

Before the  
Federal Communications Commission  
Washington, D.C. 20554

)  
)  
In the Matter of )  
) EB Docket No. 04-296  
Review of the Emergency Alert System )  
)  
)  
)

**REPLY COMMENTS OF TFT, INC.**

Darryl E. Parker

TFT, Inc.  
1953 Concourse Drive  
San Jose, California  
95131-1708

November 23, 2004

## TABLE OF CONTENTS

Executive Summary.....	i
<b>I. Introduction.....</b>	<b>1</b>
<b>II. Improvements and Enhancements – Pro and Con.....</b>	<b>2</b>
5. Text transmission enhancement to EAS.....	3
6. Use of non-proprietary enhancements.....	4
7. Use of pre-recorded messages.....	7
8. Use of RBDS.....	8
9. Use of telephone system including cellular.....	9
10. Origination of EAS messages via telephone.....	10
11. Education matters.....	11
12. Change in EAS protocol translations.....	12
13. Call for clarification of EAS message originator.....	13
14. Time required for reaction to rule changes.....	13
<b>III. Jurisdictional Issue.....</b>	<b>14</b>
<b>IV. Factual Errors in Comments</b>	
16. Participation in EAS.....	16
17. Shortened ASCII for certain devices.....	17
18. Need for digital recorders.....	18
19. Use of “NPT” Event code.....	19
20. Official FIPS codes for EAS.....	19
<b>V. Conclusion.....</b>	<b>20</b>

## **EXECUTIVE SUMMARY**

TFT, Inc. hereby files Reply Comments to the Commission's Notice of Proposed Rulemaking (NPRM) to examine the Emergency Alert System (EAS). TFT, Inc. encourages the Commission to consider all comments filed, in particular those which address enhancing the current EAS system by addition of text messaging with a non-proprietary scheme, supporting the appointment of the Department of Homeland Security as the lead federal agency for a national emergency alert system, and requesting funding to support emergency managers in the origination of EAS messages. TFT, Inc. also files these Reply Comments to support, clarify or refute statement of other comments filed in this NPRM. Several errors are evident in some comments, and TFT, Inc. seeks through this filing to point these out. TFT, Inc. also emphasizes a jurisdictional issue and several clarifications that need to be made by the Commission in the administration and operation of EAS.

Teamwork on the part of many will help the Commission and the nation effect a reliable and efficient method of alerting the public in times of danger.

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of )  
 )  
 )  
Review of the Emergency Alert System ) EB Docket No. 04-296  
 )  
 )  
 )  
 )

Reply Comments  
Of  
TFT, Inc.

**I. INTRODUCTION**

1. In these reply comments, TFT, Inc.<sup>1</sup> responds to many of those who have filed initial comments in response to the Notice of Proposed Rulemaking (NPRM) in the above-captioned proceeding.<sup>2</sup> TFT, Inc. thanks the Commission for the opportunity to comment and file reply comments to this proceeding that is vital to our nation's security. TFT, Inc. encourages the Commission to use the comments of those who filed initial comments to support and enhance the installed base of the Emergency Alert System (EAS). TFT supports the appointment of the Department of Homeland Security (DHS) as the lead federal agency for public warning, of which EAS should continue to be a part. TFT further supports the Common Alert Protocol (CAP) as the basic emergency reporting structure and the local development of state and local EAS plans with funding support from DHS. For improvements to EAS, TFT, Inc. recommends

---

<sup>1</sup> TFT, Inc. is a California manufacturer of FCC Certified EAS Encoder/Decoders and Decoders.  
<sup>2</sup> See *Notice of Proposed Rulemaking*, EB Docket No. 04-296, FCC 04-189, adopted August 4, 2004, released August 12, 2004.

codification of text messaging protocol within EAS but does not support any proprietary scheme for such text messaging.

2. In these reply comments TFT, Inc. seeks to support, clarify, correct or refute statements of certain comment filers. Additionally, TFT, Inc. wishes to emphasize some of the important ideas and issues raised by these initial comments. Some comments should be given further consideration of and study by the Commission; others will be counterproductive in the task of providing a national alert system. At least two comments raise a jurisdictional question for the Commission. There are others that are factually incorrect.

3. Perhaps Peter Ward said it best in his comments:

“The fundamental need is for teamwork.”<sup>3</sup>

Dr. Ward also states:

“The fundamental problem with current public warning systems is that warning capability has not been a high priority for the Nation and no Federal Agency has the clear legislated mandate or has assumed the mandate to assure effective public warning systems exist.”<sup>4</sup>

A team of interested parties under proper leadership and guidance, as evidenced by the comments to this NPRM, is certainly possible to constitute.

