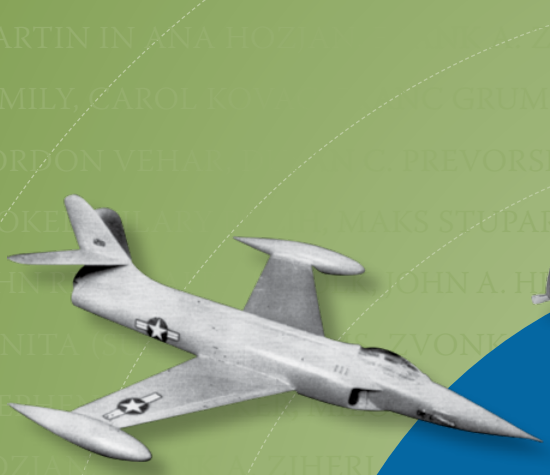
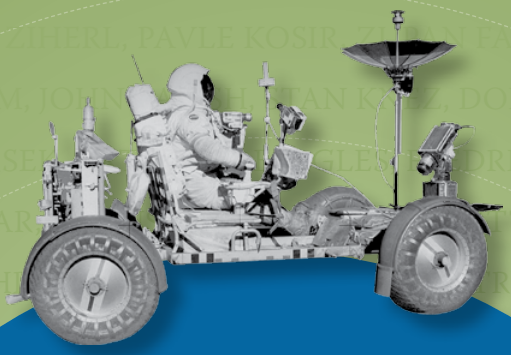
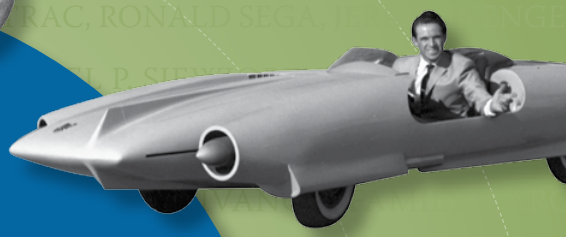
Edward GOBETZ







Slovenian American INVENTORS AND INNOVATORS

Their Contributions to America and the World

Slovenian American

INVENTORS AND INNOVATORS

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Edward GOBETZ

Slovenian American INVENTORS AND INNOVATORS

Their Contributions to America and the World

ZALOŽBA DRUŽINA

Ljubljana, 2016

CONTENTS

SELECTED COMMENTS ON SLOVENIAN AMERICAN INVENTORS AND INNOVATORS

When President Richard Nixon visited China in 1972, his party took along the HP-35 pocket calculators [lead inventor France Rode] as "the prime example of advanced U.S. technology."

(Measure magazine, June 1972)

Max Stupar was known as "father of mass aviation production" *(The Atlanta Journal,* Nov. 28, 1944). "The influence of Dr. August Raspet on airplane design is felt today all over the world" (Dr. Bruce H. Charmichael, *Soaring,* August 1960). Joe Sutter's creation of Boeing 747 "forever changed long distance travel."

(Neil Armstrong, American astronaut and the first person to walk on the Moon)

"Carol Kovac who broke glass ceiling in science and technology on her way of becoming general manager of IBM's biotech computing division was honored for serving as a role model for women considering high tech careers. Kovac was inducted into the Hall of Fame of Women in Technology International (WITI) at an awards ceremony in Santa Clara."

(Tom Abate, "IBM Executive honored as role model for women," San Francisco Chronicle, June 21, 2002)

"Over 3,250 water and waste water treatment installations designed by Milos Krofta are used in 77 countries."

(George Glider, Spirit of Enterprise, 1984, and Krofta documentation in SRCA Archives)

"Martin Hozjan's Tensor presses print newspaper and magazines in 46 countries."
(SRCA Archives)

Verna [Grahek] Mize, "First Lady of Lake Superior, single-mindedly led the fight to rescue Lake Superior form ravages of taconite tailings degradation … She saved the Great Lakes for us and for posterity."

(National Geographic, Aug. 1973,
and The Daily Mining Gazette, Houghton, June 25, 1981)

Frank Ziherl's "Press-O-Jet high pressure units were used in no fewer than a million mass immunizations [by May 1957] and played a significant role in management of leprosy, polio and other diseases."

(Dr. Robert A. Hingson, MD et al, GP/General Practitioner, May 1957)

The Factor VIII, that revolutionized the treatment of hemophilia, discovered by Dr. Gordon Vehar, twice American Inventor of the Year (1989 and 1999), was listed as "one of the 100 outstanding inventions of the century."

(The Power of Invention," Newsweek Extra 2000, Winter 1997-1998)

Polymer physicist Dr. Dusan C. Prevorsek was American Inventor of the Year, also inducted into New Jersey Inventors Hall of Fame, both in 1989, where earlier inductees include such giants as Thomas Edison, Nicola Tesla, Albert Einstein and Vladimir Zworykin, for having invented, with Sheldon Karesh, the strongest man-made fiber SPECTRA polyethylene, which is ten times stronger than steel, yet so light that it swims on water.

