TRILITHIC

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EASyCAP Linux 1.2 Test Results

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1 EAS TERMINOLOGY

Call Letters

The Call Sign of a radio station or a unique identifier contained in an eight character string. *See "Station Call Letters" under EAS Protocol Text.* Non Radio/TV stations often have to improvise when devising the 8 digit call letter codes for their Encoder/Decoder.

County Code

A six digit number representing locations throughout the United States and US Territories. *See EAS Protocol Text*.

Decoding

Converting Audio FSK to EAS Protocol Text. Decoding may also refer to the entire process of Converting to EAS Protocol Text, Recognizing the Attention Tone, Recording a Voice Message, and recognizing the EOM FSK. *See Encoding for the reverse operation.*

Duration

The amount of time for which an EAS alert is pertinent. *See Duration under EAS Protocol Text*.

EAS Header Text

See *EAS Protocol Text*.

EAS Protocol Text

A text string containing coded information about an EAS message.

1) **Sync Code:** The letters "ZCZC" that start every EAS message.
2) **Originator Code:** One of the following 3 digit codes representing the organization that started the EAS Alert.
   a) **PEP** - Primary Entry Point
   b) **CIV** - Civil Authority
   c) **WXR** - National Weather Service
   d) **EAS** - Broadcast or Cable System

   Note: The EAN (Emergency Action Notification Network) was a valid originator in the original 47CFR part 11 but is no longer valid. This is not the same as the EAN Event Code which is still valid.
3) **Event Code:** A three digit code representing the type of emergency, test, or notification. Currently 53 Event Codes are defined in the 47 CFR part 11. Two examples follow:
   a) **RMT** - Required Monthly Test
   b) **FFW** - Flash Flood Warning
4) **Location Code(s)** - One or more (maximum 31 per EAS message) 6 digit numbers representing locations throughout the United States and Territories. Usually these codes represent a County or Entire State. The location codes used in EAS contain a 1/9th county digit (usually zero for "Entire County"), followed by a five digit number defined in FIPS 6-4/6-5 (Federal Information Processing Standards).
5) **Duration** - A four digit number representing the amount of time the other information in the text is expected to be accurate or important.
6) **Time Stamp (Time/Date stamp)** - A 7 digit number representing the time at which the message was first originated. Specifically, a three digit number representing the day-of-the-year, followed by a 4 digit number representing the time (in 24 hour format). Both the day and the time referenced are in Universal Coordinated Time (UTC) which is the same as Greenwich Mean Time (GMT).
7) **Station Call Letters** - An 8 digit (including spaces) identifier of the station sending the message. Unlike the other fields, this field changes when an EAS alert is received, then retransmitted. Station Call Letters are excluded from EAS Duplicate Message checks (a message may still be a duplicate even if the call letters are different).

Emergency Alert System (EAS)

The system for creating and disseminating emergency information mandated by the U.S. government, and defined in 47 CFR part 11.

Encoding

Converting EAS Header Text data to Audio. This audio is created using Frequency Shift Keying (FSK, rapidly switching between two different tones). Encoding may also refer to the entire process of entering the parameters for an EAS Message, recording a voice message, and sending the combined EAS Header Text FSK, Attention Tone, Voice Message, and EOM FSK.

Event

One of 53 types of emergencies or tests defined for EAS. Each Event has an associated three letter code. *See EAS Protocol Text.*

Forwarding

In an EAS Encoder/Decoder Forwarding is synonymous with retransmitting an EAS message received "".

FIPS Code

A six digit number representing locations throughout the United States and Territories. *See EAS Protocol Text.*

Frequency Shift Keying (FSK)

Converting text or numeric data to audio by rapidly switching between two different tone frequencies at a specific rate. The higher tone (Mark Tone) indicates a numeric value of one, the lower tone (Space Tone) indicates a numeric value of zero. In EAS, the Mark Tone frequency is 2083.3 Hz, and the Space Tone is 1562.5 Hz. The bit rate (speed at which a one or zero is represented by a tone) is 520 bits-per-second.

Location Code

A six digit number representing locations throughout the United States and Territories. *See EAS Protocol Text.*

Origination Time

The time at which an EAS message was first sent. A message being retransmitted by an Encoder/Decoder will contain the same origination time as the message received. *See "Time Stamp" under EAS Protocol Text.*

Originator

The person or station that first encodes a given EAS message, **not** the person or station that receives, then resends the alert.

