

# **AIDC Memoirs**

**by**

**A. John Esserian**

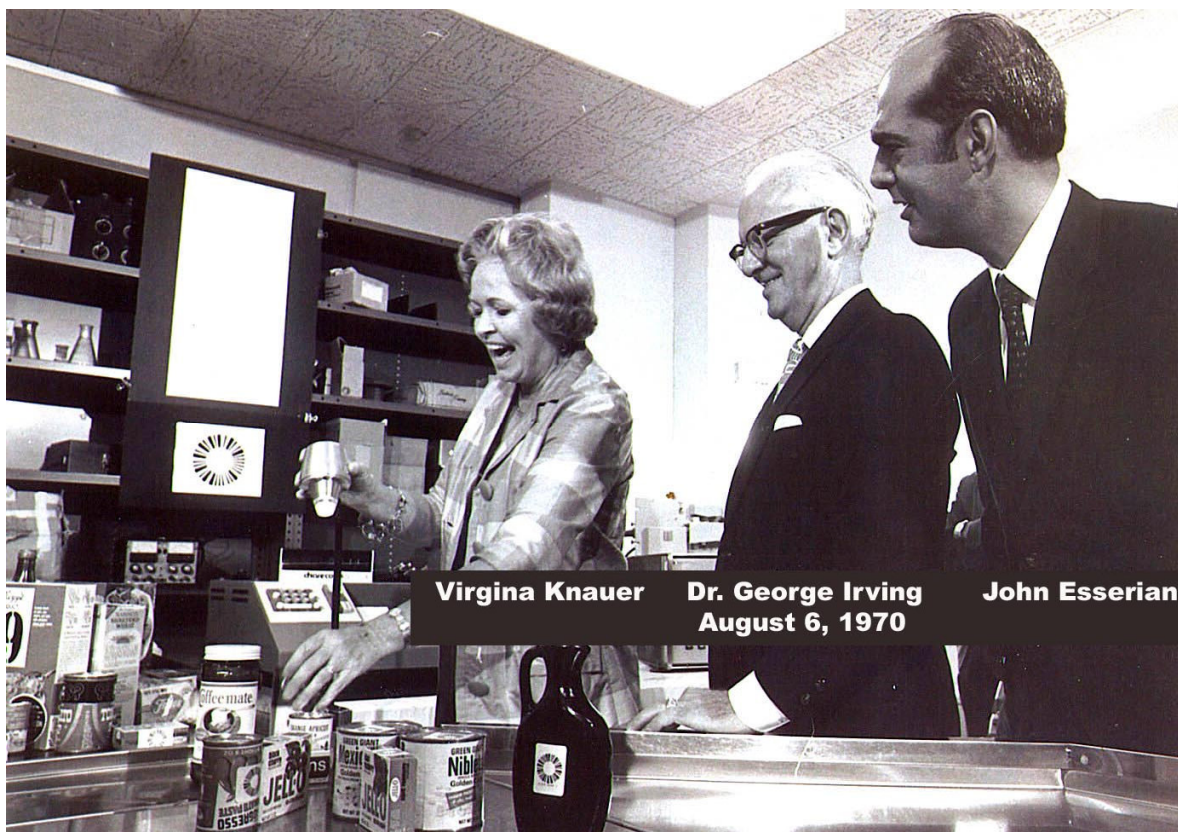
**Charecogn Systems**  
(Retired)



There was a “singular happening” in my life, and in my MIT life. It started in 1957 when I envisioned and block diagramed a computerized check out system based on new mini-computers. Everything fit; speed, memory, printing, system economics - except for one thing. There was no \$100 scanning device that allowed the required speed of data entry by human handling. To develop this, I founded Charecogn Systems in 1960.

## FAST FORWARD

Well, if I don't do it here, and if I don't do it now, where or when can I claim that I was principal in an effort and event that I call the “**Kitty Hawk of Supermarket Bar Code Scanning.**” With other M.I.T. “Beavers”, including Brad Torrey “42”, Dave Jeffries “51” and Herb Teager “52”, we invented, built and displayed to a public forum a fully functional bar code data entry system feeding a computer system that came up with a “cash register” like receipt, except better, exceptionally better. The system was presented to the press on August 6, 1970 by the U.S. Department of Agriculture with cabinet officer Mrs. Virginia Knauer showing the ease and data benefits of bar code scanning.



The USDA said of our company “Charecogn Systems, Inc. is the first firm to develop a working trial model.”

Shortly after our system demonstration, major grocery manufacturers and supermarket operators organized as the Ad Hoc Committee and retained McKinsey & Co., to conduct a run-off to select a standard bar code symbology. The submitters included RCA, Litton, Pitney Bowes, Singer, Scanner, Inc., Charecogn and a very late submission from IBM. The two section bar code you

now see as the Universal Product Code was the IBM submission. The selection was announced to the press and participants in April 1973.

## **FAST FORWARD**

In 1997 the Harvard University Press published the book *“Revolution at the Checkout Counter”* by Stephen A. Brown, founding attorney and counsel to the Ad Hoc Committee. Brown writes on page 77, “John Esserian, founder and President of Charecogn, had developed a universal product code and scanning system before the appointment of the Ad Hoc Committee.....Charecogn had developed a prototype that included a tabulator, a memory bank, a teletype, and an electronic scanner. Esserian demonstrated his machine to U.S. Department of Agriculture officials and others, including the press, in the summer of 1970.

*Business Week* in its summer 1999 issue, “100 YEARS OF INNOVATION”, recognized for the year 1973, “1973 - The Universal Product Code and supermarket scanners begin to be used.”

In a speech, at a Congressional hearing on June 14, 1999, Alan Greenspan said “productivity advances are due in great part to checkout counter bar code scanning.”

*Technology Review*, in its Centennial Issue, November-December 1999, cites the “Barcode Scanner” as one of its selected “Interfaces: The Century’s Top 10.”

On September 30, 1999, the Smithsonian Institution’s National Museum of American History, held a symposium and unveiled an exhibit on the theme, **“25 Years Behind Bars - Celebrating the Silver Anniversary of the Universal Product Code.”** The symposium discussed the background of the development of the U.P.C. and its impact on worldwide item identification to computer processing. The exhibit consisted of a 25 foot wall display descriptive of milestones in the history of the U.P.C and its productivity contributions. And there I was very surprised to see that a feature of the exhibit was a photo of Mrs. Knauer, Dr. Irving of the USDA and me at the press conference of August 6, 1970.

It was a strange but very satisfying feeling to look at this photo of 30 years ago. The Smithsonian photo caption says:

“Charecogn, a Massachusetts company, demonstrated a product code and scanning system to Department of Agriculture officials in 1970. Although not widely adopted, the system demonstrated that bar coding could work.”