(SAT, Oct. 2009)

"When Dr. Anton Peterlin came to the United States in 1961 to launch the research program at RTI's Camille Dreyfus Laboratory he brought with him an illustrious 30-year career from Germany and his native [Slovenia] Yugoslavia. … Since 1961, Anton Peterlin's presence has brought to us many distinguished visitors. None is more distinguished than Dr. Peterlin himself."

(Hypotenuse, Oct. 1973)

"Sasa Bajt invented new multilayer structures … accepted as a henchmark in the semiconductor industry."

(The Hindavi Journals, August 27, 2007)

When General Motors was the leading manufacturer of transit buses, Edward Stokel was at its helm."

(Hank Shaler, Oakland Press, August 20, 2000)

"Frank Kerze worked on several nuclear reactors and helped develop the ones used in nuclear submarines, including the first one, the Nautilus."

(The Chicago Tribune, January 18, 1985)

Dr. Donald Jerina was ranked 33rd most frequently cited scientist from a list of a million scientists around the world for the period 1973-1984.

("Citation Superstars: 50 most cited researchers,"
The Scientist: Magazine of Life Science, Vol. 4, No. 4, 1990)

INTRODUCTION

Slovenians, a small Alpine, Central European nation of slightly over two million souls, achieved independence from Austria in 1918 and from Yugoslavia in 1991, or only 25 years ago. They are, understandably, relatively unknown and frequently confused with other peoples, especially Slovaks. In America, too, they are one of the smaller ethnic groups, representing, according to recent US Census data, only 0.1 %, or one-tenth of one percent of total US population. Yet, from 2006 to 2011, three percent of US senators had Slovenian roots (namely Tom Harkin, also a candidate for US President in 1992, and George Voinovich, whose mothers were from Slovenia, and Amy Klobuchar, who still has the original Slovenian family name). There was approximately the same percentage of active Slovenian American astronauts (Dr. Ronald Sega, Dr. Jerry Linenger and Navy Captain Sunita Williams), all of whom visited Slovenia, the land of their roots. According to the 2000 US Census, Slovenian Americans are also *the* ancestry group with the smallest percentage of its members living in poverty.

The beginnings of this my 17th book and of my publications in journals, magazines, newspapers and encyclopedias, as well as of lectures and exhibits throughout America and several also in Canada and Australia, go back 65 years. It all started in the summer of 1951, during my second year in America. At age 25, I, a self-supporting student, worked as a construction laborer in Cleveland, Ohio, in order to survive and earn enough money to pay for university tuition in the fall, when I would continue my studies in philosophy, sociology and anthropology and find another, non-seasonal work as a laborer in a factory. I was a greenhorn, speaking English with a foreign accent. I had almost no money, no car, and no relatives in America. At the very bottom of the totem pole, I was for my fellow-laborers a Bohunk, Hunky, Pollack or Greiner (a local pejorative used for Slovenians), certainly a nobody who "did not even know how to drive a car," yet an "uppity" guy who went to college and had to be put into his place.

So, day-by-day I was mercilessly challenged to show them a single Slovenian who had ever accomplished anything really significant. I mentioned Frederic Baraga, who, a century earlier, was a great missionary and later a bishop among

American Indians of the Upper Great Lakes Region; he was also a great scholar and linguist, educated in Slovenia and at the University of Vienna. Indeed, Vatican's *Enciclopedia Cattolica* describes him as "one of the greatest missionaries of North America in modern times" (1949, p.795). They just laughed him off as no one has ever heard of him! "What about Frank J. Lausche who still spoke the Slovenian dialect of his immigrant parents and often attended Slovenian concerts and was, at that time, a very popular governor of Ohio?" — "He was born in America," one of my tormentors shouted. "He is no damn Slovenian! Now show us a single famous Slovenian architect, a baseball star or an inventor!"

While every muscle and bone of my body hurt, I dragged myself in the evenings and on weekends to various local libraries to find some evidence, black on white that, after all, our people were not as backward and primitive as my fellow-laborers believed. Rich and wonderful as these public libraries were, I could not find any of the data I needed, nothing on Slovenian American architects — and not a single Slovenian American inventor, indeed, nothing that I could show my tormentors.

