### Music 4 Life<sup>®</sup> Pilot Project 82d Group: 362d Training Squadron Solid Rock Café, Sheppard Air Force Base, Texas

"I first met Judith, a music therapist, over 13 years ago at Nellis AFB when MUSIC 4 LIFE<sup>®</sup> was just a concept. Since that time her passion and far reaching vision has led to the development of a revolutionary music-based, life enriching program in mobile format available to anyone. In stride with today's technology and applicable across generations, Music 4 Life's Music Medicine Protocol and when marketed, Key2MEE<sup>®</sup> mobile application, offers the ability to regulate one's emotions and self-control through their music choices. All this power can be available to all Airmen and their families to create increased resilience across all four pillars -- physical, emotional, mental and social, through what nearly everyone has near them the majority of the day – their cell phone!"

— Col Kevin McCal, Clinical Psychologist, 82 Medical Group Commander, Sheppard AFB



This Pilot Project reports experiences of sixty-six Airmen assigned to the Music 4 Life<sup>®</sup> (M4L) training which investigated the capability of the M4L Music Medicine Protocol to improve mood states, emotional intelligence and arm troops with new strategies to improve performance and wellbeing.

### **Table of Contents**

Background	3
2-Day Training Agenda	4
Demographics	5
2-Day Training Surveys	5
<ul> <li>Airmen Training Experience Summary</li> <li>Qualitative Data</li> <li>Toxicity Report</li> </ul>	6 6 7
Day 1 Training	8
<ul> <li>— eCourses</li> <li>— FAVES</li> </ul>	8 8
Day 2 Training	9
<ul> <li>Anapestic Beat</li> <li>Music Medicine Pill</li> <li>EQ Results</li> <li>Mood State Results</li> <li>Personalized Playlists</li> </ul>	9 10 11 11 13
Next Steps	13
Music 4 Life Team	13
Appendix	
<ul> <li>Individual Summaries</li> <li>Colonel (R) Gerald Curry's letter</li> </ul>	14 15

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Note: Music 4 Life, Music Medicine Pill, U.S.E., Mood Sequence Formula are intellectual properties of Music 4 Life, Inc.

January 13, 2020

### Background

Since 2007 Military installations have supported initiatives promoting community resilience and psychological health, including prevention programs and capacity building, when Congress mandated Wounded Warrior Programs. Nellis Air Force Base "AFB" leadership investigated the capability of Music 4 Life training to support warrior resilience through four projects:

- 1. Survey of deployed warriors' use of music in Afghanistan;
- 2. Security cops attending Music 4 Life training five days before deployment to Iraq;
- Meeting with military behavioral scientist Dr. Hendrick Ruck, Director, Human Effectiveness Directorate, Air Force Research Laboratory, to discuss military research interests;
- 4. Music 4 Life conference presentation to Chiefs of USA Airmen & Family Readiness Centers.

Positive feedback from all four projects motivated Major Kevin McCal, Mental Health Flight Commander, 99<sup>th</sup> Medical Group at Nellis AFB, to submit the Community Resilience Grant to the Wounded Warrior program funding Music 4 Life training at Nellis AFB. Although ACC approved the grant in 2007 and 2008, financial support was twice denied by DoD leadership largely due to unfamiliarity and lack of essential technology (not yet conceived) for easy access to trainings.

In 2019 Music 4 Life accessed technology to convert trainings into eCourses, online resources through a membership club, and individual support via telemedicine, thereby streamlining easy access for thousands of people. Col Kevin McCal, Sheppard AFB Commander of 82d Medical Group, referred Music 4 Life training to Sheppard AFB Community Support Coordinator Michael Battaglino who completed the Music Medicine Boot Camp 3-hour training with accolades. Mr. Battaglino immediately engaged base support to schedule airmen training in this Pilot Project.

