



July 8, 2014

Dear Shareholder:

You are cordially invited to attend the 2014 Annual Meeting of Shareholders of *DATATRAK* International, Inc., to be held at 10:00 a.m., local time, on Wednesday August 13, 2014 at the Oak Brook Hills Hotel located at 3500 Midwest Road, Oak Brook, IL 60523.

At this year's Annual Meeting, in addition to electing two Directors, shareholders will be asked to ratify the appointment of the Company's independent auditor. Information relating to these proposals is presented in the accompanying Proxy Statement, which shareholders are encouraged to read carefully. Your Board of Directors has unanimously approved each of these proposals, and urges you to vote in favor of these proposals.

Whether or not you plan to attend the Annual Meeting in person, it is important that your shares are represented. Therefore, please complete, sign, date and promptly return the enclosed proxy card in the accompanying envelope. If you do attend the Annual Meeting, you may, of course, withdraw your proxy should you wish to vote in person, even if you have previously returned your proxy card.

On behalf of the Board of Directors and management of *DATATRAK* International, Inc., we would like to thank you for your continued support and confidence.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'L. Birch', written over a horizontal line.

Laurence P. Birch
*Chairman of the Board of Directors
and Chief Executive Officer*

DATATRAK INTERNATIONAL, INC.
5900 Landerbrook Drive
Suite 170
Mayfield Heights, Ohio 44124

NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

TO BE HELD AUGUST 13, 2014

The 2014 Annual Meeting of Shareholders of *DATATRAK* International, Inc. will be held at 10:00 a.m., local time on Wednesday, August 13, 2014 at the Oak Brook Hills Hotel located at 3500 Midwest Road, Oak Brook, IL 60523 for the following purposes:

1. To nominate and elect two individuals as Directors for a two-year term ending at the Annual Meeting in 2016;
2. To ratify the appointment of BDO USA, LLP, as the Company's independent auditor; and
3. To transact such other business as may properly come before the Annual Meeting and any adjournments thereof.

Only shareholders of record at the close of business on June 20, 2014 will be entitled to receive notice of and to vote at the Annual Meeting and any adjournments thereof.

By Order of the Board of Directors,

VARNESH SRITHARAN
Secretary to the Board of Directors

DATA TRAK INTERNATIONAL, INC.

**5900 Landerbrook Drive
Suite 170
Mayfield Heights, Ohio 44124**

PROXY STATEMENT

This Proxy Statement is being furnished to the shareholders of record of Common Shares, without par value (the “*Common Shares*”), of *DATA TRAK International, Inc.*, an Ohio corporation (the “*Company*”), in connection with the solicitation of proxies by the Board of Directors of the Company (the “*Board*”) for use at the Annual Meeting of Shareholders of the Company (the “*Annual Meeting*”) to be held at 10:00 a.m., local time, on Wednesday, August 13, 2104 at the Oak Brook Hills Hotel located at 3500 Midwest Road, Oak Brook, IL 60523.

PROXIES AND VOTING

The close of business on June 20, 2014, has been fixed as the record date for the determination of shareholders entitled to notice of and to vote at the Annual Meeting and any adjournment of the Annual Meeting. On the record date, 1,434,703 Common Shares were outstanding and entitled to vote. Each Common Share is entitled to one vote.

At the Annual Meeting, shareholders will vote upon: (1) the election of two Directors in Class II each to hold office for a two-year term ending at the 2016 Annual Meeting of Shareholders of the Company; (2) the ratification of the appointment of BDO USA, LLP, as the Company’s independent auditor; and (3) such other business as may properly come before the Annual Meeting or any and all adjournments.

Shareholders do not have the right to cumulate their votes in the election of Directors. The two nominees receiving the highest number of votes will be elected as Directors.