I did, however, discover something incredible: H.G. Duncan, in his otherwise respectable and popular book, *Immigration and Assimilation* (Boston, 1933, pp. 309-310) claimed that "86 percent of Slovenians in Yugoslavia were illiterate and Slovenians had no literary language of their own." My God, just before the Second World War, when I was a 14-year old student at the classical gymnasium in Maribor, Slovenia, I fell in love with Slovenian literature (especially with Pregelj, Finžgar, Cankar, Prešeren and Gregorčič) and studied, in addition to five obligatory languages — Slovenian, Serbo-Croatian, French, Latin and Classical Greek — also two optional languages, Czech and German. And Slovenia was, at that time, almost 100 percent literate! Later, having had this very book on the list of prescribed readings for doctoral students under my unforgettable scholarly and kindly professor and dissertation advisor Dr. Brewton Berry at Ohio State University, I discovered that Duncan used very old statistics and, when discussing immigrants from Yugoslavia, always turned all of them upside down, thus presenting percentage of literacy as that of illiteracy. An assistant, perhaps a graduate student, could have misled him, yet my fellow-doctoral students, as before them my fellow-laborers in 1951, never suspected that their "knowledge" about Slovenia and Slovenians could have been wrong.

That failure to persuade my fellow-laborers and to find the needed information in various libraries in June 1951 led to my decision, then and there, that I would henceforth spend most of my free time and any dollar I could spare researching Slovenian immigrants and their descendents, and especially their accomplishments in America and in other countries. I had reviewed hundreds of reference works and university bulletins looking for Slovenian-sounding names and then typed countless letters trying to verify their ethnic descent.

There were no computers as yet and everything duplicated rather than typed was most likely to be discarded as junk mail. I also kept asking a constantly growing number of friends and acquaintances for addresses, leads, newspaper clippings and photos of highly successful Slovenian immigrants and their descendents in America and other countries, from Sweden to Brazil and from Canada and Argentina to Australia and Tasmania. I published invitations in Slovenian ethnic newspapers and magazines. Little by little, the project gained momentum and others joined me — factory workers, housewives, students and pensioners, priests, journalists, artists, professors and even a couple of university rectors from Slovenia and Rome, Italy.

Thus, in 1950s, the Slovenian Research Center of America was established and later incorporated in the State of Ohio. Having a "global" network of volunteer associates and assistants, we gradually created archives with thousands of dossiers on Slovenian accomplishments outside of Slovenia, as well as on our Slovenian ethnic institutions and organizations, which, we hope, are of some value both to Slovenia and to America. All, of course, was accomplished with a labor of love, as we had no paid staff, not even a single part-time typist.

Meanwhile, I have also discussed famous Slovenian architects, for instance, Araldo Cossuta (Košuta), an internationally prominent, award-winning Slovenian immigrant architect who had designed L'Enfant Plaza in Washington DC described by *Washington Post* of November 16, 1968, as an architectural "triumph," and other landmark buildings in Boston, Colorado, at MIT, in Hawaii, France, and Israel; and Alexander Papesh, the son of Slovenian immigrants, known as America's foremost designer of stadiums, including Robert F. Kennedy Stadium in Washington DC, University of Texas-Austin Stadium, West Virginia University Coliseum in Morgantown, Bithorn Stadium in San Juan, Puerto Rico, and a long list of other American stadiums and sports facilities (Gobetz, *Slovenian Heritage*, 1981, pp. 145-148). In the same book (pages 170-174, 598-599) and in the *Encyclopedia of Ethnicity and Sports in the United States* (Greenwood Press, 2000, pp. 428-431), I also introduced many Slovenian American baseball, football, basketball and other stars, as well as recipients of eleven Olympic medals, among them Eric and Beth Heiden, whose Slovenian-speaking grandmother Olga was an immigrant from Ljubno (Lyoobno), Slovenia.

I am, however, particularly happy that, at my age of 90 years, my seventeenth book, now in your hands, features over one hundred Slovenian American inventors and innovators, many of whom have undeniably made very substantial contributions to America's and the world's progress. Details in various chapters also show how curiosity, lifelong desire to learn and to contribute something worthwhile, self-denial, family solidarity, hard work and courage to overcome obstacles and view problems as challenges, and the joy of accomplishment, have led to successes, small and mind-boggling, which often benefitted America and the world. After all, reading this book we can see that almost everyone in

the civilized world is affected in some way by Slovenian American inventions, ranging from labor-saving devices, meteorological, transportation and GPS satellites, to textiles, plastics, calculators, computers, medicines and medical record keeping. Even Air Force One, the plane of American presidents, is a Boeing 747, designed by Joseph Sutter, the son of Slovenian immigrant Franc Suhadolc. And we should never forget a modest Slovenian secretary, Verna Grahek Mize, who according to *National Geographic* magazine and American media "saved Lake Superior for us and for posterity"! All accomplishments, small and mind-boggling, also show that in the proverbial country of opportunity the American Dream is still alive and within reach of members of any determined, hard-working ethnic group, including Slovenian Americans.