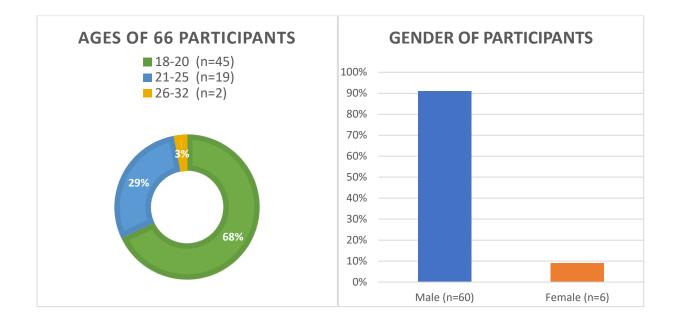
On December 18, 2019, the Music 4 Life Team arrived to train 66 airmen (Crew Chiefs-intraining from the 82d Group, 362d Training Squadron) in the Music Medicine initiative at Sheppard AFB, three days before holiday leave. It was determined after Leadership Briefing that mental health and chaplain core be present to support airmen as needed during the 2-day training at Solid Rock Cafe. This Pilot Project assigned a number (for privacy purpose) to identify each airman's surveys: pre-post training surveys (quantitative and qualitative), pre-post Music Medicine Pill surveys (quantitative), and three eCourses' evaluations (quantitative and qualitative).

### 2-Day Training Agenda

- 0930-1100 Leadership Briefing
- 1200-1230 Airmen Check-in
  1230-1430 Pre-Training Survey Psycho-Education -- eCourses --- Is Your Music Toxic? --- Danger Zones of Music Listening Habits
  1430-1500 Q&A FAVES psycho-education example Break
- 1500-1600 Psycho-Education -- eCourse
  - --- Music Medicine Boot Camp
- Day 2 December 19, 2019
- 0700-0730 Airmen Check-in
- 0730-0830 Q&A
  - Rhythm and kinesiology with Dr. Burkhardt
  - -- Anapestic beat demonstrations
  - -- 8 airmen volunteers
- 830-1000 Music Medicine Pill<sup>™</sup> (MMP) guided meditation
  - -- Pre-MMP survey
  - -- Experiential meditation
  - -- Post-MMP survey
  - -- Discuss responses to MMP
- 1000-1100 Balanced Music Diet
  - -- Discuss parameters
  - -- Create airmen units
    - According to preferred music genres
    - Remix units to mix music genres
  - Create personal MMPs
  - -- Discuss individual Mood Sequence Formulas™
  - -- Music Medicine playlist form
  - -- Breakout rooms for six units of mixed music genres
  - -- Coach each other to populate specialized Music Medicine playlists
- 1100-1200 Lunch
- 1200-0130 Continue peer coaching in breakout units Reconvene main group: personalized MMPS Summarize training Post-Training Survey Closure

## Music 4 Life

### Demographics

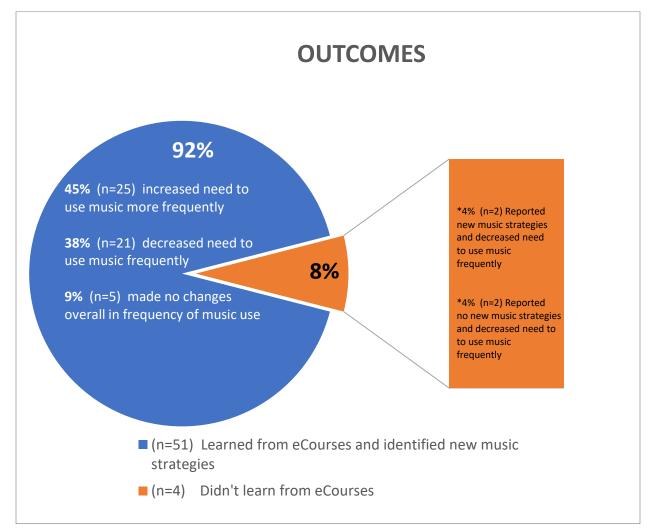


### 2-Day Training Surveys

55 of 66 airmen completed pre and post training surveys to quantify music listening habits: frequency of 15 types of applications. Ten airmen did not return Day 2 (unexcused), and one airman did not complete Day 2 surveys. Pre-post training surveys reported a slight increase in use of music: +2%.

It is compelling to review each airman's rich data exposing self-revelation with mood challenges, frequency, applications, music preferences, extrapolated Chronic Unsettled Comfort Zones with toxic music, and desire (or not) to change music listening habits that support a better life. Additionally, sample summaries of two individuals detail results of pre-post 2-day training surveys, Music Medicine Pill pre-post surveys and evaluation responses from completed eCourses. These individual summaries identify how music listening habits are adjusted to purposefully use music to improve performance and wellbeing.