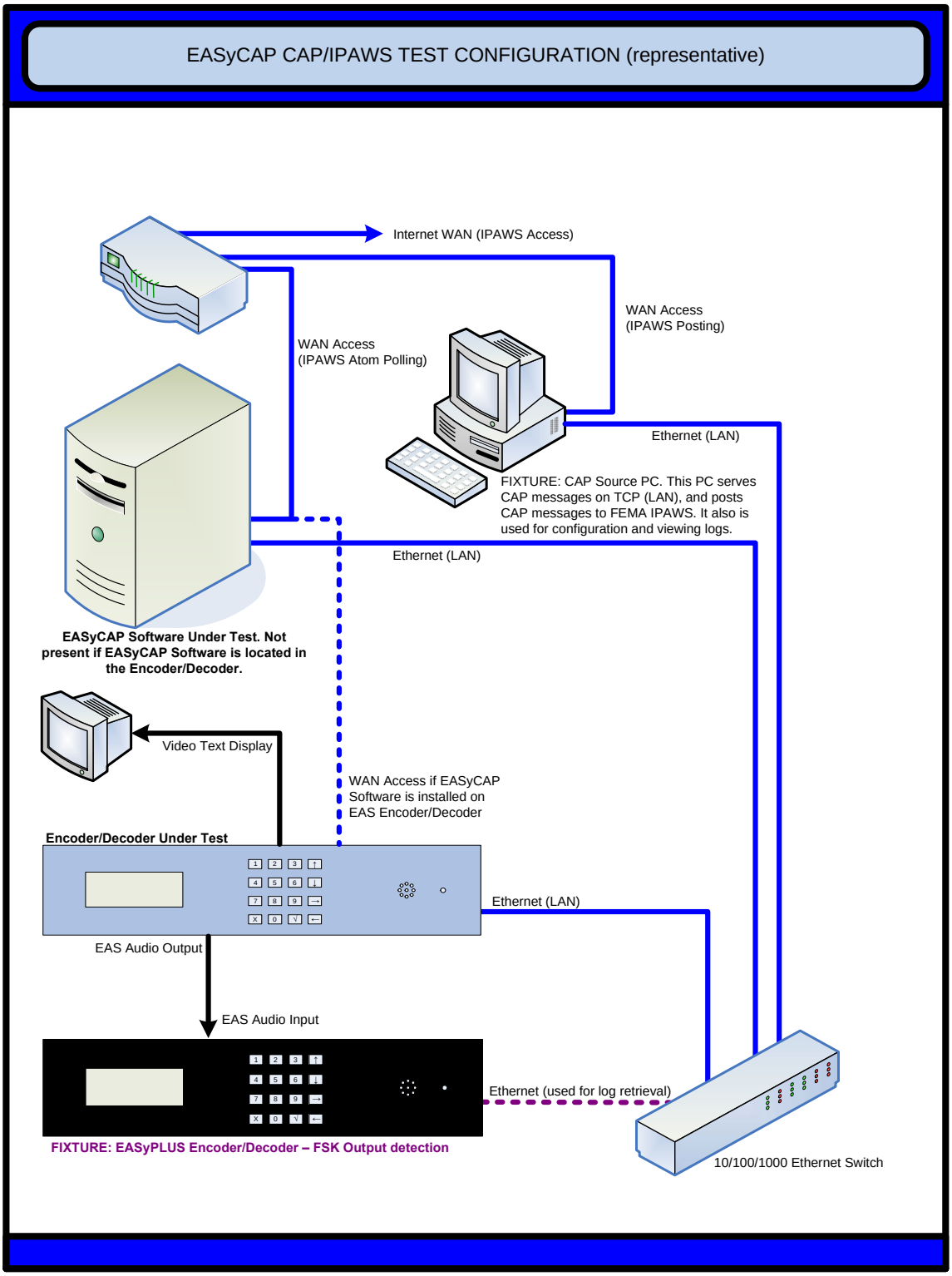
Translation

A plain English (or other language) representation of the information contained in the EAS Protocol Text. The Translation is constructed by the Encoder/Decoder primarily by replacing the codes contained in the EAS Protocol Text with an English phrase that describes the code. The Translation is displayed to viewers of TV, Cable TV, and IPTV subscribers during EAS alerts and is the sole source for Emergency Video (which is how a TV station can display Video of an alert it receives from a Radio station).