As serious scholars emphasize, assimilation is always a two-way process in which both the host country and the new group are affected. Thus, the diacritical marks are unknown in America and in several other countries and are the first ones to disappear, while in Slovenian, they are used to simplify writing, e.g., š is used instead of the English sh (or German sch), or č instead of English ch (or German tsch). Thus, space engineer Repič (pr. Repich) becomes Repic (pr. Repick) and MBI vice president Kovač (pr. Kovach) becomes Kovac (pr. Kovak). The assimilation of our inventors and innovators is also immediately suggested in Americanization of numerous first names, as Slovenian Janez (pr. Yanes) almost always, voluntarily or involuntarily, becomes John, Jožef Joe, Franc Frank, Frančiška or Francka Frances, Marija Mary, Edi Edward and Egidij or Tilen Giles. Problematic family names also usually change, so Zakrajšek often becomes Zak, while Kuhar may be translated as Cook, or phonetic writing may be used to assure proper pronunciation, e.g., Kovach rather than Kovac or Konchan rather than Koncan which would be pronounced Konkan. Many names were changed by officials already at the point of entry, thus Jaksic (Jakšič, pr. Yakshich) became Jackshaw, etc. Earlier, as other potential employers often blacklisted strikers, many of them changed their last name as a necessity of survival. Some names are inevitably mispronounced in the host country, for instance, the Slovenian surname Sešek soon becomes Sissy and Gobec is likely to be pronounced Go back which is likely to result in laughter or teasing, while no Chinese immigrant named Li wants to be called a lie and changes his or her surname to Lee.

The Slovenian immigrant writer Louis Adamič (changed to Adamic) wrote a very popular and so far the most thorough book, *What's Your Name?* (Harper & Brothers, 1942), dealing with the complexities of name changes common in America and also in other countries, for instance in Austria, where the Slovenian last name Šušnik was changed into Schuschnigg, as the former Austrian Chancellor Dr. Kurt von Schuschnigg in 1971 in a friendly personal letter confided to this writer (see Gobetz, *Slovenian Heritage,* 1981, pages 202-210). Have you noticed that Slovenians use six letters and Germans or Austrians eleven letters to write the same surname?

Well, at 90, I am more grateful than ever to my tormentors in the summer of 1951, without whose "challenges" I would never get involved in this type of research and this book would never have been written. I am most grateful to God that at my age I can still work more than eight hours a day and, after so many brutal and hostile environments starting with the Nazi occupation of my part of Slovenia in 1941, that I can now live in a loving family and in a community of sincere friends. I can never thank enough all those who have in any way cooperated in this and other projects. Most of all I am deeply grateful to my wife Milena, an award winning high school teacher of classical and modern languages and senior author of two volumes of immensely popular *Slovenian Language Manuals*, who has been for fifty years my most loyal, productive and indispensable co-worker. Without her love, unfailing help and encouragement this book and many other projects would never have been completed. As a labor of love, she has also systematically recorded and briefly summarized the contents of several thousands of dossiers in our archives, which immensely facilitates current and future research and writing. Thanks to her it is now clear that similar books on accomplishments of Slovenian immigrants and their descendents could be prepared in many other areas where the needed materials have already been collected, for instance, for architecture, medicine, education, literature, music, the arts, sports, industry, business, millitary and missionary and humanitarian activities, including those of the Slovenian version of Mother Teresa, the humanitarian giant Pedro Opeka, nominated for the Nobel Peace Prize by many government heads, bishops, university rectors and scholars, for having helped hundreds of thousands of the poorest of the poor in Madagascar.

How many surprises are still undisclosed and unpublicized! Who among those who called Slovenians "a nation of servants" or even of "slaves," would ever suspect that the second chancellor of mighty Germany had Slovenian roots and was aware of them and that the first resident bishop of Vienna, founder of Court Musical Establishment and of Vienna Boys Choir was a Slovenian from Ljubljana (pr. Lyooblyana, see *Slovenian Heritage,* pages 194-202); or who among those in America who believe(d) that we simply could not contribute anyone of note would ever suspect that the successor of Dick Cheney at Halliburton, one of world's largest industrial, energy and business corporations, its Chairman, President and Chief Executive Officer David Lesar, is the son of Stan(islav) Lesar, a Slovenian refugee and a member of a group of refugee students who had, after the Second World War, studied at the University of Graz in Austria prior to emigrating to the United States. When Slovenian immigrant Stan Lesar died in Wisconsin, one of his former Slovenian fellow-students at Graz, later a professor of neuropathology at Western Reserve University, Dr. Uroš Roessmann, published his obituary and some personal reminiscences in the *Slovenian American Times* (May 2010). We were never able to reach CEO Lesar, but I sincerely hope that some day he may get a complimentary copy of

this book as a friendly, humble reminder that Slovenians usually remember their own. Perhaps Slovenian diplomats may be more successful than I was in such tasks of "reaching out": among several of them who expressed their interest in — and strong support for — an English edition of this eye-opening work are Dr. Bozo Cerar, Ambassador of the Republic of Slovenia in Washington DC, and Deputy Ambassador Vladimir Kolmanic and Jurcek Zmauc and Andrej Rode, Consuls General headquartered in Cleveland, Ohio.

