A2B Tracking Solutions is proud to present this bar code timeline. You will note a continuity that dates from the earliest days of railcar identification in 1959 to the present day. That continuity is personified by A2B Board Chairman, David Collins, who is often referred to as the "father of the bar code industry." His presence in the industry over the last past fifty years has resulted in a string of bar code "firsts" that have shaped global commerce.

Many other pioneering individuals and companies have made ground-breaking contributions across the years. Only a few are mentioned here. The AIDC 100 organization honors these individuals, and their accomplishments are ably documented at Stony Brook University in New York.

Bar code has evolved over time, but one theme remains constant – the economy of efficiency. As the newest and largest player in the bar code revolution, the US Department of Defense, along with NATO, will carry this story deep into the 21st century.

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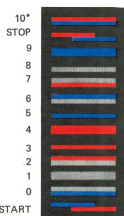
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BARCODE HISTORY TIMELINE

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THE HISTORY OF THE BAR CODE

1952 – Bernard Silver and Norman Woodland are granted a patent for "Classifying Apparatus and Method," in which they described a "bulls-eye" printing pattern. Philco soon purchased the patent and subsequently sold it to RCA.

1959 – David Collins manages the development of the KarTrak Automatic Car Identification system at Sylvannia/GTE. This is the first commercial use of a linear bar code. KarTrak reads red, white, blue and black bars, mounted on rail cars, to track their location.

1961 – The first KarTrak bar code scanner is installed and tested by Sylvannia/GTE on the Boston & Maine Railroad.

1967 –Association of American Railroads adopts bar code standard across its entire fleet of railcars, piggyback vans and sea containers.

1969 – David Collins leaves Sylvannia/GTE to start Computer Identics Corp, the first company whose product line is based entirely on bar code. Work begins immediately on development of the first black and white bar codes and helium-neon laser scanners, for expansion into other industries.

1970 – First real-time, scanner-driven distributed process and reporting developed by Computer Identics using Digital PDP8 computers.

1971 – Jim Bianco of Control Module develops the PCP portable bar code scanner, the first portable to use a microprocessor (Intel) and a digital cassette recorder.

1971 – Norand develops the first portable wand scanning unit, enabling placing of orders directly off the grocery shelf.

1971 – AIM trade association (Automatic Identification Manufacturers) is formed by four charter members: Computer Identics, Identicon, 3M and MEKontrol.

1971 – Computer Identics installs its first two systems, one at a Pontiac, MI General Motors plant and one at General Trading Company in Carlstadt, NJ. The GM system was used to identify car axels on assembly lines.

1972 – Interleaved 2 of 5 code is developed by Dr. David Allais of Intermec for Computer Identics.

1973 – IBM's Uniform Grocery Product Code (UPC) is adopted by the National Association of Food Chains.

1974 – A pack of Wrigley's Spearmint chewing gum is the very first UPC scanned. This occurs at Marsh's Supermarket in Troy, OH at 8:01 AM on June 26th. An NCR test-bed scanning system was used.

1974 – Code 39, the first alphanumeric bar code symbology is developed by Dr. David Allais and Ray Stevens of Intermec.

1977 – Scanners appear in fewer than 200 grocery stores, but statistics are proving that the return on investment for a grocery store bar code scanner is 41%.

1977 – New York Marathon adopts bar code scoring provided by Computer Identics and Printronix.

1980 – First thermal transfer printer introduced by Sato.

1980 – Bar code is being adopted by 8000 additional grocery stores each year.

1981 – Department of Defense launches LOGMARS program using Code 39.

1982 – Computer Identics introduces Code 128, the most commonly used bar code in the world today.

1982 – Symbol Technologies LS7000, the first handheld scanner, is launched.

1982 – First CCD scanner introduced by Norand.

1982 – First all AIT trade show, Scan Tech, is held in Dallas.

1982 – Data Specialties Inc. introduces The Zebra, its first bar code printer, at Scan Tech. In 1986 the company changed its name to Zebra Technologies Corp.

1983 – AIAG (Automotive Industry Action Group) chooses Code 39 as standard.

1984 – HIBC (Health Industry Bar Code) Alliance sets standards and settles on Code 39.

1984 – Los Angeles Olympics chooses Computer Identics to track and control access and security with bar code.

1984 – Computer Identics develops Mac-Barcode® Software, the first WYSIWYG bar code label composition software, for the newly introduced Apple Macintosh.

1984 – First Scan Tech Europe is held.

1987 - Code 49 is developed by David Allais at Intermec Corporation.

1987 – David Collins leaves Computer Identics to start Data Capture Institute (DCI), the first company devoted entirely to bar code education and advanced bar code and IT integration. Later DCI purchases Mac-Barcode® software and forms subsidiary, The Mac-Barcode® Company.

1989 – UCC-EAN Serial Shipping Container Code published.

1990 – Popular 2D code, PDF417, is introduced by Symbol Technologies.

1990 – ANSI X3.182 standard on bar code print quality is issued.

1991 – Data Capture Institute launches Data Capture Case Studies & Technology newsletter, which is later published within Automatic I.D. News magazine.

1994 – A2B Tracking Solutions is founded by Peter Collins. Focus is on labeling software and mobile computing. UPS contracts with A2B to complete development of UPS Trackpad® software for tracking of internal deliveries on PDAs. A2B continued a relationship of sales, support and development of UPS Trackpad for ten years.

1994 – Checkerboard symbology Data Matrix is invented by International Data Matrix, Inc. (ID Matrix) and eventually covered several ISO/IEC standards.

1994 – The Mac-Barcode® Company develops Mac-Barcode® Pro-Label™ and Mac-Barcode Walkabout™, the first software for mobile computing using the Apple Newton Platform. Application was later developed on the Windows CE platform.

1995 – MCI/Worldcom implements Scanman, the first serialized item tracking application for assets, under a design contract with Data Capture Institute.

1996 – Federal Aviation Administration (FAA) awards prime contract to Data Capture Institute for tracking and control of operational assets in a program known as BCATS (bar code asset tracking system). This program, which continued until the events of 9/11 deflected funding, became the prototype for the DoD's IUID mandate.

2000 – ATA (Airline Transport Association) releases Spec 2000, a set of e-business specifications, products and services.

2002 – DoD convenes Integrated Product Team (IPT) to expand on MIL STD 130 to serialized item tracking within the military.

2003 – DoD issues memorandum "Policy for Item Unique Identification (UID) of Tangible Items" that makes mandatory the marking and tracking of over 300 million items with Data Matrix code.

2004 – A2B Tracking Solutions releases UID Comply!® life cycle management software, the first such product to support the UID initiative.

2004 – AIM forms UID Supplier Alliance Committee in support of UID vendor community.

2005 – Airlines use IATA standard 2D bar code on boarding passes.

2007 – Peter Collins awarded ID Global Leadership Award in Milan, Italy for his contributions to the automatic identification industry in support of UID.

2008 – 2D bar codes sent to mobile phones to enable electronic boarding passes.

2010 – NATO Guidance on UID of Items is published.

| 1952 | 1959 | 1961 | 1967 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1977 | 1980 | 1981 | 1982 | 1983 | 1984 | 1987 | 1989 | 1990 | 1991 | 1994 | 1995 | 1996 | 2000 | 2002 | 2003 | 2004 | 2005 | 2007 | 2008 | 2010 |