## **II. IMPROVEMENTS AND ENHANCEMENTS – PRO AND CON**

4. Many improvements are possible for EAS. Expense, both hardware and software, is certainly an issue. Manufacturers such as TFT, Inc. may, as a result of the

---

<sup>3</sup> Comments of Dr. Peter L. Ward in EB Docket 04-296, submitted October 27, 2004, Page 2.

<sup>4</sup> *Ibid.*

Commission's rulemaking action, find that it is necessary to modify legacy FCC Type Certified products to continue the development of EAS. Even if hardware changes are not necessary and only software/firmware replacement is necessitated, the software/firmware still represents many man-hours of labor. The Ohio Associate of Broadcasters erroneously states:

“ As a practical matter, an equipment overhaul need occur only once---after ‘modern’ hardware is installed, further upgrades are typically a function of new software, which is less costly than the hardware.”<sup>5</sup>

It may be less expensive for the equipment user, but still may represent considerable effort and labor. The labor that goes into the design of the software/firmware can often exceed the cost of hardware.

5. Other comments support TFT's encouragement of codifying text transmission inside the EAS protocol.<sup>6</sup> In its comments, the National Center for Missing & Exploited Children (NCMEC) points out Amber Alerts as an impetus for station to upgrade their systems and says that

“...standardizing text transmission in an EAS alert would be a beneficial improvement to the current system.”<sup>7</sup>

TFT agrees with NCMEC.

The Partnership for Public Warning (PPW) suggests:

“One way to enhance EAS would be to have the audio portion of the EAS message in digitized form and in a standardized text packet.”<sup>8</sup>

---

<sup>5</sup> Comments of the Ohio Association of Broadcasters in EB Docket No. 04-296, submitted October 29, 2004, at D. New Equipment, Page 11.

<sup>6</sup> 47 CFR §11.31(a)(3).

<sup>7</sup> Comments of the National Center for Missing & Exploited Children in EB Docket No. 04-296, submitted October 29, 2004, Page 7.

Gary Timm cites text transmission as a method to improve [EAS] for disabled persons:

**“To improve alerting of the disabled, the greatest improvement would be adding text capability to EAS Alerts...”<sup>9</sup>**

Investigation of this issue should be given a high priority by the Commission.

6. The use of any proprietary scheme for text transmission or for any other enhancement to EAS should be avoided. Numerous manufacturers and organizations involved in EAS, including TFT, Inc., have donated countless hours and ideas for the development of the present EAS structure and organization. To reward the holder of a proprietary scheme with a government mandated protocol not in the public domain would negate the contributions of volunteers and other stakeholders in EAS and seriously hamper their future cooperation.

For example, the technology Digital Alert Systems (DAS) refers to as Textual Data eXchange (TDX)<sup>10</sup> should not be considered as an enhancement for EAS. Digital Alert Systems even states that TDX is proprietary:

**“TDX is a proprietary product of Digital Alert Systems, LLC, and a patent application covering this invention is on file.”<sup>11</sup>**

Although DAS says that it will offer its technology at “reasonable terms and conditions”<sup>12</sup> to all EAS participants, this language is often a euphemism for “expensive”. At the very least, if TDX

---

<sup>8</sup> Comments of Partnership for Public Warning in EB Docket 04-296, submitted October 25, 2004, Page 5.

<sup>9</sup> Comments of Gary E. Timm, Broadcast Chair, Wisconsin SECC, Co-Chair, Wisconsin Amber Alert Committee, in EB Docket No. 04-296, submitted October 27, 2004, Page 7.

<sup>10</sup> Comments of Digital Alert Systems, LLC, in EB Docket No. 04-296, submitted October 18, 2004, Page 1.

<sup>11</sup> *Ibid.* Page 7.

<sup>12</sup> *Ibid.*

were adopted, it would mean that one manufacturer would have to negotiate with another manufacturer in order to deliver a system that would comply with the Commission's direction. This avenue could lead to a monopoly that would not be in the public interest.