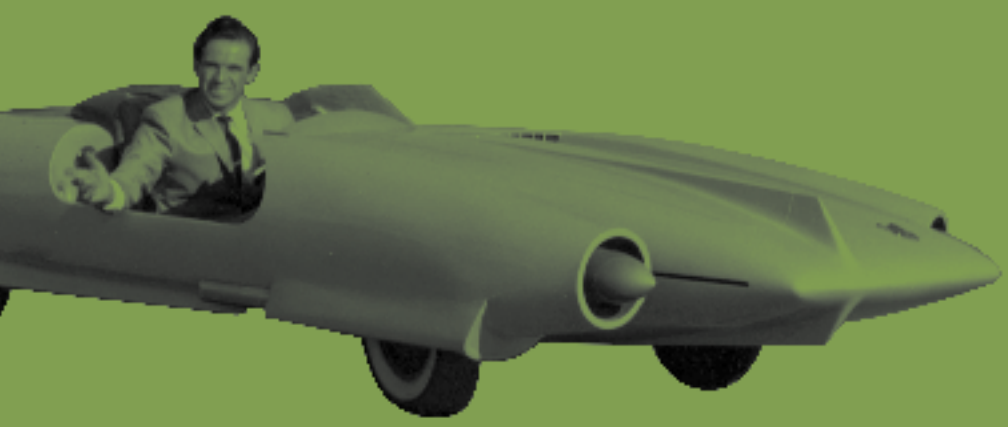
I am also very grateful to the capable and indefatigable editor of the *Slovenian American Times*, Breda Loncar, a retired award-winning high school teacher and acclaimed principal, as well as co-author of our *Slovenian Language Manuals,* who first serially published many of these materials; and to the Slovenian Section editor, Mara Cerar Hull, a published writer and artist, who was always equally kind and supportive. Graphics artists, brothers Tim and Tom Percic, repeatedly patiently compensated for my inadequate computer skills. I am for ever indebted to my brother-in-law, Peter Osenar, a former CEO of Emerald Health and former Executive Vice–President of AmeriTrust Bank, who has in various ways generously helped us when times were tough.

Msgr Franci Petrič, editor of *Družina (The Family)* in Slovenia, encouraged the translation of my English writings into Slovenian by capable Klementina Logar and persuaded Tone Rode, the Director of Družina Publishing, to publish a beautifully printed Slovenian edition in 2015, followed in 2016 by the English-language edition, now in your hands. Our lasting gratitude goes to these two pillars of Družina Publishers. I also wish to thank their capable editor of this English edition, David Ahačič, and graphic artist Klemen Kunaver who has substantially contributed to the bibliophile edition of the first edition of this book that has been selected in October 2015 for exhibit at the Frankfurt Book Fair, the largest such fair in the world. I am, of course, also deeply grateful to all who have helped us with leads, materials, encouragement, advice, constructive criticism, and moral support and to all who have helped the publisher with their financial support, while I have happily abdicated any royalties or reimbursement for my considerable costs of the project. The book is the result of a labor of love of many people who have realized the need for, and significance of, such publications.
I am pleased to dedicate both editions of *Slovenian American Inventors and Innovators* to our youth, hoping that many young boys and girls may be inspired by the example of our inventors and innovators, and by Verna Grahek Mize and the humanitarian giant Pedro Opeka, to always do their very best for progress and betterment of their communities and for a happier, more peaceful, better and nobler world.

Prof. Edward Gobetz, PhD
Willoughby Hills, Ohio

John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH, Maks STUPAR, August RASPET, Joseph SUTTER, John BUCIK, Edward STOKEL, Hilary ROLIH

FROM FUTURISTIC CARS TO FAMOUS AIRPLANES



Bucik, pictured with his futuristic mobile home, The Executive.

JOHN BUCIK, universal genius

Creator of the Car of the Future at New York World Fair and prominent designer of other futuristic cars, a mini-submarine and a museum, as well as a sculptor and a painter.

In summer 1965, while on a trip to visit my widowed mother in Slovenia, I stopped briefly in New York City to see one of its greatest attractions ever — the New York World Fair. Indeed, there was so much to see and admire: 140 pavilions, mostly American and 36 representing foreign countries. Would I find anything "associated" in any way also with the Slovenian people? The words, so often shouted at me in 1951 on the construction site in Cleveland where I had worked as a laborer, again rang in my ears, "Show me a single Slovenian who has ever accomplished anything really worth mentioning!" While any honest work deserves respect and gratitude, I also hoped to see "special" Slovenian accomplishments noticed and recognized. Excited, yet disappointed as apparently my people again fell through the cracks, I continued the trip to see my mother in the "old country." I must have changed considerably in 22 years since 1943, when at the age of just a little over 17, I saw my crying mother for the last time, as I was forced by the German invaders, together with other Styrian Slovenian boys of the same age, into a labor camp in brutally cold and windy Burgenland. My mother did not recognize me until, overcome by emotion, I blurted out the very first word she had ever taught me, "Mama!" and fell into her embrace.

