

The International Citrus & Beverage Conference
The 50th Anniversary of the Annual Short Course
– September 14-17, 2010

A Retrospective Look at the Citrus Processing Industry over the
Past 50 years
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The International Citrus & Beverage Conference A Retrospective Look at the Citrus Processing Industry Over The Past 50 years

Agenda:

- Opening Remarks
- Looking back to 50 years ago:
 - 50 years ago means that we are going to start our journey this afternoon in the 1960s
 - The first portion of our journey will be somewhat of a history lesson as we remember some of the events that took place 50 years ago
 - And finally, we will take a look at what has been going on In the Citrus Industry during this same time period



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

❑ A Worldview Look at the 1960s

- ❑ Tensions between the U.S. and the Soviet Union grew following the shooting down of an American U-2 Spy Plane (1960)
 - ❑ Alfred Hitchcock's movie *Psycho* was released
 - ❑ The first televised Presidential debates occurred
 - ❑ Massachusetts Sen. John F. Kennedy defeated Vice-President Richard Nixon to become President (1960)
- ❑ The Peace Corps was formed (1961)
- ❑ Lt. Col. John Glenn became the first American to orbit the earth (1962)



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

❑ A Worldview Look at the 1960s - Continued

- ❑ The U.S. and the Soviet Union stood on the brink of nuclear war after a missile buildup in Cuba (1962)
 - ❑ Rachel Carson's "Silent Spring" was published marking the start of the environmental movement (1962)
- ❑ The U.S., Britain and the Soviet Union signed a limited nuclear test-ban treaty (1963)
 - ❑ JFK was assassinated in Dallas, Texas and V.P. Lyndon Johnson became the President (1963)
 - ❑ Dr. Martin Luther King Jr. Delivered his famous "I Have a Dream Speech" (1963)



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

❑ A Worldview Look at the 1960s - Continued

- ❑ The U.S. Supreme Court ruled in an 8 – 1 vote that the laws requiring recitation of the Lord’s Prayer or bible verses in public schools were unconstitutional (1963)
- ❑ The Medicare Program was approved (1964)
 - ❑ The Beatles became popular in the U.S. (1964)
- ❑ Major blackouts struck the Northeast U.S., with an increase in birth rates noted nine months later (1965)



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

❑ A Worldview Look at the 1960s - Continued

- ❑ The Vietnam War was extended into Cambodia with over 385,000 U.S. military personnel in Vietnam (1966), and -
 - ❑ My wife and I were married
- ❑ President Johnson and Soviet Premier Alexei Kosygin held groundbreaking talks in Glassboro, N.J. (1967)
- ❑ Israel defeated the combined forces of Egypt, Jordan and Syria in the Six Day War (1967)
- ❑ Peace talks on the Vietnam War open in Paris (1968)



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

❑ A Worldview Look at the 1960s - Continued

- ❑ Civil Rights Leader Dr. Martin Luther King Jr. was assassinated in Memphis and Presidential candidate Sen. Robert F. Kennedy was assassinated in Los Angeles (1968)
 - ❑ Former V.P. Richard Nixon defeated V.P. Hubert Humphrey and Alabama Gov. George Wallace in the Presidential election
- ❑ Troop withdrawal from Vietnam began in July of 1969
 - ❑ Neil Armstrong became the first human to walk on the moon, and in 1969 –
 - ❑ The first Woodstock Festival drew over 500,000 people to a small New York town.



A Worldview Look at the 1960s - Continued



From Left, clockwise: Troops on the ground in Vietnam, The Beatles appearance on the Ed Sullivan show; The Woodstock Festival; Neil Armstrong walking on the Moon; China's Mao Zedong puts forth the Great Leap Forward plan ; JFK, in the presidential limousine minutes before he was assassinated; and Dr. Martin Luther Jr. making his famous I Have A Dream Speech.