Common Shares represented by properly executed proxies will be voted at the Annual Meeting in accordance with the choices indicated on the proxy. If no choices are indicated on a proxy, the Common Shares represented by that proxy will be voted in favor of the two nominees described in this Proxy Statement, and for the ratification of the appointment of BDO USA, LLP, as the Company’s independent auditor. Any proxy may be revoked at any time prior to its exercise by delivering to the Company a subsequently dated proxy or by giving notice of revocation to the Company in writing or in open meeting. A shareholder’s presence at the Annual Meeting does not by itself revoke the proxy.

Abstentions will be considered as Common Shares present and entitled to vote at the Annual Meeting and will be counted for purposes of determining whether a quorum is present. Abstentions will not be counted in determining the votes cast for the election of Directors and will not have a positive or negative effect on the outcome of the election. For purposes of

Proposal 2, abstentions will have the effect as an “Against” vote. Broker non-votes will have no effect on any of the Proposals presented herein.

Management does not know of any other matter which may come before the Annual Meeting. However, if any other matters properly come before the Annual Meeting, the persons named in the accompanying form of proxy intend to vote the proxy in accordance with their judgment on such matters.

PROPOSAL NO. 1 – ELECTION OF DIRECTORS

The authorized number of Directors is presently fixed at six, with members of the Board of Directors divided into two classes with the term of office of one class expiring each year. At the Annual Meeting, Common Shares represented by the proxies, unless otherwise specified, will be voted to re-elect each of the following persons as Directors in Class II for a two-year term ending at the 2016 Annual Meeting of Shareholders of the Company:

Jerome H. Kaiser, Ph.D., 57, has been a Director since December 1999. Dr. Kaiser, a physics teacher since 2012 and consultant since 2009, served as the Senior Vice President and CIO for Tower Group, Inc., an insurance company, from 2006 until 2008, and prior to his appointment to that position, was Head of Information Systems for Rothschild Inc., a private investment bank from 1999 to 2006. From 1992 to 1999, Dr. Kaiser held various positions within the pharmaceutical industry. During 1998 and 1999, he was the Director of Portfolio Management for Pfizer, Inc. From 1994 to 1998, Dr. Kaiser was employed by Hoffman-LaRoche, Inc., first as Senior Projects Specialist and then as Director of Information Management for Global Development. Dr. Kaiser worked in Project Management for Boots Pharmaceuticals from 1992 to 1994. From 1986 to 1992, he served in the positions of Assistant Professor and Associate Professor of Physics at the University of Texas at Arlington. Dr. Kaiser is a graduate of the University of East Anglia, Norwich, England (B.Sc. and Ph.D. in Physics).

James M. Karis, 66, has been a Director since 2012. Mr. Karis is the Chief Executive Officer of MAPI Group, a healthcare services company. Prior to joining MAPI, Mr. Karis was the Co- Chief Executive and Chief Executive Officer of CollabRx, a NASDAQ listed health information technology company from 2010 to 2012. From 2000 to 2009, Mr. Karis served as the President, Chief Executive Officer and Director of Entelos, Inc, a developer of computer models for clinical trials. Mr. Karis was the Chief Operating Officer and President of Parexel International from 1997 to 2000 and Chief Operating Officer of Pharmaco from 1994 to 1997. He was also the Vice President of International Operations for Baxter International from 1982 to 1987 and the founder of KMR Group, Inc., a pharmaceutical R&D analytics firm. Mr. Karis currently serves on the Boards of MAPI Group and CollabRx, Inc. Mr. Karis earned a Bachelor of Science degree in Management and Economics from Purdue University and a Master of Arts degree with a major in Applied Economics from American University.

The Board of Directors Unanimously Recommends that the Shareholders Vote “FOR” the Two Nominees Whose Two-Year Term Will Expire in 2016.

