# Amateur Radio's Next Gen









Sterling Coffey, NØSSC

NOSSC's Testimony



### The Real Issue(s)

- High rate of attrition vs Low rate of young blood
  - Aging population
    - Silent Generation approaching finality
      - Radiomen from army and introduction of commercially viable radios
    - 80-90% Baby Boomers SK in next 25 years
      - Huge influx from CB/car phone/autopatch craze
  - Millennials
    - Emcomm and scouting interests, or "my dad was a ham"
    - Ham radio has been surpassed by the internet
  - Generation Z
    - Internet Born & Raised...how does ham radio keep up?

#### How to Fix It

#### Top Level (ARRL)

Gamification



Marketing & Incentivization



Continued Development

#### Lower Levels (SLSRC & You)

Facilitate Emotional Engagement



Thoughtful Elmering



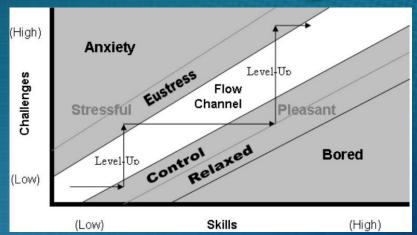
Follow Up

#### **Emotional Connection**

- Bewilderment + fascination + applicability = captivation
- It's friggin' magic!
  - Brooke Allen N2BA
- Making it easy
- Making it rewarding

# **Gamifying Ham Radio Contesting**

- Make contesting...
  - Accessible & Low Cost
    - By having a public or remote hamshack



- Competing with \$5 \$60 games
- Intrinsically Rewarding
  - By creating contests and sprints that follow the "flow diagram"
- Showing peer interest use modern tools
  - Social media & Live Scoring
  - Livestreaming?

### Pre-High School

- Technically Challenging to create interest
  - Requires a lot of elmering and facilitation
- Morse Code
- Science connections
  - Using amateur radio as a tool to demonstrate layers of the ionosphere
- Scouting!

#### Scouting

Extremely active & successful in amateur radio

Over 1M exposed to ham radio during JOTA!

Keep it up!





### **High School**

- Competing Interests (Girls & Boys, football, band, being cool etc)
  - Make ham radio an interest
    - If not a superficial interest
- FIRST robotics
- Competitive Ham Radio
  - Contesting Teams
  - Orienteering (ARDF)
- Ballooning





# College

- Massive Potential
- Rivalry promotes competition
- Relevance to EE coursework
- Easy Networking
- Career Implications
- Collegiate Amateur Radio Initiative



See Sam Rose's "Advantages of College Ham Radio Clubs" presentation on YouTube <a href="here">here</a>, and his slides <a href="here">here</a>

#### Post College

- Many large employers (especially in engineering industry) have amateur radio clubs
  - Motorola, Boeing, TRW, Rockwell Collins, Disney, Compaq, RCA, various broadcaster societies
  - Most of them are retirees only! <a>©</a>
  - What can your company's club do to get younger membership?
    - Get the word out internal & external social media, flyers, emails
    - Don't expect attendance at meetings, so keep everyone well informed
      - And don't expect everyone reads your website use email!
    - Design youthful activities

#### Youngsters on the Air

IARU Region 1 Youth Initiative

Starts at the top...

IARU R1 Youth Working Group

26 young hams from R1 member countries

Annual YOTA Camp

December Youth Month

Month long Youth QSO party

Special Event "-YOTA" call signs



#### YOTA in the US

- Sam Rose KC2LRC and Myself leading YOTA US movement
  - We're both employed, overworked, and underpaid engineers
    - Help? Help!
- Venues
  - Voice of America Museum
  - Contest Superstations
- Activities
  - Contesting, Special event operating, ARDF, antenna building, mesh networking, APRS, DSTAR, DMR, SDR, circuit design, Raspberry Pi, LTE/GSM informational, ISS contacts.........
  - Must also have non-ham radio events
    - Sightseeing, swimming, bowling, hiking, etc
  - And Social events
    - Teambuilding, icebreaking, dancing
- People!
  - And money.

### Thank You!

This presentation and more at <a href="http://n0ssc.com">http://n0ssc.com</a>