A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ **A Worldview Look at the 1960s – Continued**
- ❑ **Now that we have looked at some of the events that took place in the 60s, I thought that it might be interesting to take a nostalgic look at some comparisons in the cost of living from the 60s to today as well as some of the Technological advancements that were made during this decade:**
 - ❑ **Regarding inflation: If we were to convert \$100.00 from 1960 to today's money, the \$100.00 would be equivalent to \$679.09 today**
 - ❑ **The price of a new house in 1960 was \$12,700.00 and by 1969, it was \$15,500.00**
 - ❑ **In 1960, the average income per year was \$5,315.00 and by 1969 it was \$8,450.00**
 - ❑ **The price for a gallon of gas was \$0.25 and in 1969, it was \$0.35**



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

A Worldview Look at the 1960s – Continued

- In 1960, the average price of a new car was \$2,600.00 and by 1969, it was \$3,270.00
- The price for a new Volkswagen Beetle was \$1,769.00 and for a new Ford Mustang 2 door hardtop, the selling price was \$ 2,368.00
- An automatic can opener 's price was \$8.88
- And Oranges were selling for \$0.89 for 2 dozen

Technological Advancements and Inventions:

- Landing on the moon and returning safely back to earth
- The cash dispenser
- Communications Satellites
- The Computer Mouse



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- Technological Advancements and Inventions, Continued:**
 - Fiber Optics**
 - The Heart Pacemaker**
 - Hypertext – for linking text**
 - The Internet**
 - Kevlar**
 - Lasers**
 - LEDs – Light Emitting Diodes**
 - The Portable Calculator – Texas Instruments**
 - The Tape Cassette Recorder and Player**
 - The First Weather Satellite**



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ Now let's take a look at what has been happening in the Citrus Processing Industry
 - ❑ Were you aware that:
 - ❑ The earliest references to oranges are to be found in some ancient Chinese manuscripts and documents, with one such notation appearing in a written record that was dated around 2200 B.C.
 - ❑ The first citrus fruit to attract the attention of the Europeans was the citron and it was included in some literature by Theophrastus, a Greek philosopher and botanist in 300 B.C.
 - ❑ That the first citrus concentrate was made in an ice cream freezer in 1920 by Dr. J.E. Crump a Veterinarian and Citrus Grower in Winter Haven



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ The commercialization of fruit juices has had a long and colorful history, with the first commercial fruit juice being produced in 1869 by Welch, who began bottling unfermented grape juice in Vineland, N.J. By the 1930s, flash pasteurization was developed, and it was during this time period that fruit juices gained the public's interest as a significant source of vitamin C and began to increase in popularity
- ❑ World War II created new demands for the juice industry, which resulted in the development of dehydrated fruit juices and frozen concentrates. Prior to this time, California dominated the Citrus Industry with its fresh fruit markets. However, with the development of frozen concentrated orange juice and its subsequent increase in popularity, the industry moved east to Florida.



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ The Citrus Industry has been and continues to be quite complex, as it embraces a number of components. Locally from nurserymen to growers and fresh fruit packers to processors and transportation companies as well as suppliers and other processors and storage and sales and distribution centers around the globe. The Florida Citrus Industry directly and indirectly currently generates approximately 76,000 full-time and part-time jobs. The Citrus Industry makes an important contribution to the global economy. The impact of citrus in Florida's economy is approximately \$9 billion a year
- ❑ During the 70s and the 80s (when I first went to work in the industry), there were over 35 Citrus Canning or Concentrate Plants in Florida and due to consolidations, closings and mergers and acquisitions, if I have counted correctly, there are currently 10 large scale fruit processing plants, 5 smaller processing plants and 6 that at one time were processing plants and now operate packaging and storage operations only – So, Changes have occurred



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ Although each of the processing plants have developed their own individual equipment layouts to process their fruit, citrus processing from plant to plant basically consists of the receiving and storage of the fruit, fruit washing, and grading, juice extraction, juice finishing, by-products recovery, heat treatment, packaging and storage and shipping.
- ❑ The process itself doesn't sound too difficult. And although these methods have been in use for a long time, the industry did not remain complacent. As a result, over the past 50 years, there have been many changes, advancements and improvement made in each of these areas to improve product quality and plant efficiencies as well as safety with the use of technology, experience, hard work and ingenuity
- ❑ So, what has been going on....



