also the longest game in MLB postseason history in terms of elapsed time. How long was the game?  
a. 6hrs 11mins  
b. 5hrs 22mins  
c. 5hrs 46mins  
d. 4hrs 42mins
5. This 2005 rookie running back was the Giants 4th round draft pick.  
a. Tiki Barber  
b. Jim Finn  
c. Brandon Jacobs  
d. Chad Morton

1. b, 2. d, 3. c, 4. c, 5. c

The Longo Letter is published by Longo Electrical-Mechanical, 1 Harry Shupe Blvd., Wharton, NJ 07885. Joseph M. Longo President. Comments and suggestions can be made via our e-mail address: [info@elongo.com](mailto:info@elongo.com)



Service Through Knowledge®, Since 1945