### Airmen Training Experience Summary



\*reference Toxicity Report page 7

### Qualitative Data

91% (n=50) reported what they learned to help them reach their goals in the Air Force.

# *"I can use music to improve my physical, motivational, emotional goals. All to become the best Airman I can be."*

91% (n=50) reported they learned a new life skill.

### "How to properly select music that will benefit my mental health."

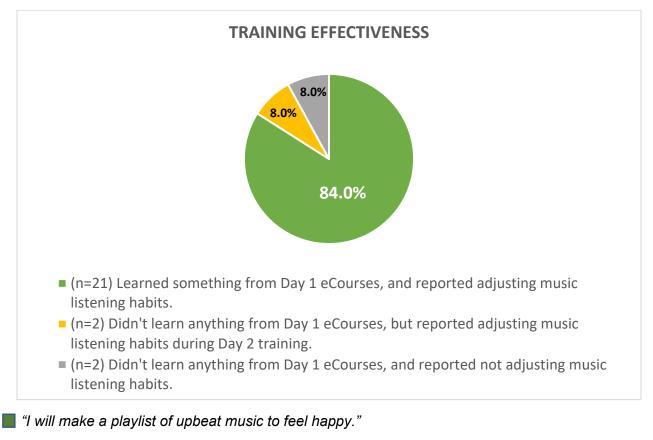
**87%** (n=48) reported they learned a new coping strategy.

"I learned how to curate my music library in a way that is productive."

### \* Toxicity Report

Twenty-five airmen (45% of total airmen participating) initially reported they listened to music "almost always," suggesting they may be caught in the Chronic Unsettled Comfort Zone with *over-use of music to self-medicate – when music may become toxic.* On Day 2 they learned to purposefully choose music, versus shuffling music randomly, which translates into <u>decreased</u> <u>desire thereby using music less frequently with lower scores</u>.

Twenty-three of these airmen reported future use of music as decreased frequency with specific applications, i.e. during physical fitness training or reducing stress. Based upon their 2-day training surveys and Music Medicine Pill surveys, in most cases these airmen adjusted music listening habits to be more intentional and discriminating about listening frequency for fifteen specific applications. Only two airmen out of sixty-six reported not learning anything, not recommending the training, and not changing their music listening habits.



"How I can use music to help me reach my physical goals and how certain kinds of music has an anapestic beat which can hurt your muscle performance. You should work out with music that can be timed to your heart."

"I don't think 'Is Your Music Toxic' will change my way of using music because I choose my music based on my own standards."

### Day 1 Training

### <u>eCourses</u>

Sixty-six airmen were advised that personal smart phones would be used to access three eCourses online requiring about 5 hours to complete. Coupon Codes were provided to bypass payment system. Private listening spaces were required with earbuds distributed by SAFB Community Support Coordinator.

98.5% (n=65) completed "Is Your Music Toxic" with one airman 76% complete.

"I better understand how my music affects my moods."

*"I will consider what music is good for me and remove the music that is not healthy for me." "It makes me well aware of the type of music I listen to and when and when not to listen to different types of music."* 

"This eCourse will make a difference in my life by helping me find the right type of music for me and being able to release the unwanted tension."

**92.4%** (n=61) completed **"Danger Zones of Music Listening Habits"** with one airmen 95% and one airman 82% complete. Three other airmen may have completed the eCourse sharing devices.

"It will help me make and improve better habits of listening to music."

"Makes me more open minded about my music."

"How to manage music so life is good."

"It gave me a better understanding of my theme song and how to use music to better my day."

94% (n=64) completed "Music Medicine Boot Camp" with two airmen 74% complete.

"I feel pretty good about how this lesson helped me understand the ways music tends to the brain's desires."

"I think it encouraged me to open my horizons and not listen exclusively to a given genre. As I listen to tons of music, especially when; trying to sleep, relax, calm down, get hyped, etc... That said, there were some benefits I was not aware of."

"I learned stuff that I never knew."