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ There are many excellent companies that have been involved in designing the advancements and Improvements that have steadily been made in the areas of processing and packaging equipment and storage systems, such as:
 - ❑ The implementation of automated process and control systems
 - ❑ Improvements In Evaporator design and control. The T.A.S.T.E. evaporator with high-temperature, short time evaporation remains as the primary water removal technology for juice concentration. However, other processes were developed to utilize freeze concentration and membrane technologies to try to improve on the quality of concentrate.
 - ❑ Pasteurization design and control, Process Piping automation, C.I.P. automation, Tank Farm Inventory Control and Aseptic NFC storage in Bag-in-Box and Aseptic Tank Farms, and complete Juice Room Control and automation



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ In the area of by-products recovery, systems have been developed to produce additional value-added products:
 - ❑ Such as pulp cell recovery/storage and packaging
 - ❑ And Improvements have been made to Oil Recovery Systems to improve quality and yield
 - ❑ A process has been developed and implemented that produces a functional food ingredient made from citrus pulp
 - ❑ And there is another process that has been developed that has some unique technologies that are associated with the processing of organic biomass (the waste stream) of fruits, vegetables and other organic materials

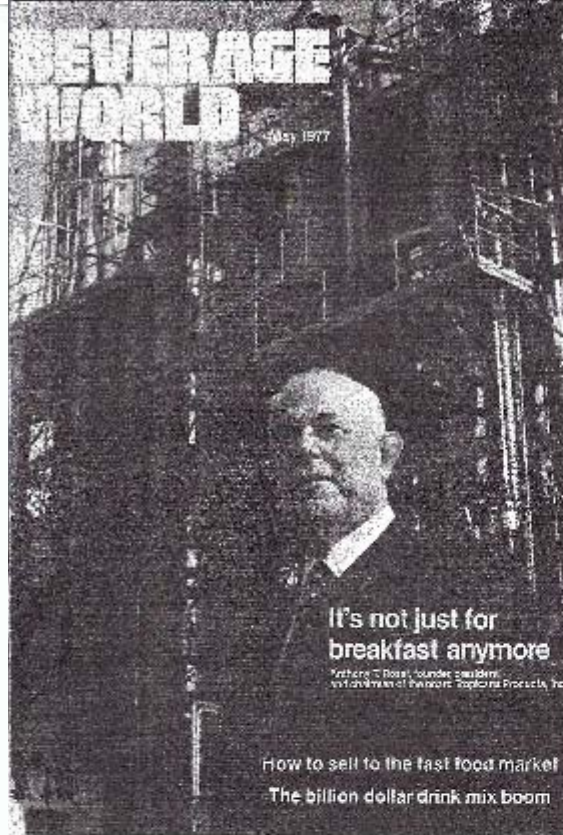


A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ So, who were some of the people that helped to make all of this happen. It would be impossible for me to list all of the people that have worked so very hard and diligently over the past 50 years to make the industry what it is today: but let's take a look at a few of them; like Anthony Rossi, the Founder of Tropicana.



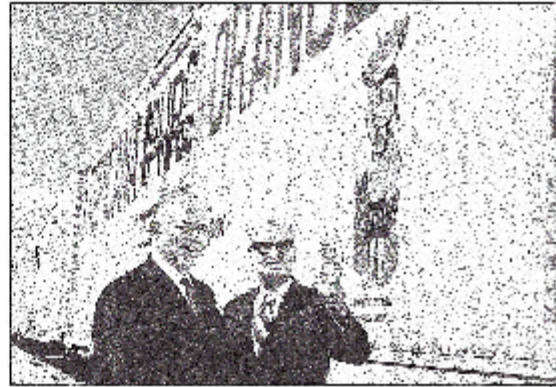
**“It’s not Just For
Breakfast Anymore”
(1977)**



