



THE PHOENIX



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PHOENIX RISES

Although Phoenix has existed as an entity since May, 1975, the history of the company actually begins 30 years earlier.

In 1946 Toronto, a group of scientists with entrepreneurial spirit worked in a freezing garage behind an apartment building to make test equipment for electro-magnetic surveys. The members of this group used the initials of their surnames to make up their new company's name, McPhar. (They were George McLaughlin, Bill Cartier, Matthew Perz, Herb Harvey, Ray Anthes and Bill Robinson.)

"The possibility of airborne EM was then at the limit of technical feasibility," recalls Harvey, the sole surviving founder of the original McPhar. He lives not far from Phoenix's offices in Scarborough, an eastern suburb of Toronto. "We wrote a proposal for EM for a group of which Falconbridge was

a part." (Falconbridge is a major nickel mining company headquartered in Sudbury, Ontario.)

"Everyone worked at other things, in my case a master's thesis at the University of Toronto, while sneaking off to do our EM work," says Harvey. "They were grand times. I remember while doing airborne EM for Sherritt Gordon we bought a bright yellow wooden plane, an Anson, to use for spare parts. We discovered it still had flying time on it so we used it for surveys. Davidson called it our yellow-bellied sapsucker because it sucked money from the company.

"We invented and built all sorts of things while starving and trying to make EM a success. We had a ground unit for EM,



H. A. Harvey, McPhar Founder

geiger counters and travelled on the Canadian National railroad tracks with a car looking for radioactivity. In partnership with INCO (the International Nickel Company) we built the first successful airborne EM system."

By the early 1950's, all but one of the original six partners worked full time for the three successful McPhar companies, McPhar Geophysics, Manufacturing and Engineering. As well, some of the group started another company, Nucom, specifically to work for the American Metal Company from 1955-59 using the technology developed with INCO. (Nucom closed in 1959 due to depressed metal prices. Some of the principals

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CENTENNIAL OF CANADIAN TRADE COMMISSIONER SERVICE

Congratulations to the Canadian Trade Commissioner Service, celebrating its 100th year of service to Canadian business and industry.

John Short Larke was appointed Canada's first professional trade commissioner in 1894 and sent to Sydney, Australia. The service has grown since then – there are now more than 500 trade officers located inside and outside Canada, searching out opportunities for Canadian business.

Phoenix appreciates the help and cooperation we have received over the years from many missions, but in this issue we want to single out the Canadian High Commission in New Delhi, India. Former

High Commissioner John L. Paynter (now back in Canada training for a new posting) and his staff provided valuable assistance to us many times. (In particular, thanks to Commercial Counsellor Robert Vanderloo, Commercial Second Secretary Michael Dugate, Commercial Officer Ashwani Nanda and former Commercial Counsellor D. Brian MacKay).

Our best wishes go with John Paynter to his new posting and we extend a warm welcome to his replacement in New Delhi, Stanley Gooch, as well as to Michelle Wiwchar, Trade Commissioner.

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FROM THE EDITOR

Welcome to the first issue of The Phoenix. We hope you enjoy learning more about our company, its products and its people.

The Phoenix will be published every three months with news about our latest projects, product innovations, technical information and tales of where we've been and where we're going.

Every issue will list trade shows, symposiums and conferences where we hope to meet you in person (we've rushed this first issue to the printers so we can hand it to many of you at the SEG in Los Angeles). We'll also tell you about some of our travels (it would take a book to tell

you all!), who's new on our staff and who visited Phoenix to have a coffee from a souvenir Phoenix mug.

Good people are the backbone of any successful company so each issue we'll profile one or two of the people who have made Phoenix the international success it is today. This issue features Tony Anselmo and Frank Wakida who, together, have worked well over half a century for Phoenix and its predecessors (see the front page Phoenix Rising story). We hope such profiles add a touch of personality to the voices on the telephone, the feeders of the fax machine and the nimble brains and fingers behind the equipment you use in the

field.

We thought an abbreviated history of Phoenix's background would be appreciated in our inaugural issue, so we asked H.A. Harvey, one of the founders of McPhar, to drop by for a visit. We hope you find his memories interesting.

We're always delighted to hear from our readers, by fax, phone or, best of all, in person. Please contact us with your stories, photographs, compliments and complaints – we promise to respond.

Audrey Hutchison,
Editor

GOVERNMENT-PHOENIX PARTNERSHIP SUCCESS

A fifteen year partnership with the Geological Survey of Canada (GSC) has helped Phoenix Geophysics become a world leader in the design, manufacture and operation of magnetotelluric (MT) systems.