Voice Message

The portion of an EAS alert that is spoken and recorded to relay details about an Emergency. The Voice Message follows an Attention Tone in an EAS Message, and is terminated by EOM FSK. EAS Decoders record the voice message when a message is received "off air". EAS Encoders (usually the same unit) play back the voice message that was recorded. The originator of an EAS message should record a voice message prior to sending an alert.

2 TEST CONFIGURATION

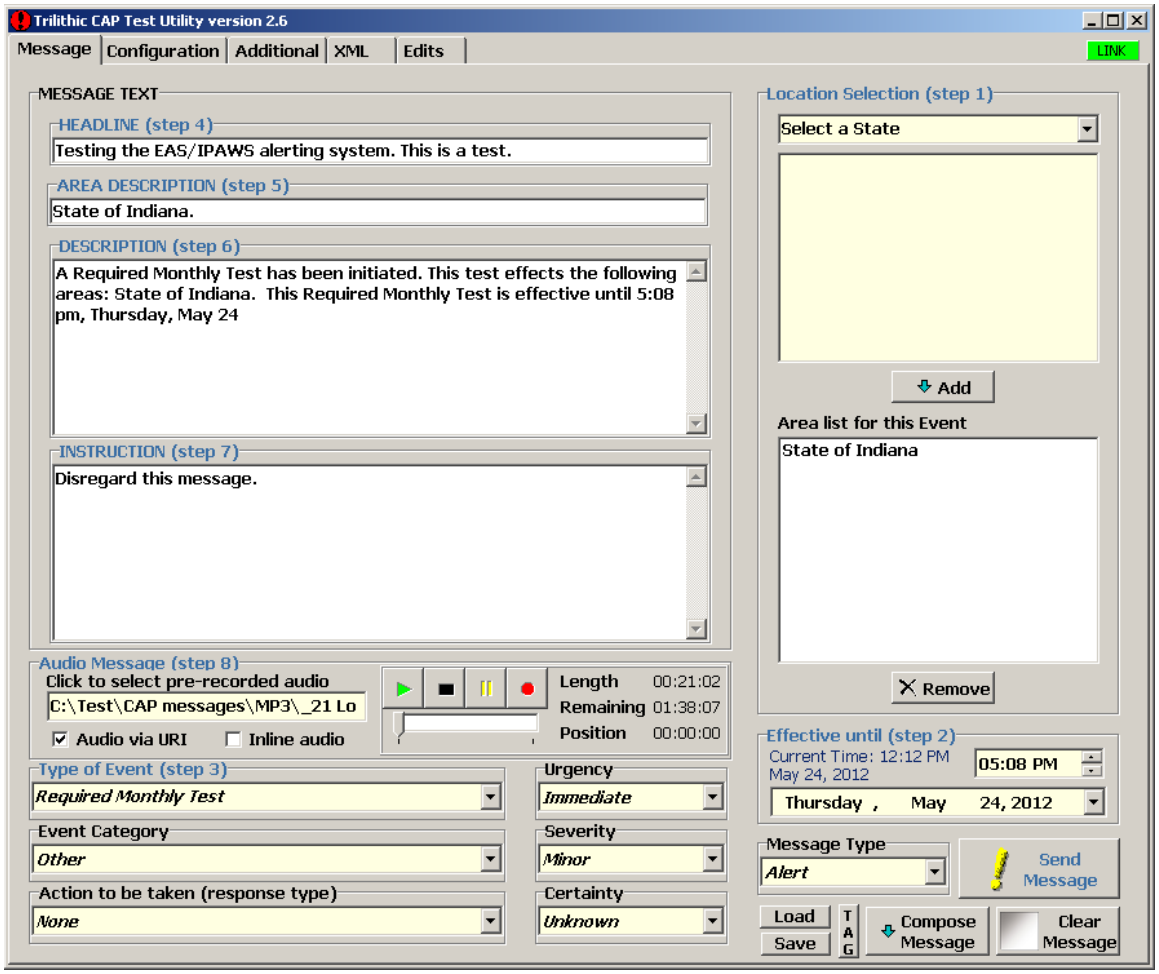


3 TEST PROCESSES

Sending or Generating CAP messages:

Sending (generating) a CAP message when initiating a test is performed using Trilithic CAP Test Utility software, which has the ability to act as it's own server for CAP messages, as well as to post messages to the IPAWS Soap interface for retrieval from the IPAWS Atom feed (TDL). Message parameters and audio settings are configured according to the specifics of the test being performed, then the utility is activated to provide a CAP message to the EASyCAP service.