Nine years later, I received a letter from Father Josko Bucik, a priest who worked among the Slovenian immigrants in Germany. He had read somewhere

Janko is also an artist.

about our work at the Slovenian Research Center of America and sent me the address of his brother Janko who, he believed, would be of interest to us. Wasting no time, I immediately wrote to Janko: Would he please send me information about himself and especially about his work and accomplishments? Could he enclose some pictures, with captions?

A couple weeks later, on September 17, 1974, a visitor appeared at the door of our home in Willoughby Hills and introduced himself: "Jaz sem (I am) Janko Bucik." We went to our main archives room and in a few minutes of lively conversation, we felt like old friends who had known each other for years. The more I learned about Janko, the more I respected and liked him. What a wonderful guy, so humble, personable and unassuming! And what an amazing goldmine of brilliant accomplishments!

He also showed me pictures of some of his creations, among them the photo of the "car of the future." Dear God, I saw that car, surrounded by throngs of admiring visitors, at the New York World Fair in 1965! And no one had the slightest idea that it was designed and created by Janko Bucik, a Slovenian immigrant from Illinois. As I continued gathering more documentation on Janko's amazing accomplishments, I also read much about this car. The booklet, *Transportation and Travel Pavilion* (1964), described it as "one of the masterpieces of custom auto world, … valued at over $250,000, … built and owned by John Bucik of Chicago, Illinois."

R. L. Sharpe in "Cover Profile," published in *Assembly Engineering* (May, 1969), writes in his extensive cover story on Bucik that this car "incorporates many electrical and electronic controls which were radically new in 1963. Thus, the inside front compartment contained a maze of electrical and electronic components which operated the retractable headlights, a retractable passenger windshield, and many other design innovations." (Others list as many as 12 major innovations.) And *Repaint Reporter* (March-April, 1964), in another cover story, titled "Sports Car of the Future," added, "Just as every other feature on this vehicle was selected for outstanding performance, so was the finish — Radiance Silver. According to Bucik, the silver flakes in the paint change color similar to a rainbow when the sunlight strikes the surface."

Well, Bucik built this amazing car when he was slightly less than 30 years old. Born on May 23, 1934, as the oldest of nine children, in the small village of Kanalski vrh, in the parish of Kanal, near Gorica, in the part of western Slovenia which was then under Italy but was, after the Second World War, except Gorica, united with Slovenia within Yugoslavia, he grew up on a farm of devout Catholic Slovenians. His name was, under Mussolini, changed to Giovanni Bucci in a brutal effort to Italianize Slovenians in border areas. Although the political atmosphere during Janko's youth was oppressive, his home life was filled with love, beauty and many constructive activities. And somehow, he always seemed to be ahead of times.

Car of the Future, America's major attraction at the New York World Fair.

Schkee, on the cover of Sports Car, Official Publication of Sports Car Club of America.

Sports car Trieste on its tour of Europe (the Alps).

Gina, Bucik's sports car completed in 1967.

"He was even born a month too early," jokes his brother Josko. "When he was three years old, he allegedly climbed to the top of a huge pile of wood, which has remained characteristic of him ever since — he is always climbing to the top of what he perceives as a challenge." As a child, he made his own toys. At 13, he found many discarded old car and truck batteries in his home area, then under the Allied protection. He brought them home, connected batches of them with wires and — behold! — there was free electricity for the Bucik farm. He built himself a radio from scratch when he was only 14. Later, in refugee camps, he built his first television set. In spite of discrimination first by Italians and later by Yugoslav communists, he successfully completed his primary and secondary education. In 1955, at the age of 21, he was to be inducted into the Yugoslav army, but decided to escape across the border, only to spend the next four years in refugee camps in Udine and Turin. There he completed the Electronics Technical School and also some courses in art at Leonardo da Vinci Institute.

Finally, in 1959, he was able to immigrate to America and settled in his Slovenian sponsor Frank Polak's home city, Chicago. There he worked at various jobs for the Zenith Radio Corporation for two years, then joined friends working in a machine shop to learn more about all kinds of machines. This was followed by a five-year employment as a research and development engineer in the Automotive Division of Sun Electric Corporation where he was soon recognized as a brilliant engineer. In 1967, he founded his own firm, Bucik Designs, a small and daring enterprise located in suburban Lombard, in which he gave full scope to his boundless imagination, energy and creativity.