DAS further comments that "Four other EAS vendors; (sic) Sage, Hollyanne, Trilithic, and TFT, have indicated their ability to upgrade current equipment to enable TDX and manufacture new equipment with TDX as a standard configuration or as a selectable option."<sup>13</sup> TFT, Inc. has had no such discussions about TDX upgrades or about manufacturing new equipment with TDX as a standard configuration. Although TFT, Inc. is interested in any improvement to EAS, it is not true that TFT, Inc. has any specific agreement with DAS.

Another difficulty with the DAS proposal is its reliance upon an "associated database."<sup>14</sup> This technique means that an extensive database must be installed and maintained at each node in the EAS distribution system, certainly both at the originator's location and the recipient's location(s).

DAS states that

"TDX vastly improves the level of communication within the EAS infrastructure by adding details to the EAS message. Members of the SBE, SCTE, PPW, and various government agencies have encouraged the further consideration and implementation of this method."<sup>15</sup>

TFT is a member of PPW, and endorsement of TDX has not been considered by PPW. To TFT's knowledge, no further consideration or implementation of TDX is underway by PPW.

---

<sup>13</sup> *Ibid.* Page 7.

<sup>14</sup> *Ibid.* Page 3.

<sup>15</sup> *Ibid.* Page 2.

Similarly, the suggestion by Global Marketing Solutions, Inc. (Global) is based on a proprietary technology.

“Global Marketing Solutions, Inc. has developed one such technically advanced system. This new patent pending technology has the potential for revolutionizing the way in which people receive critical information.”<sup>16</sup>

Global freely states that their development is proprietary.

“This proprietary system is intended for the broadcast of advertising.”<sup>17</sup>

Global also expresses its intent to seek government funding to deploy their technology.

“We are looking for partial government funding in order to rapidly deploy this system throughout the United States.”<sup>18</sup>

TFT, Inc. agrees with Harris Corporation in its comments

“...[T]he Commission should ensure that the development of such a system [Media Common Alert Protocol] be in the public domain;...”<sup>19</sup>

Harris reiterates its call for MCAP (Media Common Alert Protocol) to be standardized, non-proprietary and in the public domain.

“Intellectual property issues could stifle the development and deployment of a digital transmission coding system using MCAP. As the Commission knows, EAS coding was developed by several groups and adopted by the Commission in the early 1990’s. However, one individual pursued intellectual property protection on the coding and was issued a patent. Any companies utilizing the coding to develop compatible transmission and distribution facilities were forced to pay royalties. In the context of developing standards for MCAP, Harris strongly urges

---

<sup>16</sup> Comments of Global Marketing Solutions, Inc. on EB Docket 04-296, submitted October 26, 2004, Page 4.

<sup>17</sup> *Ibid.* Page 6.

<sup>18</sup> *Ibid.* Pages 6 and 7.

<sup>19</sup> Comments of Harris Corporation in EB Docket No. 04-296, submitted October 28, 2004, Page 3.

the Commission to ensure that MCAP, or any such standard developed in the context of this *NPRM*, be standardized, non-proprietary and in the public domain.”<sup>20</sup>

The Telecommunications Industry Association (TIA) also calls for standards to be non-proprietary.

“Intellectual property issues could stifle the development and deployment of a digital transmission coding system using the medial (sic) common alert protocol. Thus, the MCAP should be non-proprietary.”<sup>21</sup>

Bill Croghan, who has long been a broadcast user of EAS for his employer (Lotus Broadcasting) and is co-chair of the Southern Nevada EAS operational area and former member of the President’s National Industry Advisory Council, states

“Whatever systems are adopted for use, the basic concepts must be openly available to the public companies to develop. A dependence on a single company who may not remain in business, or may take the government mandate as a license to steal must be avoided.”<sup>22</sup>

TFT, Inc. could not agree more.

7. Unfortunately, the idea of using pre-recorded messages, even for cellular telephone notification, is problematic. Canned messages, such as those described by Charles County, South Carolina, in their comments will not provide sufficient detail for the hearer/reader/viewer to know what the emergency is, what area is effected, or what action to take.

“As for cellular technologies, an EAS warning/notification could be accomplished by either activation of a pre-recorded emergency message, or the injection of a

---

<sup>20</sup> *Ibid.* Page 5.

<sup>21</sup> Comments of the Telecommunications Industry Association in EB Docket No. 04-296, submitted October 29, 2004, Page 4.

<sup>22</sup> Comments of Bill Croghan in EB Docket No. 04-296, submitted October 29, 2004, Page 4 at 9.

scrolled emergency message. The pre-recorded message could direct the cellular user to dial a reserved number, in order to receive further information.”