During testing, use of the IPAWS TDL (Atom feed) is recommended when CAP message content meets posting requirements. Many messages, including valid CAP messages may not be permitted or posted to the Atom feed, or may require precise ordering, etc. In these cases use the internal TCP server of the software. Audio may be served using the built-in FTP server, an external FTP server, or an external HTTP server. Use of an (Apache) web server (serving the Test Utility's File Local Path) is recommended as this is likely to be close to a real-world CAP audio configuration.



Forwarding Events

Forwarding an Event refers to the Encoder/Decoder act of retransmitting an EAS message received at one of its audio (or radio) inputs, or from the EASyCAP software. If the Encoder/Decoder is working as designed, this requires that configuration options match the incoming EAS message.

- Event Enabled: The three letter Event code of the incoming message must be enabled on the EAS tab of the configuration software.
- Selected County: At least one of the FIPS codes of the incoming message must correspond to at least one of the State codes or County/Subdivision combinations configured in the Counties tab of the configuration software.

Configured to Forward: In order for an EAS message to be Configured to Forward, the Encoder/Decoder must be configured in such a way that the EAS message meets all the requirements to be sent to the system. If testing the ability to reject a message for a given attribute, two messages should be sent. One message should be generated and observed to be sent out (forwarded), then the attribute under test should be changed, and the message sent to check for message rejection.

Message Verification: Messages that are forwarded are checked on the Fixture EASyPLUS Encoder/Decoder to insure that the FSK was properly encoded. Properly Encoded messages will appear in the EASyPLUS log, which includes the EAS Header Text. In addition, the UUT Encoder/Decoder should be monitored using the front-panel speaker to insure recorded or Text-to-Speech audio is presented as appropriate to the test being performed. The Text output can be viewed using the Video Output of the UUT Encoder/Decoder and an NTSC Monitor.

4 EAS MESSAGE EVENT FILTERING

1) Method:
   a) Each Event type sent using the CAP Test Utility.
   b) Each Event type sent with the Event Disabled in the Encoder/Decoder, but the Encoder/Decoder otherwise configured to forward the messages (counties and times match, etc).
   c) Each Event type sent with the Event Enabled and the Encoder/Decoder configured to forward the messages
2) Expected Results:
   a) Disabled Events
      i) Receipt logged by the Encoder/Decoder
      ii) Not logged as sent in the Encoder/Decoder
      iii) Status of receipt log indicates event not selected for retransmission
   b) Enabled Events
      i) Receipt and transmission logged by the Encoder/Decoder
      ii) Transmitted to the Fixture EASyPLUS (verified in the EASyPLUS log)
      iii) Transmitted to Video/Audio by the Encoder/Decoder
3) Results: See Table below for results

Event	Enabled	Disabled	Pass	Fail	Version
EAN	X		X		1.2
EAT	X				
RMT	X		X		1.2
RWT	X		X		1.2
ADR	X		X		1.2
AVA	X		X		1.2
AVW	X		X		1.2
BZW	X		X		1.2
CAE	X		X		1.2
CDW	X		X		1.2
CEM	X		X		1.2
CFA	X		X		1.2
CFW	X		X		1.2
DMO	X		X		1.2
DSW	X		X		1.2
EQW	X		X		1.2
EVI	X		X		1.2
FFS	X		X		1.2
FFA	X		X		1.2
FFW	X		X		1.2
FLS	X		X		1.2
FLA	X		X		1.2
FLW	X		X		1.2

FRW	X		X		1.2
HMW	X		X		1.2
HLS	X		X		1.2
HUA	X		X		1.2
HUW	X		X		1.2
HWA	X		X		1.2
HWW	X		X		1.2
LAE	X		X		1.2
LEW	X		X		1.2
NIC	X		X		1.2
NMN	X		X		1.2
NPT	X		X		1.2
NUW	X		X		1.2
RHW	X		X		1.2
SMW	X		X		1.2
SPS	X		X		1.2
SPW	X		X		1.2
SVA	X		X		1.2
SVR	X		X		1.2
SVS	X		X		1.2
TOE	X		X		1.2
TOA	X		X		1.2
TOR	X		X		1.2
TRA	X		X		1.2
TRW	X		X		1.2
TSA	X		X		1.2
TSW	X		X		1.2
VOW	X		X		1.2
WSA	X		X		1.2
WSW	X		X		1.2
EAN		X	X		1.2
EAT		X	X		1.2
RMT		X	X		1.2
RWT		X	X		1.2
ADR		X	X		1.2
AVA		X	X		1.2
AVW		X	X		1.2
BZW		X	X		1.2
CAE		X	X		1.2
CDW		X	X		1.2
CEM		X	X		1.2
CFA		X	X		1.2
CFW		X	X		1.2
DMO		X	X		1.2