Phoenix turned the government's initial \$500,000 research grant (given in 1980-81) into more than \$18 million worth of exports of MT equipment and services. Phoenix-built systems are now used in more than 75 countries and still there is potential for growth.

Besides financial support, invaluable scientific and technical advice from the GSC scientists contributed to the mutually beneficial relationship. Dr. Alan Jones, an

MT expert at the GSC, cites Phoenix's success as a prime example of the role government can play in supporting Canadian industry and jobs. The GSC is Phoenix's single largest domestic client for MT equipment and services.

Although MT instruments measure electrical and magnetic fields in the subsurface and are used primarily for resource exploration, the technology is also used for geological research, exploring for groundwater and mapping chemical pollutants near the earth's surface. Some countries (Japan and India are two) are also using MT for earthquake prediction research.

PHOENIX RISES

(Continued from front page)

returned to McPhar while others, like Harvey, moved into different fields of endeavour.

"I became a high school math and physics teacher until my retirement in 1987," says Harvey, "attempting to instill in my students an interest in and love for the sciences."

McPhar successfully carried on through the 1960's and in 1970 was bought by CIL (Canadian Industries Limited). But on a Friday the thirteenth in late December of 1974, the era ended. When workers arrived at the office the following Monday, a newspaper article tacked to the bulletin board announced that CIL had sold McPhar, not to the employees as they had hoped, but to another company.

Within months, a dozen key personnel had formed their own new company. In May, 1975, Phoenix Geophysics was born, rising from the ashes of McPhar. Today Phoenix is an acknowledged world leader in the geophysical field.

WELCOME, BEN



Technician Ben Zlobin is Phoenix's newest employee. Twenty-year-old Ben came to Canada from Estonia in 1992. He enrolled in a two-year electronics engineering course at Toronto's George Brown College and graduated earlier this year. Ben is an environmentally responsible technician, making the long journey from his home to Phoenix's offices by bicycle.

EMPLOYEE NEWS



Frank Wakida

Senior electronics technician Frank Wakida moved to Toronto in 1951 after completing high school in Kamloops, British Columbia. He started his long and illustrious technical career with Spartan Radio, becoming a television technician there before spending from 1955-59 as an airborne survey technician with Nucom (see the page one story about Phoenix's origins).

Frank's duties with Nucom took him to many exotic locales to perform airborne and ground geophysical surveys (mainly mining exploration) making him a fountain of anecdotes about the colourful personalities he encountered.

From 1959-1975 Frank worked for McPhar as a manufacturing technician, often taking his expertise into the field. He began work for Phoenix a few months after its inception. Although bench-bound most of the time, Frank has travelled to the United States, Mexico and Japan on company business.

Frank is an expert golfer and enjoys challenging courses year round, especially during his December vacations to Florida. He married Gloria in 1960 and they are very proud of their 27-year-old son Warren, who just recently became the owner of his own specialty dessert restaurant.



Tony Anselmo

A half-century of technical experience makes Tony Anselmo a valuable, and highly valued, employee. Although a little beyond official retirement age, we're happy Tony continues to share his expertise with us.

Portuguese-born Tony joined the Portuguese navy in 1943, became a radio operator in 1944, a radio technician in 1946 and a radar technician in England from 1947-1949. He left the navy in 1953 and spent the next seven years working as a marine electronics and radar technician with a private company – attempting to fulfill his dream of moving to Canada.

In 1960 he arrived and went to work for Canadian Marconi. But 1965 was the big year – Tony joined McPhar (Phoenix's predecessor, see front story) and became a Canadian citizen. In 1970 he attained his certificate as a Certified Senior Engineering Technician (C.E.T.).

Tony's favourite hobby is similar to his work. When Canada celebrated its 100th birthday in 1967, Canadians were urged to fulfill a personal project. Tony chose to become a licensed ham radio operator and to this day keeps his license up-to-date.

MESSAGE FROM THE PRESIDENT



We dedicate the first issue of The Phoenix to our valued clients around the world. We hope our newsletter will prove to be an interesting and useful source of information for you, a forum for information sharing among our many customers, and a catalyst to establish linkage among our end-users.

We invite all of you to submit newsworthy items and photographs that describe your field surveys and applications.

Leo Fox, President

VISITORS

We often have guests from overseas visiting Phoenix for training, upgrading, customizing their equipment or just to visit our production department. Consider this your invitation to visit our Scarborough offices in Toronto's east end (but please call ahead so a Phoenix coffee mug will be awaiting you.)