Without specific information, our experience with emergency managers over the last fourteen years of EAS has taught us that the hearer/reader/viewer will not be motivated to take the action of calling a number for further information. This may also lead to system overload for cellular service providers and telephone central offices. The database necessary to provide specific information would be immense. For example, if a chemical spill were to occur at the corner of “5<sup>th</sup> and Main Streets”, and that information were put into a database, then to add “6<sup>th</sup> and Main Streets” and “5<sup>th</sup> and Canal Streets” and “6<sup>th</sup> and Canal Streets” would lead to a database with geometric proportions. This is why the early thinking for the design of EAS messages led to putting such level of detail into an audio message that could be widely disseminated, clearly understood, and easily generated.

8. Seven Ranges Radio Co., Inc. suggests that NWS transmission facilities could be upgraded by

“The use of the RBDS codes and protocols on these broadcast band transmitters.”<sup>23</sup>

The United States RBDS (Radio Broadcast Data System) standard uses a wideband system,<sup>24</sup> the modulation characteristics of which materially differ from narrowband NWS Weather Radio transmitters. To add RBDS to the narrowband modulation of NOAA Weather Radio transmitters would require extensive upgrades of not only the transmitter itself but also of the transmission link equipment.

---

<sup>23</sup> Comments of Seven Ranges Radio Co., Inc. in EB Docket No. 04-296, submitted October 15, 2004, at 3, Page 1.

<sup>24</sup> *United States RBDS Standard, specifications of the radio broadcast data system*, April 9, 1998, pp. 6-11.

9. Several comments suggested that cellular telephones, although they may play a role in emergency alerting, are not the total answer to providing a national system.

The Primary Entry Point Advisory Committee (PEPAC) notes the important role of broadcasting in reaching millions of people quickly and some of the dangers of using telephone systems, of which cellular telephones are certainly a part.

“PEPAC also believes availability of trunked systems such as cellular is unlikely to provide the reliable contact to citizens that broadcasters do. We further believe that this would cause a traffic overload to these systems that would do more harm than good to the public.”<sup>25</sup>

Contrary to what Henry B. Ruhwiedel suggests,<sup>26</sup> cellular telephones are not always used at places of residence and may be turned off at other times; thus, no emergency information would be received if cellular telephones were employed as the basis for a national alerting system.

Even the Rural Cellular Association in its comments conclusion urges the Commission not to use wireless system operators to transmit EAS messages.

“Neither the SMS [Short Messaging Service] nor the cell broadcast capabilities of wireless system operators were designed for, not are the well suited for, retransmission of EAS messages.”<sup>27</sup>

Verizon also discourages use of the Public Switched Telephone Network (PSTN).

---

<sup>25</sup> Comments of Primary Entry Point Advisory Committee on EB Docket 04-296, submitted October 29, 2004, Page 2.

<sup>26</sup> Comments of Henry B. Ruhwiedel (additional) on EB Docket 04-296, submitted October 21, 2004, Page 5.

<sup>27</sup> Comments of Rural Cellular Association on EB Docket 04-296, submitted October 29, 2004, at VI, Page 22.

“Use of the PSTN, however, is not a viable option for emergency alerts... Therefore, the EAS should not rely on the PSTN for timely communication of emergency alerts to large populations.”<sup>28</sup>

10. The PSTN can, nonetheless, be used for portions of the EAS structure to **originate** EAS messages. TFT, Inc. has been manufacturing a Telephone Interface Unit for its FCC Type Certified EAS Encoder/Decoder for just this purpose to assist emergency managers originate and forward EAS messages. Identified as the TFT Model 943, this unit connects a TFT EAS 911 EAS Encoder/Decoder to an ordinary telephone line and with DTMF (Dual Tone Multi-Frequency) techniques available on a majority of telephone sets, including cellular telephone handsets, provides the security and capability to originate, record, and forward EAS protocol messages.

This unit, used as a part of the EAS origination and distribution structure, can provide cable companies and emergency managers the type of interrupt systems to which they are accustomed. It alleviates the need for the special type of system mentioned by Southeastern Michigan Counties and Municipalities<sup>29</sup> The TFT EAS 943 Telephone Interface Unit works in conjunctions with EAS and does not override messages as described by Southeastern Michigan.<sup>30</sup>

With EAS, and specifically the TFT Model 943 Telephone Interface Unit, municipalities can accomplish the method of alerting described by the Towns or Auburn and

---

<sup>28</sup> Comments of Verizon telephone companies on EB Docket 04-296, submitted October 29, 2004, at 2, Page 3.