DSW		X	X		1.2
EQW		X	X		1.2
EVI		X	X		1.2
FFS		X	X		1.2
FFA		X	X		1.2
FFW		X	X		1.2
FLS		X	X		1.2
FA		X	X		1.2
FLW		X	X		1.2
FRW		X	X		1.2
HMW		X	X		1.2
HLS		X	X		1.2
HUA		X	X		1.2
HUW		X	X		1.2
HWA		X	X		1.2
HWW		X	X		1.2
LAE		X	X		1.2
LEW		X	X		1.2
NIC		X	X		1.2
NMN		X	X		1.2
NPT		X	X		1.2
NUW		X	X		1.2
RHW		X	X		1.2
SMW		X	X		1.2
SPS		X	X		1.2
SPW		X	X		1.2
SVA		X	X		1.2
SVR		X	X		1.2
SVS		X	X		1.2
TOE		X	X		1.2
TOA		X	X		1.2
TOR		X	X		1.2
TRA		X	X		1.2
TRW		X	X		1.2
TSA		X	X		1.2
TSW		X	X		1.2
VOW		X	X		1.2
WSA		X	X		1.2
WSW		X	X		1.2

5 MESSAGE FILTERING: LOCATION FILTERING

	Test name	Condition	Expected Result	Result	Version
1	Min FIPS	1 County Sent and configured to forward	Message Forward	**Pass**	**1.2**
2	Max FIPS	31 Counties Sent, at least one configured to forward	Message Forward	**Pass**	**1.2**
3	Max +1 FIPS	32 Counties Sent, at least one configured to forward	Message transmitted with first 31 FIPS.	**Pass**	**1.2**
4	No FIPS	0 counties sent	Message not logged at Encoder/Decoder.	**Pass**	**1.2**
5	Entire State	018000 (Entire State of Indiana) FIPS sent And configured to forward	Message Forward	**Pass**	**1.2**
6	Entire Country	000000 (Entire U.S.) FIPS sent and configured to forward. Try EAN and Non-EAN.	Message Forward if EAN. Message rejected if not EAN.	**Pass**	**1.2**
7	9th County Forward	Each 1/9th code sent, each configured to forward at time sent.	Message Forward	**Pass**	**1.2**
8	9th County Reject	Each 1/9th county code sent, each configured to NOT forward at time sent. County selected is configured to forward a different 9th county code.	Message logged but not forwarded.	**Pass**	**1.2**
9	Unprogrammed FIPS	Message sent with a valid FIPS not in the programmed locations list.	Message reject. No location match.		
10	Invalid FIPS	Message sent with an invalid (not in current standard) FIPS code AND a valid FIPS code programmed for forwarding is sent.	Message Forward	**Pass**	**1.2**

Note1: Counties Sent is in reference to the FIPS codes encoded using the Test Utility.
Note 2: 1/9th code sent is in reference to hand-editing the CAP XML in the Test Utility to alter FIPS codes to represent 1 ninth of a county per 47CFR part11 EAS protocol.
Note 3: Ninth county codes are configured to forward, or not forward, using the EAS Configuration in the Counties GUI, Subdivision window.
Note 4: Invalid FIPS codes can be created and sent by hand editing the locations in the Test Utility.

6 MESSAGE FILTERING: ORIGINATOR CODE FILTERING

	Test name	Condition	Expected Result	Result	Version
1	Valid Originators	Configure a message for forwarding and try sending each valid originator code with the message.	All Attempts forward	**Pass**	**1.2**
2	EAN Originator	Send a valid, forwardable message with the exception that EAN is used as the Originator	Message not logged, or logged as an error unless EAN or EAT event code	**Pass**	**1.2**
3	Invalid Originator	Send a valid, forwardable message with the exception that ORG code is an unpublished code (Use “BBC”).	Message not logged or logged as an error.	**Pass**	**1.2**

Note 1: Valid Originator codes are WXR, EAS, PEP, and CIV.
Note 2: The EAN Originator Code (not the EAN Event Code) is tested as a special case because it used to be a valid Originator code.
Note 3: Invalid ORG codes can be created and sent by hand editing XML in the Test Utility.