### FAVES

To reinforce what airmen learned in the first two eCourses, psycho-analysis of preferred music was demonstrated with one airman volunteering his favorite "FAVE" song that had become an earworm\*: "Pumped Up Kicks" by Foster the People. The airman consented to be interviewed with a psycho-analysis by Pinkerton for Music Medicine application. The airman reported not paying attention to the words and remembered the song triggered a happy memory that would never again be repeated which left him feeling melancholy. The song itself represented two energies: (1) unsettled from lyric describing escalating gun violence amongst youth and (2) the music being a happy energizing energy. In terms of assigning music into Music Medicine specialized playlists, the music and lyric must match mood otherwise it confuses mood responses within the Mood Sequence Formula\*\*. Therefore, this song would not be used (or could have a special placement) within his personalized Music Medicine Pill. The airman discovered that a Music Medicine Pill would be the next recommended step to treating

melancholy. Furthermore, once the meaning behind an earworm is understood (plus possible application of a Music Medicine Pill), the earworm usually stops.

\* Earworm: stuck song syndrome intruding into thoughts with a never-ending loop.

\*\* A Mood Sequence Formula is required to determine best order of pre-selected Music Medicine choices for optimal catharsis: release and transformation of mood states.

#### **Day 2 Training**

#### Anapestic Beat

eCourse dissention was anticipated with a follow-up demonstration scheduled to support "Danger Zones of Music Listening Habits" content related to strength-based rhythms. Dr. Dennis Burkhardt began the morning applying kinesiology on one airman while he listened to two different types of music with, then without, the anapestic beat\*\*\*. Seven more airmen immediately stepped forward attempting to disprove eCourse content because the anapestic beat is found most often in Rap music. All responses were remarkable as <u>each airman</u> <u>attempted to maintain muscle strength and failed</u>.

The lesson: Rap music is not bad. Airmen were encouraged to increase awareness of what and when they listen to music to support best outcomes. For instance, avoid anapestic beats at times in which aligning the central and peripheral nervous systems during physical fitness training aim at building muscle strength. Anapestic beats disrupt the signal transmission and weaken the muscular structure. Simply: the muscle blows out. Because the anapestic beat also opposes the heartbeat, avoid that rhythm when relaxation is desired.

Following Q&A for the completed Music Medicine Boot Camp eCourse, airmen were prepped for the Music Medicine Pill experiential, citing it's playlist demonstrates what to consider for their specialized U.S.E.\*\*\*\* playlists.

<sup>\*\*\*</sup> During the Music Medicine Boot Camp, Eminem's "Mockingbird" demonstrates the stress of the beat on the third beat: 1-2-3, 1-2-3, 1-2-3, which is called an *anapestic* beat. Anapest comes from Greek poetry, wherein the third syllable is long and stressed following the first two syllables that are short and unstressed. Dr. John Diamond researched the anapestic beat with muscle testing (kinesiology) and discovered that for the majority of people tested, the anapestic beat weakened the muscular structure. The anapestic beat also opposes the heartbeat, wherein the stress beat is on 1 rather than on 3. Therefore, music exhibiting a strong anapestic beat typically belongs in the Unsettled music playlist and not in the Soothed playlist when you want to align with - not oppose - the heartbeat to increase relaxation.

<sup>\*\*\*\*</sup> **U.S.E.** describes the three mood categories that represent the broad emotional continuum: <u>U</u>nsettled – <u>S</u>oothed – <u>E</u>nergized.

#### Music Medicine Pill

53 Airmen experienced the 40-minute specialized playlist called a Music Medicine Pill to demonstrate the impact of listening to music when purposefully applied as medicine within a balanced music diet. This specialized playlist is a guided meditation incorporating a Mood Sequence Formula with eleven songs from ten music genres: metal, punk rock, pop, Christian, world, new age, soundtrack, soul, R&B and synthpop.

Originally created for detox patients (n=603) in residential addiction treatment centers, this Music Medicine Pill's recovery surveys (2018) yielded 94% reporting an increase in emotional intelligence and 91% reporting improvement in mood states.

Typical responses to the Music Medicine Pill are significant reductions of unsettledness, and balancing out soothed and energized mood states with increases and/or decreases dependent on problem moods minimally or overly expressed. For instance, an extremely high score in soothed moods may indicate dissociation with a reduced score indicating enhanced connection with reality. An extremely high energized score could be misinterpreted anger (as energized) or anxiety (as excitement) energy: the desired score may decrease.

