Life is Getting Better

Tim Tickner   Jose Del Rio
Steve Masceri  Jackson Hill
1. Personal: Sense of accomplishment and feeling that I’m doing things right.
2. Social life: Family and girlfriend.
3. Material life: Get to a point where everything I own has been paid by myself.
4. Occupation: Work at something where I help others. Medicine or keep on the Biomedical Engineering track.
5. Recreation: To dance, to learn, to relax, and to explore.
6. Political:
   a. local (P.R.): economic crisis resolved
   b. national: racism out of the map, for good
   c. global: minimize wars
Life IS getting better

- Kathy Bleitz: blind since she was 11
- Stargardt disease: degenerative disease that affects central vision, but not the peripheral
- eSight: electronic glasses, which the user can adjust to enhance the quality of the image
- Gets to see her newborn baby for the first time
- Is life getting better or not?

photo credit: Yvonne Felix, screenshot from YouTube
Issues solved > generated

U.S. Life Expectancy at Birth
1900 to 2009

Stephen Masceri

What do I Want from Life?

a. Happiness - High Security/Low Stress
b. Global Friendships
c. Enough “Things” to be Comfortable
d. Fulfilling Job - Challenging and Meaningful (Aerospace)
e. Experience the World
f. Make a Difference - Engineering or Policy Making
Asteroid Mining

Limitless Resources
- Metals/Minerals
- Energy
- H2O

Near Earth Asteroids
- Hold all of the above resources
- Possible to land on (Rosetta)
- Feasible to “capture”

Gateway to more resources
- Comets, Moons, Planets
Asteroid Mining in Practice

Planetary Resources and Deep Space Industries
● Missions in 2020

NASA Research - Robotic Asteroid Prospector
● Asteroid selection and classification

Congressional Bill - “Asteroid Act”
● Promote Space Mining
Jackson Hill

a.) A sense of accomplishment, Biological Engineering
b.) A normal family and social life
c.) Things required for a comfortable lifestyle
d.) Project manager for the Army Corps of Engineers
e.) Active lifestyle, outdoor activities.
f.) conservative
Nitrogen Cycle

- Human activities such as agriculture and the burning of fossil fuels are decreasing atmospheric nitrogen levels.

- Removing nitrogen from the atmosphere damages the ozone layer and accelerates global warming. It also contributes to acid rain which contaminates fresh water supplies.
Regulating The Nitrogen Cycle

- Engineers are constantly improving farming practices to limit nitrogen depletion.
  - optimizing fertilizer application
  - planting crops such as soybeans that facilitate nitrogen fixation, which prevents nitrogen runoff and also produces food.

- Maintaining the nitrogen cycle relates to my personal agenda because I am studying to become a Biological Engineer. Biological Engineers work to reduce the human impact from agriculture and the use of other natural resources.
Tim Tickner

- Desire to make people happy
- Things are here to make life easier or entertaining for us but sometimes being quiet is nice too
- Work as an M.E. At car company designing engines
- THON committee, ref IM sports
- Generally conservative but very mildly
Fuel Economy

- Nationwide average fuel economy of 23.8 mpg
- Brought from under 14 mpg in 1975
Fuel Prices and MPG

- As fuel prices have risen (albeit not recently), people are looking for more bang for their buck from their cars
- A goal of 35 mpg for all cars has been set by 2025 for a standard (non-hybrid) vehicle
- Example:
  - 2015 Ford Fusion: 25 city 37 highway
  - 2015 Honda Accord: 27 city 36 highway
  - 2015 BMW 328i: 32 city 45 highway
    - 535i: 26 city 38 highway
**Increase Across the Board**

**MY 2010–2012 Manufacturer Fuel Economy and CO₂ Emissions**

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<th>Manufacturer</th>
<th>MY2010 MPG</th>
<th>MY2010 CO₂ (g/mi)</th>
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Citations

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