7 MESSAGE FILTERING: TIME STAMP AND DURATION

	Test name	Condition	Expected Result	Result	Version
1	Expiration Imminent	Send a valid, forwardable message with a Duration of 1 hour, and a time stamp that is earlier than the ENCODER/DECODER clock by 58 minutes.	Message Forward	**Pass**	**1.2**
2	Just Expired	Send a valid, forwardable message with a Duration of 1 hour, and a time stamp that is earlier than the ENCODER/DECODER clock by 65 minutes.	Message not forwarded, Message logs as expired.	**Pass**	**1.2**
3	Expired by a day	Send a valid, forwardable message with a Duration of 1 hour, and a time stamp that is earlier than the ENCODER/DECODER clock by 24 hours 30 minutes.	Message not forwarded, Message logs as expired.	**Pass**	**1.2**
4	Short Term Precognition	Send a valid, forwardable message with a Duration of 1 hour, and a time stamp that is later than the ENCODER/DECODER clock by 20 minutes.	Message should forward	**Pass**	**1.2**
5	Long Term Precognition	Send a valid, forwardable message with a Duration of 1 hour, and a time stamp that is later than the ENCODER/DECODER clock by 180 minutes.	Message should not forward. Message log should show an invalid origination time.	**Pass** Logs as "time in future"	**1.2**
6	Max Duration	Send a valid, forwardable message with a Duration of 99 hours and 30 minutes, and a time stamp that is 99 hours and 15 minutes earlier than the ENCODER/DECODER clock.	Message should forward. Message log should identify expiration time as 15 minutes after the receive time.	**Pass**	**1.2**

Note: The Time Stamp of a message can be controlled by changing the clock on the PC running the Test Utility or by hand editing the XML on the utility before sending.

8 CAP LEVEL PROCESSING

	Test name	Condition	Expected Result	Result	Version
1	EAS Event Processing	Send a valid CAP message with each of the EAS Event Codes.	CAP Message formatted for EAS and sent to Playback	**Pass**	**1.2**
2	EAS Originator	Send a valid CAP message with each of the EAS Originator Codes.	CAP Message formatted for EAS and sent to Encoder/Decoders	**Pass**	**1.2**
3	Category ignored	Send messages with each of the CAP Category values	CAP Message formatted for EAS and sent to Encoder/Decoders	**Pass**	**1.2**
4	ResponseType ignored	Send messages with each of the CAP ResponseType values	CAP Message formatted for EAS and sent to Encoder/Decoders	**Pass**	**1.2**
5	Urgency ignored	Send messages with each of the CAP Urgency values	CAP Message formatted for EAS and sent to Encoder/Decoders	**Pass**	**1.2**
6	Severity ignored	Send messages with each of the CAP Severity values	CAP Message formatted for EAS and sent to Encoder/Decoders	**Pass**	**1.2**
7	Certainty ignored	Send messages with each of the CAP Certainty values	CAP Message formatted for EAS and sent to Encoder/Decoders	**Pass**	**1.2**
8	Update adds references	Send an Update message with references. Send the updated message afterward.	The updated message should be rejected (previously updated message discarded)	**Pass**	**1.2**
9	Cancel adds references.	Send an Update message with references. Send the cancelled message afterward.	The cancelled message should be rejected (previously cancelled message discarded)	**Pass**	**1.2**
10	Error Ignored	Send an otherwise valid message with an Error msgType.	Message should be rejected due to msgType.	**Pass**	**1.2**
11	Ack Ignored	Send an otherwise valid message with an Ack msgType.	Message should be rejected due to msgType.	**Pass**	**1.2**
12	Duplicate messages discarded.	Send the same CAP message over both IPAWS OPEN and TCP.	Only one of the messages should be played on the system. The other	**Pass**	**1.2**