<sup>29</sup> Comments of Southeastern Michigan Counties and Municipalities in EB Docket No. 04-296, submitted October 29, 2004, at 2, Page 3.

<sup>30</sup> *Ibid.* at 48, Page 17.

Northborough, Massachusetts, in their comments.<sup>31</sup> Negotiation for interrupt capabilities can occur before emergencies arise rather than during. Emergency managers, broadcasters, and cable operators in each market can agree as a part of a comprehensive local emergency plan as to the conditions and criteria for emergency message interruption to broadcasts and cable services. Emergency managers can use either their own EAS encoder/decoders linked to broadcasters and cable casters or utilize the remote connection feature of the TFT EAS 943 at a broadcast or cable facility.

11. Education of broadcasters and the public is vital to the success of a national emergency alerting system. Adrienne Abbott-Guiterrez, Navada Chair, State (Nevada) Emergency Communication Committee (SECC), points out:

“You can bet those News Directors thought it was still called E-B-S and the GM’s thought that once the EAS equipment was installed, it could be set to Auto-Forward and everything would all take care of itself. That was how the equipment manufacturers billed their products, and we bought the line, hook and sinker.”<sup>32</sup>

The two best things the Commission did in establishing EAS and replacing EBS were to provide a digital system intelligence and provide entry points anywhere in the system, especially local. Because of this capability, many do not understand that EAS and the programming of EAS equipment is very local in nature. It is not appropriate, as Ms. Abbott-Guiterrez suggests, or responsible for EAS equipment to be set to forward any and all EAS messages. Decisions have to be made locally on exactly what messages are to be forwarded for what areas. Fortunately, for most EAS equipment, this means a one-time programming and setup and installation. TFT has never billed its equipment as totally automatic without the need for local customization. EAS

---

<sup>31</sup> Comments of the Towns of Auburn and Northborough, Massachusetts, in EB Docket No. 04-296, submitted October 22, 2004, Page 2.

<sup>32</sup> Comments of Adrienne Abbott-Guiterrez in EB Docket 04-296, submitted October 19, 2004, Page 2.

equipment, as it exists now, is a tool for local broadcasters, cable operators and emergency managers to use to provide emergency information to the public they serve. Because all communities are different, the EAS equipment needs to be tailored to operate in a specific environment. Decisions must be made on a local basis in order for messages to be disseminated properly and quickly to the public. This means that users will need to be educated in the organization as well as the operation of EAS.

12. The State of Ohio Emergency Management Agency has suggested that EAS translation of EAS protocol headers<sup>33</sup> be modified such that geographical identifiers be appended to geographical place names.

“As changes are made to the EAS, the design of the EAS crawler must be modified to include the word ‘county’ after county name designation in the crawler. Ohio has thirty cities that lie outside of a county carrying the same name... The simple addition of ‘county’ after each county name would go a long way in solving this situation.”<sup>34</sup>

Presently the Commission defines the Location field in the EAS protocol<sup>35</sup> from the Federal Information Processing Standard (FIPS) described by the U.S. Department of Commerce. This document<sup>36</sup> identifies “first order subdivisions” as counties, parishes, boroughs, census areas, independent cities in certain states, possessions, and associated entities. As a manufacturer of FCC EAS Type Certified equipment, we are bound by some constraints in this area. To add further description to these first order subdivisions will demand about a 250% increase in the size of memory required in EAS encoder/decoders and decoders (only) and may require

---

<sup>33</sup> 47C.F.R. §§11.31(c), 11.51(d), 11.51(g)(3), and 11.51(h)(3)

<sup>34</sup> Comments of the State of Ohio Emergency Management Agency in EB Docket No. 04-296, submitted October 27, 2004, Page 6.

<sup>35</sup> 47C.F.R. §11.31(c)

<sup>36</sup> *Federal Information Processing Standards Publication 6-4*, December 15, 1979, as modified through July 7, 2001.

resubmission for FCC Type Certification of equipment. It certainly is possible to be done but will have a resultant expense associated with it.

13. The State of Ohio Emergency Management Agency is also calling for a change in filtering EAS originator codes.<sup>37</sup> This relates to an interpretation of the definition of originator:

“ORG- This is the Originator code and indicates who originally initiated the activation of the EAS.”