Although the guided meditation script for the Music Medicine Pill was adapted to airmen, the playlist was not modified due to desired genres alongside these universal emotions: anxiety, anger, depression, sadness, peace and happiness.

Sheppard AFB mental health technicians and chaplains were assigned to monitor the training in the event an airman was triggered into unsettledness and desired emotional support: no airmen stepped forward. The Community Support Coordinator, mental health technician and chaplain were notified by the Music 4 Life Team about two airmen who might need support based upon survey results, facial affect and/or behavior.

#### EQ-Emotional Intelligence Survey Results

Emotional Intelligence "EQ" is desired in occupational settings where emotional regulation connects importantly to EQ. The Music 4 Life training goal is to empower airmen creating personalized playlists to regulate emotions, improve EQ and build capacity to deal with more stress. Even though this particular playlist was not completely customized to military life, 62% of airmen increased EQ - remarkable.

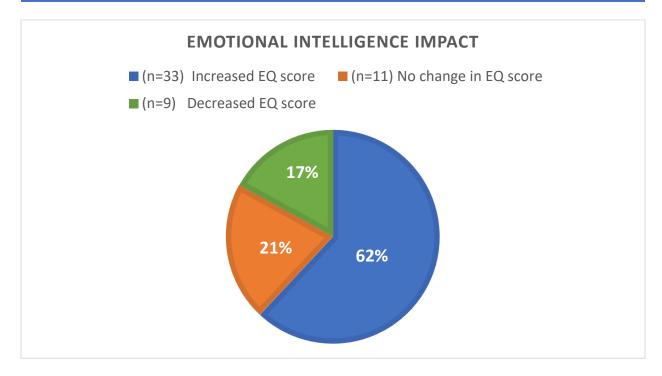
EQ scores report airmen's experiences of twelve statements indicative of Emotional Intelligence on the Pre-Post Music Medicine Pill surveys. Reference graph on page 11.

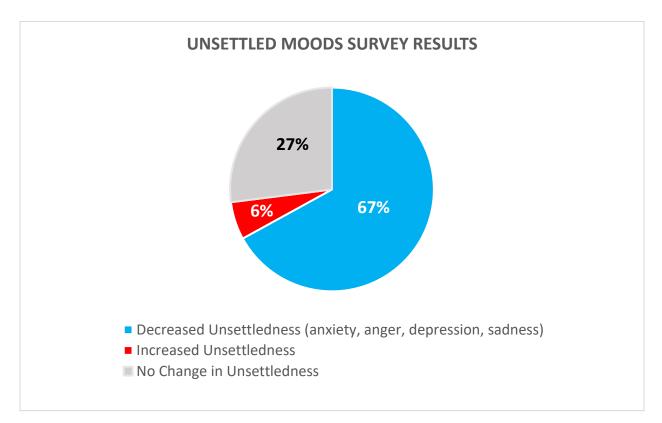
Unsettled mood scores are reported on page 11. Two airmen's experiences were immediately reported to SAFB mental health on-site for (1) "extreme" anger not mitigated and (2) facial affect / behavior indicative of depression symptoms.

Soothed mood scores are reported on page 12.

Energized mood scores are reported on page 12.