			should be logged as discarded.		
13	Duplicate CAP Reference reject	Send two different CAP messages with the same identifier/sender/sent	Message should be discarded due to duplicate CAP identifier fields.	**Pass**	**1.2**
14	Duplicate EAS Protocol reject	Send two different CAP messages that resolve to the same EAS protocol text.	Message should be discarded as a duplicate EAS message.	**Pass**	**1.2**
15	Audio by URI	Send a message with a URI referencing an audio file.	Audio should be downloaded and played on the system.	**Pass**	**1.2**
16	Audio by Deref	Send Mime encoded audio in the DerefURI element of a CAP message.	Audio should be decoded and played on the system.	**Pass**	**1.2**
17	Streaming Audio	Send an EAN message with a reference to a streaming audio source, and streaming enabled in the CAP configuration.	The EAN should display on the system. The Encoder speaker should play the streaming audio.	**Pass**	**1.2**
18	No Audio	Send a message with NO audio.	The message should play out with only EAS tones.	**Pass**	**1.2**
19	Max Audio	Send a message with 2 minuets of audio (Bach Minuet in G 110 metre).	The message should play out with attention tone and 2 minutes of audio.	**Pass**	**1.2**
20	Minimum FIPS	Send a message with one Valid FIPS code.	The message should play out on the system.	**Pass**	**1.2**
21	Maximum FIPS	Send a message with 31 FIPS codes (at least on Valid)	The message should play out on the system.	**Pass**	**1.2**
22	Description Text used	Send a message and observe the STB Crawl.	The Description text should be visible on the STB.	**Pass**	**1.2**
23	Instruction Text used	Send a message and observe the STB Crawl.	The Instruction text should be visible on the STB.	**Pass**	**1.2**
24	Missing Identifier	Send a message without an identifier element.	The message should be discarded.	**Pass**	**1.2**
25	Missing Sender	Send a message without a sender element.	The message should be discarded.	**Pass**	**1.2**
26	Missing Code	Send a message with no Code elements	The message should be discarded.	**Pass**	**1.2**
27	Missing IPAWS	Send a message without an IPAWS Code element	The message should be discarded.	**Pass**	**1.2**
28	Missing Severity	Send a message with no Severity element	The message should be discarded.	**Pass**	**1.2**
29	Missing eventCode	Send a message with no eventCode element	The message should be discarded.	**Pass**	**1.2**

30	Missing Expires	Send a message with no Expires element	The message should be discarded.	**Pass**	**1.2**
31	Missing EAS Originator	Send a message with no EAS originator element	The message should be discarded.	**Pass**	**1.2**
32	Invalid EAS Originator	Send a message with an invalid EAS originator element	The message should be discarded.	**Pass**	**1.2**
33	Invalid Status	Send messages with each of the CAP status values.	Only the status “Actual” message should be processed.	**Pass**	**1.2**
34	Invalid Scope	Send a message with each of the CAP Scope values.	Only the scope of “Public” message should be processed.	**Pass**	**1.2**
35	TCP CAP	Send a message via TCP	Verify message plays out on the system	**Pass**	**1.2**
36	IPAWS Atom feed	Send a message via IPAWS OPEN	Verify message plays out on the system	**Pass**	**1.2**
37	Atom feed source loss	Add an Atom feed and point it to an invalid URL (but valid server).	Log should indicate loss of feed.	**Pass**	**1.2**
38	Atom feed server loss	Add an Atom feed and point it to an invalid server.	Log should indicate loss of feed.	**Pass**	**1.2**
39	Atom feed resumes.	Add the FEMA Atom URI to the Hosts file and point to an invalid address. Wait for server loss event. Remove the host entry and flush DNS. Send message to FEMA Atom.	Next EASyCAP Atom Poll should retrieve message.	**Pass**	**1.2**
40	TCP CAP Source offline detection	After allowing a connect to the TCP CAP source, disable the TCP server.	The CAP Service should register a CAP source failure.	**Pass**	**1.2**
41	Include EAS Header	Send a message with the Include EAS Header Translation option enabled.	The EAS Header translation should be included in the crawl text.	**Pass**	**1.2**
42	Include Headline	Send a message with the Include CAP Headline option enabled.	The CAP Headline should be included in the crawl text.	**Pass**	**1.2**
43	Include Area Description	Send a message with the Include CAP Area Description option enabled.	The CAP Area Description should be included in the crawl text.	**Pass**	**1.2**
44	Min CAP version	Send a message with a CAP version below the configured minimum.	The message should be discarded.	**Pass 1.1**	**1.2**
45	Max CAP version	Send a message with a CAP version above the configured maximum.	The message should be discarded.	**Pass 1.2**	**1.2**
46	Use Spanish Audio	Configure the Service to	Spanish audio	**Pass**	**1.2**