This is a point that needs clarification by the Commission in coordination with the National Weather Service. One could argue that the “originator” and “declarer” of an emergency are the same entity. It could also be interpreted that the “originator” is the entity that generates the related EAS protocol, not necessarily the “declarer” of the emergency.

14. Depending upon the rules changes adopted by the Commission, changes in EAS equipment hardware and software may be slow and may not be able to be made in less than six months as Gary Timm suggests.<sup>38</sup> For the last amendments to the Commissions EAS rules, TFT, Inc. was able to provide changes relatively easily and inexpensively. Our effort still represented many man-hours of development and organizational time. What changes may be made are still unknown, so it is impossible to comment on how long it would take to design, develop and distribute those unknown changes. If the Commission were to force manufacturers of Type Certified equipment to re-certify EAS equipment, the process could take considerably longer and thus deprive users of upgrades in a timely fashion.

---

<sup>37</sup> 47C.F.R. §§11.31(c) and(d).

<sup>38</sup> *Op. cit.* Gary E. Timm, Page 5.

### III. JURISDICTIONAL ISSUE

15. Two organizations raised an issue about whether Commission jurisdiction could be extended beyond the requirements for only national level EAS messages and Required Monthly Tests.<sup>39</sup> Charleston County, South Carolina, argues in its comments that

“[T]he FCC should not promulgate rules, regulation, and standards that completely pre-empt local government participation and/or flexibility, because as noted above, all national disasters/emergencies filter to the local level, and retain a local element of administration.”<sup>40</sup>

Bill Croghan notes as well that emergencies do not always follow geographic boundaries and do indeed often involve more than one state.

“Only the Federal Government has the ability to coordinate efficiently across state lines to handle the needs of larger market areas. Here in Las Vegas, we have 3 other states and 8 other counties within the listening area of many of our radio stations.”<sup>41</sup>

If all emergencies are indeed local as Charleston County asserts and if emergencies often cross state political boundaries, then would the Commission have jurisdiction to alter mandatory EAS messages other than EAN, EAT, and RMT and prescribe EAS plans that may involve more than one state? There are several notable examples other than the one Bill Croghan cites of markets that overlap one or more states:

---

<sup>39</sup> 47C.F.R. §§11.51(a), 11.51(k), 11.51(k)(2), 11.52(e), 11.52(e)(2), 11.54, and 11.61(a)(v).

<sup>40</sup> *Op. cit.* Charleston County, South Carolina, Page 3.

<sup>41</sup> *Op. cit.* Bill Croghan, Page 2.

Amarillo, Texas	Duluth, Minnesota	Lafayette, Indiana
Binghamton, New York	El Paso, Texas	Lake Charles, Louisiana
New Orleans, Louisiana	Elmira, New York	Lansing, Michigan
Boise, Idaho	Erie, Pennsylvania	Louisville, Kentucky
Boston, Massachusetts	Eureka, California	Lubbock, Texas
Bowling Green, Kentucky	Evansville, Indiana	Mankato, Minnesota
Buffalo, New York	Fargo, North Dakota	Marquette, Michigan
Burlington, Vermont	Fort Smith, Arkansas	Medford-Klamath Falls, Oregon
Butte, Montana	Fort Wayne, Indiana	Memphis, Tennessee
Charleston-Huntington, West Virginia	Grand Junction, Colorado	Meridian, Mississippi
Charlotte, North Carolina	Green Bay, Wisconsin	Minneapolis-Saint Paul, Minnesota
Chattanooga, Tennessee	Greenville, South Carolina- Asheville, North Carolina	Missoula, Montana
Cheyenne, Wyoming	Harrisburg, Pennsylvania	Monroe, Louisiana-El Dorado, Arkansas
Chicago, Illinois	Harrisonburg, Virginia	New York, New York
Cincinnati, Ohio	Hartford, Connecticut	Norfolk, Virginia
Clarksburg, West Virginia	Huntsville, Alabama	North Platte, Nebraska
Jackson, Mississippi	Idaho Falls, Idaho	Odessa-Midland, Texas
Columbus, Georgia	Cleveland, Ohio	Omaha, Nebraska
Columbus-Tupelo-West Point, Mississippi	Jackson, Tennessee	Paducah, Kentucky-Cape Girardeau, Missouri
Dallas-Fort Worth, Texas	Jacksonville, Florida	Parkersburg, West Virginia
Davenport, Iowa-Rock Island- Moline, Illinois	Jonesboro, Arkansas	Philadelphia, Pennsylvania
Dayton, Ohio	Joplin, Missouri	Pittsburgh, Pennsylvania
Denver, Colorado	Kansas City, Kansas and Missouri	Portland, Oregon
Detroit, Michigan	Knoxville, Tennessee	Portland, Maine
Dothan, Alabama	La Crosse-Eau Claire, Wisconsin	Providence, Rhode Island
Quincy, Illinois	Raleigh-Durham, North Carolina	Rapid City, South Dakota