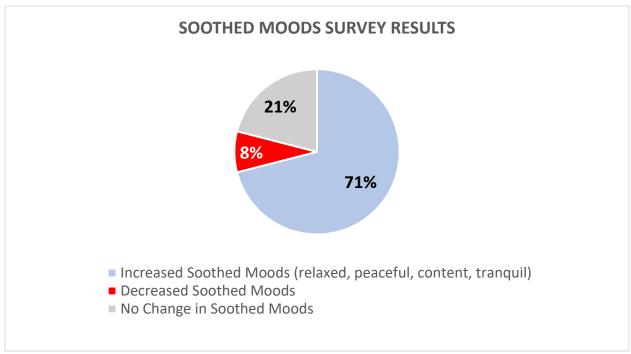
## Music 4 Life



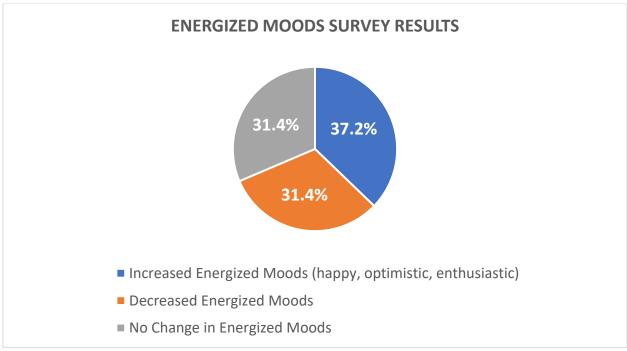


Note: 20% (n=10) reported the lowest possible unsettled score on pre and post surveys indicating "no change." If these 10 surveys were omitted with rates adjusted, percentages would change:83% decreased unsettled moods, 7% increased unsettled moods, and 10% no change in unsettled moods.

## Music



Note: 8% (n=4) reported the highest possible soothed score on pre and post surveys indicating "no change." If these 4 surveys were omitted with rates adjusted, then percentages would change to 83% increased soothed moods, 7% decreased soothed moods, and 10% no change in soothed moods.



NOTE: 8% (n=4) were already at the highest score. If these 4 surveys were omitted with rates adjusted, then percentages would change to 40.5% increased energized moods, 34% decreased energized moods and 25.5% no change in energized moods.

Personalized Playlists

Following the Music Medicine Pill, Q&A and a review of the playlist segued into discussion of achieving a balanced music diet. To foster peer coaching all genres were recognized as important and airmen identified their preferences. Six units were created with assigned airmen representing assorted genres to build community as they populated their individual playlists to create personalized Music Medicine Pills:

- 1. The six units relocated to private spaces utilizing their cell phones to explore and examine music selections with the newly acquired psycho-analysis method.
- 2. The Music 4 Life team rotated between units to answer questions and coach.
- 3. Airmen's music preferences were validated, learning they educate a peer's unfamiliarity about their music with desired songs that effectively populate the U.S.E. playlists, thereby achieving the optimal balanced music diet.
- 4. The goal: to support airmen leaning on each other with optimal sharing for support, strengthening empathy and desire to consider, invite and accept diverse music genres into their personalized playlists to create optimal Music Medicine Pills.

Final discussions supported holiday season conversations with loved ones, invigorating what they just learned. Post training surveys were administered.

### **Next Steps**

- 1. Schedule trainings for all airmen.
- 2. Develop appropriate assessment tools for research studies that decode the influence of Music Medicine on emotional regulation and emotional intelligence.
- 3. Build the patent-pending Key2MEE<sup>®</sup> mobile app for users to easily create specialized playlists for personalized Music Medicine Pills.
- 4. Apply what was learned during this Pilot Project to develop and launch military and age specific: eCourses at MusicMedicineAcademy.com; appropriate Music Medicine Pills; and insurance-reimbursed access to personal coaching by music therapists at MusicTelemedicine.com.

"On December 18 and 19, 2019 I oversaw a training initiative with 66 Airmen that participated in a Music 4 Life<sup>®</sup> Pilot Project on Sheppard Air Force Base. The Airmen that participated reported a 64% increase in EQ (emotional intelligence) and a 67% reduction in unsettledness (anger, anxiety, depression, and sadness). During the pilot project, it was remarkable to see how Airmen came to understand the power of music and how it affected them emotionally. This particular training and the benefits of it were markedly different from any other training I had ever witnessed. I would be interested to see how this training could impact Airmen more broadly to improve their Resilience and increase their EQ." — Michael Battaglino

### Music 4 Life® (M4L) Pilot Project Team

Judith Pinkerton, LPMT, MT-BC	Master Trainer, M4L Founder/CEO
Donnie Lee, III, LPMT, MT-BC	Trainer, M4L Music Therapist
Dennis D. Burkhardt, D.C.	Chiropractor/Kinesiologist (R), M4L COO
Alyssa Janney, MBA	M4L Sales/Marketing Director
Michael Battaglino, M.S.	SAFB M4L Pilot Project / Community Support Coordinator

#### Appendix – Sample Airmen Summaries

# This airman (age 18) increased awareness of self and interactions in relationships with significant increase intentionally applying music to enhance life.