		enable Spanish audio, then send a message. Repeat with Spanish audio disabled on all Encoders.	should only play if enabled for the Endecs.		
47	Use Spanish Text	Configure the Service to enable Spanish text, then send a message. Repeat with Spanish text disabled on all Encoders.	Spanish text should only play if enabled for the Endecs.	**Pass**	**1.2**
48	Previously cancelled message discarded	Send a cancellation message followed by a message identified by the cancellation message.	The Cancelled message should log as “previously cancelled message discarded”	**Pass**	**1.2**
49	Previously updated message discarded	Send an update message followed by a message identified by the update message.	The Update message should play out. The referenced message should log as “previously cancelled message discarded”	**Pass**	**1.2**
50	Cancellation message with no INFO block Passes	Send a cancellation message with no INFO block, followed by a normal message identified by the cancellation message.	The Cancelled message should log as “previously cancelled message discarded”	**Pass**	**1.2**
51	EAN Termination by message cancellation	Send an EAN with streaming content. Follow with a cancellation message.	The EAN should stop playback after receipt of the cancelling message.	**Pass**	**1.2**
52	EAN Termination by message update	Send an EAN with streaming content. Follow with an update message.	The EAN should stop playback after receipt of the update message. The update message should play out normally.	**Pass**	**1.2**
53	TTS Audio Enabled	Send a message with no audio resource URI and TTS Enabled	Message should play out with TTS Audio	**Pass**	**1.2**
54	TTS Audio Disabled	Send a message with no audio resource URI and TTS Disabled	Message should play without voice audio	**Pass**	**1.2**
55	TTS Audio on audio fetch fail	Send a message with an invalid audio URI and TTS enabled	Message should play out with TTS Audio	**Pass**	**1.2**
56	No TTS on Audio URI	Send a message with a valid audio URI and TTS enabled	Message should play out with URI referenced Audio	**Pass**	**1.2**
57	Area Block Processing	Send a message with multiple, valid area blocks containing separate FIPS. Try with Area Block option on and	If Area Block processing off, only the first block should be processed, otherwise all should	**Pass**	**1.2**

		off.	be.		
58	Configured States	Send messages (IPAWS Atom) for states included in, and excluded from the States to Process list.	Only messages including states in the list should be sent to the Encoder.	**Pass**	**1.2**
59	No Encoding version	Send a message encoded in UTF-8 but with no Version tag	Message should process normally	**Pass**	**1.2**
60	English Info search	Send a message with the first Info block es-us and the next en-us. Include an audio URI.	Message should process with URI audio and en-us text.	**Pass**	**1.2**
61	Default Info Search	Send a message with the first Info block es-us and the next with no designator but English info. Include an audio URI.	Message should process with URI audio and en-us text.	**Pass**	**1.2**
62	Audio URI without file size	Send a message with an audio URI but no file size info	Message should process with URI audio	**Pass**	**1.2**
63	Audio URI with bad file size	Send a message with an audio URI and incorrect file size info. TTS enabled.	Message should process with TTS. Log should show audio reject.	**Pass**	**1.2**
64	Streaming MimeType	Send a normal message with a streaming MimeType. TTS enabled.	Log should note MimeType and message should process TTS audio.	**Pass**	**1.2**
65	EAN TTS	Send an EAN with TTS enabled and no audio URI.	EAN should process TTS and self terminate.	**Pass**	**1.2**
66	EAN TTS on Audio file Fail	Send an EAN with TTS enabled and an invalid audio URI.	EAN should process TTS and self terminate.	**Pass**	**1.2**
67	EAN TTS on Audio stream Fail	Send an EAN with TTS enabled and an invalid audio stream URI.	EAN should process TTS and self terminate.	**Pass**	**1.2**
68	Translation Effective Time	Configure the CAP Server Windows Time for several U.S. time zones and times, both in and out of daylight savings time periods. Send messages for each time configuration.	All message should display the correct “effective until” time in the translation text.	**Pass**	**1.2**
69	EAN uses English Info	Send a message in which the streaming reference is in the first en-us block (not block zero)	The streaming reference should be processed.	**Pass**	**1.2**
70	CAP Stress	Send messages including a valid audio URI, as well as messages that will render via TTS. Send a minimum of 100	Logs should show the processing of the messages. The last two messages should process through the	**Pass**	**1.2**

		of each. Format messages such that they are processed through the Encoder/Decoder. Send each type of message at the end of the test and watch them play out.	system correctly, including the playback of downloaded audio and TTS audio.		

9 MISCELLANIOUS

	Test name	Condition	Expected Result	Result	Version
1	Production Ready	Configure the unit as described in the product documentation. Send a valid CAP message to FEMA IPAWS.	The message should be retrieved from the Atom feed and transmitted.	**Pass**	**1.2**
2	Message Queue	Rapidly send several messages that will pass retransmit filters.	The messages should be queued, then play out in the order received.	**Pass**	**1.2**