Reno, Nevada	Rochester, Minnesota	Rockford, Illinois
Saint Joseph, Missouri	Saint Louis, Missouri	Salisbury, Maryland
Sherman, Texas Ada, Oklahoma	Savannah, Georgia	Shreveport, Louisiana
Sioux City, Iowa	Sioux Falls, South Dakota	South Bend, Indiana
Spokane, Washington	Springfield, Missouri	Springfield, Massachusetts
Tallahassee, Florida- Thomasville, Georgia	Terre Haute, Indiana	Toledo, Ohio
Kingsport-Bristol-Johnson City, Tennessee	Tucson, Arizona	Tulsa, Oklahoma
Twin Falls, Idaho	Washington, District of Columbia	Wheeling, West Virginia- Steubenville, Ohio
Wichita Falls-Lawton, Oklahoma	Wilkes Barre-Scranton, Pennsylvania	Wilmington, North Carolina
Yakima, Washington	Youngstown, Ohio	Yuma, Arizona

#### IV. FACTUAL ERRORS IN COMMENTS

16. The question of participation in EAS was discussed in several comments.

The Commission has made this clear in multiple rulemakings and that clarification is made in its current rules in Part 11:

“All broadcast stations and cable systems and wireless cable systems specified in §11.11 are categorized as Participating National (PN) sources unless by the FCC to be a Non-Participating (NN) sources (sic).”<sup>42</sup>

Although broadcast and cable systems and wireless cable systems may request Non-Participating status, they still must comply with EAS monitoring requirements<sup>43</sup> and, if granted Non-Participating status, would have to go off the air during a national emergency.<sup>44</sup>

---

<sup>42</sup> 47C.F.R. §11.41(a)

<sup>43</sup> 47C.F.R. §11.52

<sup>44</sup> 47C.F.R. §11.41(b)

In its comments, Telecommunications for the Deaf, Inc., Association of Late-Deafened Adults, Deaf & Hard of Hearing Consumer Advocacy Network, National Association of the Deaf, and Self-Help for Hard of Hearing People encourages the Commission to change its rules on EAS participation.

“Commenters encourage the Commission to revisit its rules to mandate all local and state broadcasters to participate in the EAS system.”<sup>45</sup>

The Santa Clara County Emergency Managers Association incorrectly claims:

“Emerging digital broadcasters are not required to install EAS equipment.”<sup>46</sup>

There is no exemption for digital broadcasters.<sup>47</sup>

Santa Clara County Emergency Managers Association erroneously claims also:

“Except for Presidential messages, EAS is voluntary. State or local messages may not be carried.”<sup>48</sup>

State and local messages may indeed be carried, at the discretion of the broadcaster or cable operator.<sup>49</sup>

17. Gary E. Timm calls for a change in EAS FCC Type Certification to provide ASCII text for HD Radio and RBDS.

---

<sup>45</sup> Comments of Telecommunications for the Deaf, Inc, Association of Late-Deafened Adults, Deaf & Hard of Hearing Consumer Advocacy Network, National Association of the Deaf, and Self-Help for Hard of Hearing People in EB Docket No. 04-296, submitted October 29, 2004 at C, Page 7.

<sup>46</sup> Comments of George Washburn for Santa Clara County Emergency Managers Association in EB Docket No. 04-296, submitted October 19, 2004, at 3b, Page 1.

<sup>47</sup> See §47CFR11.11(a).

<sup>48</sup> *Op. cit.* Santa Clara County Emergency Managers Association, at 3c, Page 1.

<sup>49</sup> See §47CFR11.55

“FCC requirements for EAS Encoder/Decoders should be changed to enable better integration of the EAS unit with the transmission of EAS alerts via HD Radio and RBDS. This would require EAS manufacturers to provide on the FCC-mandated RS-232 output port a ‘bare minimum’ version of the alert, in ASCII test.”<sup>50</sup>

This output is already required on EAS Encoders, Decoders, and Encoder/Decoder.<sup>51</sup> It will be impossible to limit this output to 64 characters because the location codes for an EAS protocol message can be up to 31.<sup>52</sup> If each location in an EAS message of 31 locations were only three characters long, Mr. Timm’s limit of 64 characters would be exceeded.