Well, as we have seen, he was always imaginative, energetic and creative. In 1961, only two years after arriving in America, he made his first remarkable contribution to his adopted country — a car which was unique, unlike any other car anywhere in the world. It was the result of Janko's dreams and hard work after his daily shifts and on weekends. A year later, he was persuaded to enter his creation, named Astro, in the National Champion Custom Car Show in Indianapolis. As reported in *Sun Rays Magazine,* Fall 1962, in the article "Experimental Car Award to Sun Electric Research Engineer," Astro was "first in its class as an experimental model and was also rated second best in the entire show which included over 150 entries. The Astro, finished in a brilliant metallic yellow gold, captured the enthusiasm of thousands of visitors at the show."

Two years later, there was his amazing triumph with the Car of the Future at the New York World Fair. Although Janko wasted no time with such trivia as patent applications, lists of his breakthroughs, or even orderly scrapbooks of clippings, we can nevertheless catch glimpses of some of his other creative work. Take, for instance, one of his next cars, Trieste, named in honor of the ethnically mixed city of Trst or Trieste, located close to his native area of Kanal. As Sharpe wrote in *Assembly Engineering,* the work on "Trieste began with hand

construction of a wood and plaster frame template to the exact size of the finished automobile. A five-layer fiberglass body then was laid up over this form. … Many hours of sanding and finishing and then a five-coat paint job followed before the entire car was completed, a job that took nearly two years working during the evenings and on weekends. Then Bucik took it on a 30,000-mile exhibition tour of Europe and now [in 1969] displays it throughout the Midwest. The Trieste, valued at $60,000 to $70,000, is 14 feet long, 40 inches high and 70 inches wide. It has a torsion bar suspension, a layered fiberglass body, and a total weight of only 1,100 lbs. … The car has a top speed of 160 mph."

And there are many more amazing cars designed and manufactured by Bucik, among them the Executive, a rolling executive suite, a futuristic motor home, complete with a fireplace, a shower with skylight above it, a sliding roof, lavatory, kitchen … and a waterfall; and Can-Am car, the Schkee, which in April, 1978, made the cover of *Sports Car* magazine, Official Publication of Sports Car Club of America.

Janko also designed a small submarine, futuristic shopping centers, homes, yachts, and other vehicles and buildings. He was even commissioned to design the Italian American Museum, the pride of Italian Americans. He is not only an engineer, designer, architect, and irrepressible creator of innovations, but also an artist, sculptor and painter, indeed, a universal genius.

As his brother Josko, a priest and himself a talented artist, as is also their sister Emilia Bucik Razman, once wrote to this writer: "Janko is also an artist, but he is not a businessman." Indeed, John Bucik, the Slovenian immigrant, could be very wealthy, but has never concentrated on becoming financially rich. His legacy has been a ceaseless, tireless involvement in the creative process and an unselfish sharing of its results with America and the world.

Director Edward Stokel in GM Coach Production Plant, Pontiac, Michigan.

EDWARD STOKEL, head of General Motors Truck and Coach Division, America's "Mr Bus"

He coordinated all public transportation engineering, design, and product planning, manufacturing and sales operations at General Motors and was known as America's "Mr Bus". "When General Motors was the leading manufacturer of transit buses, Stokel was at its helm" (Hank Schaler, Oakland Press, Aug. 20, 2000).

With over 200,000 employees in America and around the globe, General Motors was (and even after the recent crisis continues to be) one of the most powerful corporations in the world. After the Second World War, there was even a saying, "What is good for General Motors is good for America." Cars, trucks and buses were one of the main sources of American national pride and even of American identity. The General Motors was a leading giant that exemplified American industrial power and knowhow. It was an essential part of the fabric of America as a land of opportunity where everyone who was willing to learn, work hard and persevere could pursue the American Dream.

Edward Stokel, also known as Big Ed, pursued this Dream from the modest Slovenian family home on Cleveland's Bonna Avenue in St Vitus Parish to the top levels of executive leadership of General Motors Corporation in Michigan. Both of his parents, Kristjan (or Kris) Stokel and Maria, nee Sivec, were immigrants from Slovenia and came to America shortly before the First World War. They were married at St Mary's Church and bought their home on Bonna Avenue in the Slovenian ethnic neighborhood within the St Vitus Parish in Cleveland, Ohio. It was there that Edward was born in 1923. He always fondly remembered his neighborhood as a nice, friendly, safe and clean environment where every home had a garden, filled with vegetables and flowers.

His father worked at various jobs as a skilled carpenter and was very active in the Slovenian ethnic community. Ed, who also had an older brother Stanley and a sister Olga, remembered a very happy early childhood. Yet, in 1931, his mother died of cancer and his sixteen-year old sister died only six weeks later from appendicitis complications. Kris later remarried a Slovenian widow, Jennie (Grebenc) Jerina, who, like himself had two young children. From around 1920 he worked at the local General Motors Fisher Body plant making the wood jigs that were required before the metal parts were made. His son Edward, in turn, also pursued his career at the same corporation and was eventually in charge of all public transportation operations in General Motors Corporation.