"I learned how to use music in a productive way dealing with stress" reporting the eCourse *Is Your Music Toxic* was "very eye opening."

He significantly increased willingness to use music daily to reduce stress, anxiety, anger, depression, sadness, and increase relaxation, meditation, performance, physical fitness training, getting in touch with his feelings, focus/concentration, positive mindset, socialize and sleep.

He reported the Music Medicine Pill meditation improved his EQ-Emotional Intelligence by utilizing criticism and other feedback for growth, seeing things from another's perspective, and recognizing how his behavior affects others.

More important comments from airmen about different learning experiences.

"Do not let negative music effect your goals in life."

"It makes me well aware of the type of music I listen to and when and when not to listen to different types of music."

"I recommend *Danger Zones of Music Listening Habits* eCourse because it shows you the proper way to listen to your music."

"You can't master this training in one day." "Music has a bigger effect than I thought."

#### This airwoman (age 22) became aware of Music Medicine's capability to support the best life.

"I can use music to improve my physical, motivational, emotional goals all to become the best Airman I can be."

"I have more awareness on the dramatic effects of music on the body and mind."

"To match my music to my mood and move on to music to achieve the mood I want." She increased desire to use music daily for better meditation, performance, physical fitness training, socializing and sleep.

She reported the Music Medicine Pill meditation improved her EQ-Emotional Intelligence and positively affected mood states with reduced anxiety, stress, anger, and fear in pursuit of her goals, airing grievances skillfully and feeling extremely relaxed and happy.

She recommends the eCourses to people "that are pretty sad or angry because it will help them change the music type by understanding themselves more so they can improve their life."

More important comments from airwomen about different learning experiences. *Is Your Music Toxic* eCourse "will make a difference in my life by helping me find the right type of music for me and being able to release the unwanted tension."

Danger Zones of Music Listening Habits eCourse "helps me choose more up beat music" and "make better music choices for long term health." "I will channel music to my body's needs." "Music can help when things aren't going as planned."

"It can help me to not be so stressed. The Air Force can be overwhelming."

"Music can be your guide to do great things or be your downfall to a darker sinister path."

"Learn how to not just pick random songs, but to seek out other options on how to tune in my emotions with the songs." "Not all songs are good for your emotional mindset and the better it copes with your emotions the better you will feel as it helps express your feelings in a different way."



DEPARTMENT OF THE AIR FORCE HEADQUARTERS 99TH SECURITY FORCES GROUP (ACC) NELLIS AIR FORCE BASE, NEVADA

COLONEL GERALD CURRY 99 Security Forces Group 5503 Pease Drive, Suite 101 Nellis AFB, Nevada 89191-6214

NATIONAL ASSOCIATION OF MUSIC MERCHANTS 5790 Armada Drive Carlsbad, CA 92008

Dear Sirs,

1. The purpose of this letter is to discuss the significance that Music 4 Life is having on reducing Post Traumatic Stress Disorder (PTSD) on my troops assigned to the 99<sup>th</sup> Security Forces Group. In 2007, my unit has deployed over 330 troops in support of the war and a handful has received pre-deployment Music 4 Life training, and it has added one additional technique for us to use in reducing PTSD. In our effort of equipping and supporting our troops that are actively engaged in fighting the Global War on Terrorism with the best technologies and strategies possible we have turned our attention to Mrs. Judith Pinkerton and her Music 4 Life program. She has taken the time in availing herself to our benefit and we sincerely appreciate her wisdom.

2. As a senior officer serving our nation's freedom for over twenty five years this program has the wherewithal of becoming mainstream if given the leverage and financial backing. We have an obligation of providing only the best to the men and women in uniform. I have not personally or professionally witness a singular program with as much direct impact as Music 4 Life. It is my hopes that this program will transform treatment for not only our military, but First Responders that are in the emergency management business.

3. No longer can we merely rely on technologies of the past; we must look for innovative strategies that successfully posture us for the future. Thank you for allowing me to attest to the credence of Music 4 Life and it is our hopes that you too will apply the principles of music therapy to your arsenal in combating PTSD.

GERALD-DCURRY Colonel, USAF Commander

Defensor Fortis - "Defender of the Force"