18. In his further comments, Henry B. Ruhwiedel is concerned that EAS devices would not provide those who could receive a message to see or hear it and react within a reasonable time.

“And in general the EAS digital information is not received by the public, only an aural or visual announcement contained within the EAS message block. I don’t think my TV set would even come on fast enough to see or hear the message if it was ‘commanded on’ automatically, I would likely not even be awake yet to see/hear the message and I would unplug it if I felt I was going to lose a night’s sleep from some crackpot who decides to have fun and wake everybody up. Again EAS is ineffective.”<sup>53</sup>

Most EAS products for professional use contain digital voice recorders. TFT, Inc. even manufactures a commercial-grade device that has a digital voice recorder for exactly the application Mr. Ruhwiedel describes. It will replay on command the audio message associated with EAS protocol codes. If personnel are away from the unit at the time the message is

---

<sup>50</sup> *Op. cit.* Gary E. Timm, Page 7.

<sup>51</sup> 47C.F.R.§11.32(a)(3) and 47CFR11.33(a)(7).

<sup>52</sup> 47C.F.R.§11.(c), Definition of “PSSCCC” field, “There may be 31 Location codes in an EAS alert.”

<sup>53</sup> Comments (further) of Henry B. Ruhwiedel in EB Docket No. 04-296, submitted October 22, 2004, Page 3.

received, they can replay the audio message after having been alerted with a warning signal that a message is waiting.

19. Although the Event code “NPT” has never been used, it is still a part of the Event code list.<sup>54</sup>

“PEPAC believes that the FCC should adopt a ‘NPT’-type EAS event code that could be used for National Periodic Testing. This could propagate through the network, which most other available codes will not, allowing better end-to-end testing of the PEP activation system.”<sup>55</sup>

If “NPT” is already in the Event code list, why adopt a new “NPT-type” code? The present NPT Event code could be used to head tests conducted by PEPAC or FEMA. Although the original idea in the “NPT” code was a hold-over from teletype distributed tests of the old Emergency Broadcast System, all FCC Type Certified EAS encoders, decoders, and encoders/decoders must have the capability of decoding and forwarding “NPT”.

20. FIPS codes used by FCC Type Certified EAS encoders, decoder, and encoder/decoders are delineated by the Commission’s EAS rules.

“The Location code uses the Federal Information Processing Standard (FIPS) numbers as described by the U.S. Department of Commerce in National Institute of Standards and Technology publication FIPS PUB 6-4.”<sup>56</sup>

Mr. Timm points out in his comments that “[T]he federal government should **mandate that EAS equipment manufacturers incorporate all 416 Marine Codes.**”<sup>57</sup>

However, EAS equipment manufacturers are also bound by Commission rules:

---

<sup>54</sup> 47C.F.R. §11.31(e).

<sup>55</sup> *Op. cit.* PEPAC, Page 4.

<sup>56</sup> 47C.F.R. §11.31(c).

<sup>57</sup> *Op. cit.* Gary E. Timm, Page 4.

“The EAS protocol, including any codes, must not be amended, extended or abridged without FCC authorization.”<sup>58</sup>

These extended Marine codes are not a part of FIPS 6-4<sup>59</sup> and should not be used until some time after they are officially incorporated into FIPS 6-4 by the Department of Commerce. This issue speaks to an incompatibility between the protocol used by NOAA Weather Radio and EAS because NOAA Weather Radio is not bound by the constraints of 47 C.F.R. Part 11 or FIPS 6-4. These “unofficial” FIPS codes should not be used presently because television and cable viewers see a geographical description of “Unknown Area” appear on their screens when these “unofficial” codes are used.

## V. CONCLUSION

TFT, Inc. encourages the Commission to consider the comments of those who called for continuation of EAS by providing text messaging in a non-proprietary manner, appointment of DHS as the lead agency for a national emergency alerting effort, and funding for emergency managers to become real stakeholders in EAS.

Respectfully submitted,

TFT, Inc.



Darryl E. Parker  
Senior Vice President

November 23, 2004

---

<sup>58</sup> 47C.F.R. §11.31(c).

<sup>59</sup> *Op. cit.* FIPS Publication 6-4, modified July 7, 2001.