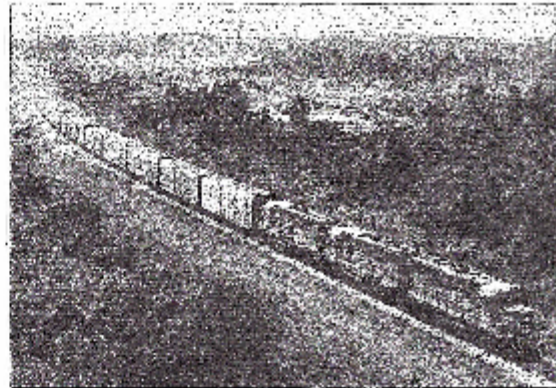
Anthony Ross and Tropicana were featured on the May 1977 cover of Beverage World magazine.



**O.J. ON THE MOVE – FROM
FLORIDA TO NEW YORK IN
36 HOURS – THE TRAIN
SERVICE (WITH 150
REFRIGERATED CARS) WAS
INITIATED ON
JUNE 1, 1970**



Anthony Rossi and Ed H. Price, Jr., executive vice president of Tropicana, inspect the Tropicana train which departed Orlando June 1, 1970.



The six-ton Tropicana train consisted of 150 refrigerated railcars especially designed and constructed for Tropicana. It was able to make the trip from Florida to New York in 36 hours.



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ And here are some others:
 - ❑ Ira Webb (Tropicana)
 - ❑ Joe Weidner (Tropicana) and Dick Alexander (Tropicana)
 - ❑ Chuck Harvey (Citrus Belle)
 - ❑ Dr. Braddock (UF – Citrus REC)
 - ❑ Dr. Bonnell (Tropicana)
 - ❑ Bill Roscoe (Tropicana – Silver Springs Citrus)
 - ❑ Jeff Raasch and Joe Gruber (Enerfab)
 - ❑ Bart Plymale (Peace River Citrus)
 - ❑ All of the managers and employees that worked for me at Golden Gem
 - ❑ All of the employees of JBT/FMC
 - ❑ Roger Waters and John Cox with Brown International



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ Now lets take a look at some of the events and issues that the Citrus Processing Industry has been dealing with over the past 50 years:
 - ❑ Freezes – The back to back freezes of the early 80s
 - ❑ Pests and diseases
 - ❑ Urbanization
 - ❑ Poor economic conditions are not helping juice sales (how people spend their grocery dollars)
 - ❑ An increasing number drink options available on the store shelves
 - ❑ Hurricanes



Welcome to **Florida**

We are here







A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ 50 years ago this weekend, Hurricane Donna blew in (it struck September 10, 1960) and caused an estimated \$6 million worth of damage in Polk County alone as it muscled its way from the Florida Keys all the way to Maine. The Citrus crops were hit hard as young fruit littered the ground throughout the groves.
- ❑ The 2004 Hurricane season was notable as one of the deadliest and most costly Atlantic hurricane seasons on record. The most notable storms for the season were the five named storms that made landfall in the U.S. state of Florida. Tropical Storm Bonnie, Charley, Frances, Ivan and Jeanne. This was the only time in recorded history that four hurricanes affected Florida



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ So, what do we know from all of this:
 - ❑ There are thousands of companies that make and sell products, but why is it that some become so much more successful than others? Is it luck, or is it because of their people? My opinion has been and will always be is that it is the individuals that make all of the difference. People really are a companies' greatest assets. It is individuals who make the strategies, ideas, and innovations come to pass. Businesses are driven by talented people that demonstrate their creativity in research and development, and being an entrepreneur and putting forth the hard work and the efforts to make the changes that have made the Citrus Processing Industry what it is today and what it will be in the future.
 - ❑ Thank you!



A Retrospective Look at the Citrus Processing Industry Over The Past 50 years -Continued

- ❑ Acknowledgements and thanks to:
 - ❑ Donn Sabato and Fran Boyer – JBT
 - ❑ Dr. Braddock’s text book – “The Handbook of Citrus By- Products and Processing technology”
 - ❑ The Story of the Founder of Tropicana – A book written by is wife – Sanna Barlow Rossi
 - ❑ Citrifacts – by Thomas B. Mack