It was in the early 1940s that Ed started working for General Motors in Michigan as an unskilled laborer on the assembly line, while studying at the General Motors Institute under the Co-Op Program. When America entered the Second World War, he joined the Navy and was eventually sent as an ensign to the Pacific War Theater where he served until the end of the war. In 1951, his General Motors career was again interrupted, as he was called to serve his country for two years during the Korean War.

In spite of interruptions, he always remained keenly aware of the importance of education and, as a veteran, completed his engineering studies with a bachelor's degree in Mechanical Engineering from Worcester Polytechnic Institute. In 1948, he also graduated from General Motors Institute in Flint, Michigan, and later, while working in the Sales Division, squeezed in a master's degree in Business Administration from Michigan State University. At one of the fraternity dances, he fell in love with Barbara Arnold whom he married in November 1949 in Flint, Michigan. The newlyweds then settled in Chicago where Ed became the corporation's regional bus sales manager.

When, after two years spent in the Navy during the Korean War, he returned to Chicago, he had to work even harder in order to gradually recapture the market from various competitors. Meanwhile, the growing family bought its first house in Racine, Wisconsin, a distant suburb of Chicago.

Ed's abilities, work ethic, and trustworthiness resulted, in 1965, in his promotion to assistant to the General Motors Corporation sales manager, in Pontiac, Michigan. In 1968, he was promoted to coach sales manager, and in 1972, was named assistant general manager in charge of the Coach Division. Then, in 1974, he was appointed Director of Public Transportation for General Motors Corporation's Truck and Coach Division, one of the highest and most responsible executive positions, which he held until his retirement in 1986. At that time he was hailed by the American Public Transit Association as "the personification of the General Motors transit business for over forty years." When he died of cancer on August 18, 2000, at William Beaumont Hospital in Royal Oak, numerous obituaries (such as Kevin Lynch's in *Detroit News* of August 20) referred to him simply as "Mr Bus" of General Motors Corporation.

Barbara and Ed Stokel, with children, from left: Kathryn (now financial planner), William (now Algeco Scotsman's Vice President of Business Development for 19 countries), Elizabeth (now Mrs McNair), Edward Jr (now orthopedic surgeon), Barbara, Jr (now Regional Vice President, Eastern Operations, GM Acceptance Cor-poration, and one of "100 Leading Women in North American Auto Industry).

The most notable years of his service were those between 1974 and 1986 when he was at the helm of General Motors Corporation's Public Transportation Division, being responsible for engineering, design, product planning, manufacturing and sales operations. During this period, about 70 percent of all public transportation passengers in the United States travelled by bus and, in spite of fierce competition, General Motors always supplied the largest number of newly manufactured buses. On the basis of annual production statistics which were kindly provided for this chapter by Mr Christo Datini, Lead Archivist of GM Media Archive and Heritage Center, we could compute the total number of buses built and put into service under Stokel in his Coach and Truck Division located at Pontiac, Michigan. The breath-taking total number was 18,851 buses.

Annual production shows considerable variations, reaching the peak with 2,495 buses produced in 1980 and falling to the lowest number of 527 in 1984. Such variations were undoubtedly influenced by the law of supply and demand; by changing and often unreasonable and unpredictable federal, state and municipal regulations; by the relative strength or weakness of competing companies, and other factors. Yet, Stokel's Coach and Truck Division always supplied the largest number of newly manufactured buses.

As reported by Bob Stevens in *Auto Products* (April, 1974), the complexities faced by Stokel are suggested by the fact that the General Motors Corporation

View of a GM articulated bus.

"offered 4,300 parts options on its transit coach, including 350 different axels, wheels, brakes and related mechanical components." In addition, the influx of federal money into public transit [especially under President Jimmy Carter] has compounded the bidding process for the bus makers. "In a case involving federal funds, we have to deal with as many as six individual documents running from one to 40 pages, before we have a bona fide order," stated Stokel to the *Auto Products* reporter. Further complicating the picture was the creation of transit departments at state and local levels. Consequently, the bus manufacturers often had to please three customers to secure a single order. Well, in spite of these and similar difficulties, close to 19,000 buses were produced and put into service under Stokel.

In 1974, when Stokel became the top General Motors executive of the entire Public Transit Division, one of his first tasks was to meet the increased demand for buses. According to Stevens, he boosted transit bus production more than 40 percent, from 35 to 50 buses a week. The increased output did not offset the production schedule for intercity buses, which were still being cranked out at a rate of ten a week. "Transit coaches differ from intercity buses in several respects. The transit unit seats 45 to 53 passengers and is normally limited to metropolitan transit service, while the intercity version is a long-distance runner carrying 39 to 49 passengers on longer trips with fewer stops." At the time when Stokel became the General Motors head of bus production, the so-called "old look" buses which resembled the PCC streetcar styling were no