- In February of 1994 we introduced Cemal Kaya and Tuğrul Tokgöz of the Mineral Research and Development Organization (MTA), Ankara, Turkey, to the best of Toronto's winter weather. They were here for training on the V-5 MT system purchased by MTA. Although we kept them busy, time was made to visit Niagara Falls and to sample some of Toronto's many ethnic restaurants.
- Dr. Frank Boerner of the Dresden Groundwater Institute (DGFZ), Germany, visited Phoenix in June to discuss customizing his V-5 Receiver so that it can operate with his Campus resistivity transmitter. We hope his family enjoyed their visit to Canada.
- Mitsuru Honda from West Japan Engineering Consultants Co., Inc. spent a few days in Toronto in September for software training. He worked primarily with our Vice-President Mitsuru Yamashita, re-processing magnetotelluric data and he took part in some local field testing.

CASE HISTORIES VALUABLE

Phoenix always tries to facilitate the exchange of information among our clients and we've found the sharing of case histories to be one of the most valuable forms of exchange among earth scientists. Below we've listed a few of the case histories available in our office. Contact us for further information.

- Advances in the Integrated Interpretation of Seismic with Magnetotellurics, illustrated by practical examples from the Pannonian Basin, Hungary. By Zoltan Nagy, Hungarian Oil & Gas Company, Budapest.
- Results of Magnetotelluric Exploration for Geothermal Reservoirs in Hungary. By Zoltan Nagy, Hungarian Oil & Gas Company, Budapest.
- Study of the Santa Catarina Aquifer

System (Mexico Basin) using Magnetotelluric Soundings. By M. Chouteau, S. Krivochieva, R. Castillo, T. Moran & V. Jouanne, Ecole Polytechnique, Montreal & the Department of Natural Resources, Institute of Geophysics, Mexico City.

- An Audio-Magnetotelluric Survey in Western Sudbury: Application to Exploration. By E. Blais, M. Mareschal & P. Zhang, Ecole Polytechnique, Montreal.
- Mapping Oil Contaminated Sand and Till by Spectral Induced Polarization Method. By H. Vanhala & H. Soinenen, Geological Survey of Finland.

Let us know about your reports, papers and case histories so we can inform other users.

ON THE ROAD

The past year has been an extremely busy one for Phoenix, with our personnel scattered to the four corners of the globe. We have room to tell you about just a couple of our trips and surveys.

- As part of Canada's ongoing LITHOPROBE project, Phoenix conducted an MT survey in northern Saskatchewan and Manitoba. The objective of the six-week project was to determine the deep structure along the Trans-Hudson Oregon Transect which is one of the earth's great examples of a preserved collisional belt representing the "glue" that stuck together older "bits and pieces" of North America while generating significant volumes of new material. The Canadian government, universities and industry participate in LITHOPROBE.
- Mits Yamashita, Phoenix vice-president, senior engineer Gerry Graham and V.P. Far East James Kok all travelled extensively in Japan and China during the last few months, installing systems and providing after-sales service to our clients. Dr. Hu Wenbao of Jiangnan Petroleum Institute acquired a multi-purpose V-5 system for oil exploration. We also wel-

come a new client in China, Da Qing oil field in the northern province of Heilongjiang. Da Qing (China's largest oilfield) acquired two V-5 MT systems.

- Senior engineer George Balint trained personnel in Turkey in September on the V-5 MT system purchased by the Mineral Research and Development Organization (MTA), Ankara. George especially thanks Cemal Kaya and Tuğ Tokgöz for helping to make his visit both productive and pleasurable.
- Dr. Alex Savelyev of the Aerogravity Division of Carsor Services, Inc., Philadelphia accompanied Phoenix President Leo Fox to the Second Kazakhstan International Oil and Gas Exhibition (KIOGE) in Alma Ata (Almaty), Oct. 5 - 8.

HOPING TO SEE YOU . . . Exhibition/Meeting Schedule

Phoenix personnel plan to take part in several trade shows in the coming months. Please drop by to say hello and maybe you'll be the lucky winner of a can of genuine Canadian maple syrup.

- We're at the SEG in Los Angeles, Oct. 26 - 29, Booth #746-748.
- James Kok, our vice-president Far East, is attending the Asia Pacific Mining Conference and Exhibition, Oct. 26 - 29, in Jakarta, Indonesia.
- We'll have our regular booth at the Prospectors and Developers Association of Canada (yes, with ice cream!), March 5 - 8, 1995, Royal York Hotel, Toronto.
- April 23 - 26, 1995, we'll be in Florida at SAGEEP '95 (Environmental and Engineering Geophysical Society meeting).
- From May 29 to June 2, 1995 we are at the EAEG (European Association of Exploration Geophysicists) Show in Glasgow, Scotland.



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