PROPOSAL NO. 2 – RATIFICATION OF APPOINTMENT OF INDEPENDENT AUDITORS

The Audit Committee has appointed BDO USA, LLP to act as the Company's independent auditors and to audit the Company's financial statements for the fiscal year ended December 31, 2014. The selection of BDO USA, LLP as the Company's independent auditors is not required to be submitted to a vote of shareholders for ratification; however, the Company is submitting the appointment of BDO USA, LLP to the Company's shareholders for ratification as a matter of good corporate practice and in order to provide a method by which shareholders may communicate their opinion to the Audit Committee. If shareholders fail to vote on an advisory basis in favor of the selection, the Audit Committee will consider whether to retain BDO USA, LLP, and may retain that firm or another firm without resubmitting the matter to the Company's shareholders. Even if shareholders ratify the appointment, the Audit Committee may, in its discretion, direct the appointment of a different independent auditor at any time during the year if it determines that such a change would be in the Company's best interests and the interests of the shareholders. During the fiscal year ended December 31, 2013, BDO USA, LLP served as our principal auditors and provided certain other services.

Fees for services rendered by BDO USA, LLP were:		<u>2013</u>
Audit Fees	\$	103,000
All Other Matters	\$	<u>20,106</u>
Total	\$	123,106

Vote Required

The affirmative vote of holders of a majority of the Common Shares represented and entitled to vote at the Annual Meeting is required to ratify the appointment of BDO USA, LLP as the Company's independent auditors.

The Board Unanimously Recommends a Vote “FOR” the Ratification of the Appointment of BDO USA, LLP as the Company's Independent Auditors.

SECURITY OWNERSHIP OF MANAGEMENT

The following table and accompanying footnotes show information regarding the beneficial ownership of our Common Shares as of June 20, 2014, unless otherwise indicated, with respect to each (i) Executive Officer, (ii) member of our Board and (iii) all Directors and Executive Officers as a group.

Common Shares		
Beneficially Owned (2)		
Name and Address of Beneficial Owner (1)	Number	Percent
Laurence P. Birch (3)	187,757	12.4%
Timothy G. Biro (4)	19,791	1.4%
Jerome H. Kaiser, Ph.D.	16,668	1.1%
James M. Karis	4,166	*
Nicholas A. Loiacono	2,083	*
Jennifer W. Mabe	49,042	3.4%
All Directors and Executive Officers as a group (6 persons)	279,507	18.3%

* Less than one percent

(1) The address of the Directors and executive officers listed above is c/o *DATATRAK* International, Inc., 5900 Landerbrook Drive, Suite 170, Mayfield Heights, Ohio 44124.

(2) The number of Common Shares deemed beneficially owned is comprised of (i) 1,434,703 Common Shares outstanding as of June 20, 2014, and with respect to each of the following individuals, the following number of Common Shares which may be purchased pursuant to option exercises within 60 days after June 20, 2014: Mr. Birch (78,386 Common Shares); Mr. Biro (16,446 Common Shares); Dr. Kaiser (14,892 Common Shares); Mr. Karis (3,333 Common Shares); Mr. Loiacono (2,083 Common Shares); Ms. Mabe (19,653 Common Shares) all Directors and Executive Officers as a group (134,793 Common Shares).

(3) Includes 2,500 Common Shares held by Mr. Birch's wife. Mr. Birch disclaims beneficial ownership of these 2,500 Common Shares.

(4) Includes 25 Common Shares held by Mr. Biro's wife. Mr. Biro disclaims beneficial ownership of these 25 Common Shares.

BOARD OF DIRECTORS

The following provides information concerning the current members of the Board:

Laurence P. Birch, 54, has been a Director since April 16, 2007, the Chairman of the Board of Directors since May 15, 2008, was appointed Interim Chief Executive Officer effective January 21, 2009, and was appointed Chief Executive Officer effective November 1, 2009. From March 2007 until October 2009, Mr. Birch served as the President, Chief Executive Officer and a director of NeoPharm, Inc., a biopharmaceutical company dedicated to the research, development and commercialization of new and innovative cancer drugs for therapeutic applications. Prior to joining NeoPharm, Mr. Birch served as President and Chief Executive Officer, as well as Sr. Vice President and Chief Financial Officer, of AKSYS, Ltd., a hemodialysis developer and manufacturer from 2005 to 2006. Prior to that, Mr. Birch served as a Partner with Stratego Partners, a cost management consulting firm, from 2003 to 2005. Mr. Birch was Sr. Vice President of Business Development and Chief Financial Officer of Technology Solutions, Inc., a systems integration and consulting company from 2000 to 2002. Mr. Birch was also Chief Financial Officer of Brigade, Inc., an internet support company, from 1999 to 2000. Prior to that, Mr. Birch served five years with EDS where he held a variety of senior finance and general management positions. Mr. Birch began his career with Baxter Healthcare, a manufacturer and supplier of pharmaceuticals and medical devices, where, over the course of 13 years, he held a variety of positions. Mr. Birch serves on the Board of Managers of the YMCA of Metropolitan Chicago. Mr. Birch holds a Bachelor of Science-Finance from the University of Illinois and a MBA from Northwestern University — Kellogg Graduate Business of Management. Mr. Birch is a Certified Public Accountant and a Chartered Global Management Accountant.

Timothy G. Biro, 60, has been a Director since 1992. Mr. Biro has been the Chief Operating Officer of On Target Laboratories, a developer of cancer imaging solutions based on proprietary cancer targeting technology, since 2012. Mr. Biro has been the Managing Partner of Ohio Innovation Fund I, L.P., a venture capital firm which invests in early-stage business, since 1997. Mr. Biro was co-founder of SpineMatrix, a medical technology company specializing in advanced spinal diagnostics in November 2009, and served as the CTO through December 2011. From June 2008 to December 2008, Mr. Biro served as CEO of MORK Process, a manufacturer of Clean-In-Place systems for the biopharmaceutical and food industries. Mr. Biro was also a Partner with Reservoir Venture Partners, an early stage venture capital firm, from 2004 to 2009. Mr. Biro has been involved in venture capital financing since 1991. Prior to 1991, Mr. Biro was Superintendent of Pharmaceutical Manufacturing at Merck & Co., Inc. Mr. Biro has a B.S. Degree in Microbiology from Pennsylvania State University and in Pharmacy from Temple University and an MBA from The Wharton School of Business at the University of Pennsylvania.

Nicholas A. Loiacono, 61, has been a Director since 2013. Mr. Loiacono is formerly the Vice President and Treasurer of McKesson Corporation, a Fortune 15 corporation which delivers pharmaceuticals, medical supplies and health care information technologies to its customers. He had been with McKesson Corporation since 1997. Mr. Loiacono began his career with American Hospital Supply Corporation from 1975 to 1985, during which he held a series of financial responsibilities with various business units serving the medical surgical, clinical laboratory,

durable medical equipment, and home health care markets. From 1987 to 1990, he held a senior financial position with a broad-based, medical surgical manufacturing unit of Baxter International. From 1992 to 1997, he was Group Vice President/Finance and Administration of Sulzer Medica USA, an international manufacturer of implantable medical devices, primarily serving the cardiovascular and orthopedic markets. Mr. Loiacono has a B. S. degree in Business Administration from the University of Illinois and a Master of Management from the Kellogg School of Management of Northwestern University.

Jerome H. Kaiser, Ph.D. Dr. Kaiser has been a Director since 1999. See “Proposal No. 1 – Election of Directors” for additional information regarding Dr. Kaiser.

James M. Karis, Mr. Karis has been a Director since 2012. See “Proposal No. 1 – Election of Directors” for additional information regarding Mr. Karis.

INDEPENDENT AUDITOR

BDO USA, LLP

TRANSFER AGENT

Computershare Inc.

First Class/Registered/Certified Mail:
Computershare Investor Services
P.O. Box 43078
Providence, RI 02940

Courier Services:
Computershare Investor Services
250 Royall Street
Canton, MA 02021

Shareholder Services Number(s): 800-622-6757

OTHER MATTERS

The Company will bear the cost of soliciting proxies. In addition to the use of the mails, proxies may be solicited by officers, Directors, and regular employees of the Company, personally or by telephone.