



# Forensic Technologies Group

*world leading truth testing technologies*

**DVSA - systems information**



## **FORENSIC DIGITAL STRESS ANALYSIS SYSTEMS**

### **Complete system packages**



***FTG DVSA packages include quality components enabling you to undertake reliable and accurate in-house truth testing***

***Our systems are user friendly and operators require only basic computer skills***

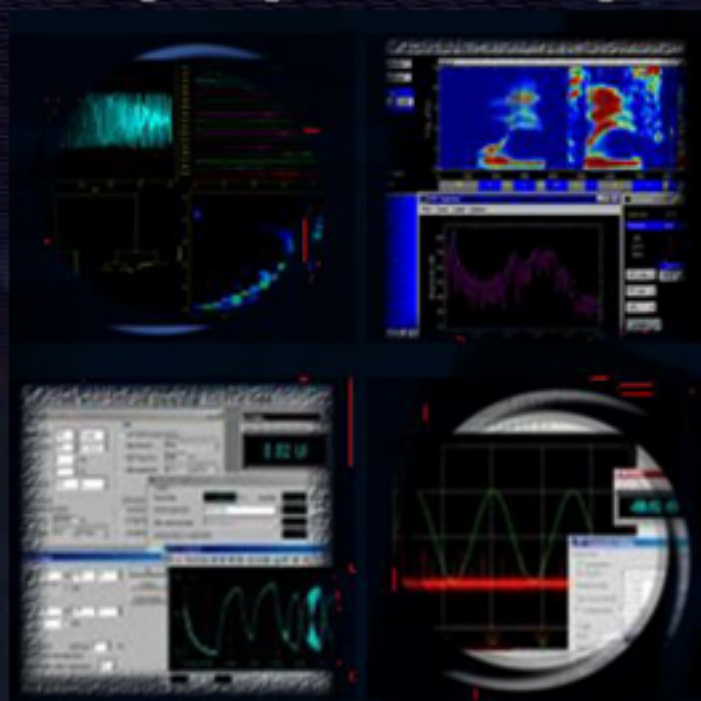
***Formal interview testing can be completed in 45 minutes***

***On-going support & mentoring is provided by professional investigators in your own region or location***



## **Research & Development**

### **Cutting Edge Technologies**



***In-house research & development programs ensure our technologies remain at the cutting edge***



***Our latest DVSA system version provides unique benefits not previously available in Voice Stress Analysis Systems***



## ***Forensic Digital Voice Stress Analysis***

### ***Formal Interview Testing***



- 1. Conduct pre-test interview with the subject using neuro linguistic programming to remove defence barriers.**
- 2. Formulate questions appropriate to your enquiries with the subject. These will include Relevant, Irrelevant and Control questions**
- 3. Interview the subject using system protocols and designed question formats.**
- 4. Undertake Chart Pattern Analysis using FTG's unique multi-scale and expandable options for in-depth analysis and rating**
- 5. Analysis will determine Deception Indicated (DI) or No Deception Indicated (NDI)**



## ***Subject Interview***

***Record interview direct into DVSA computer or Digital recorder for later input***



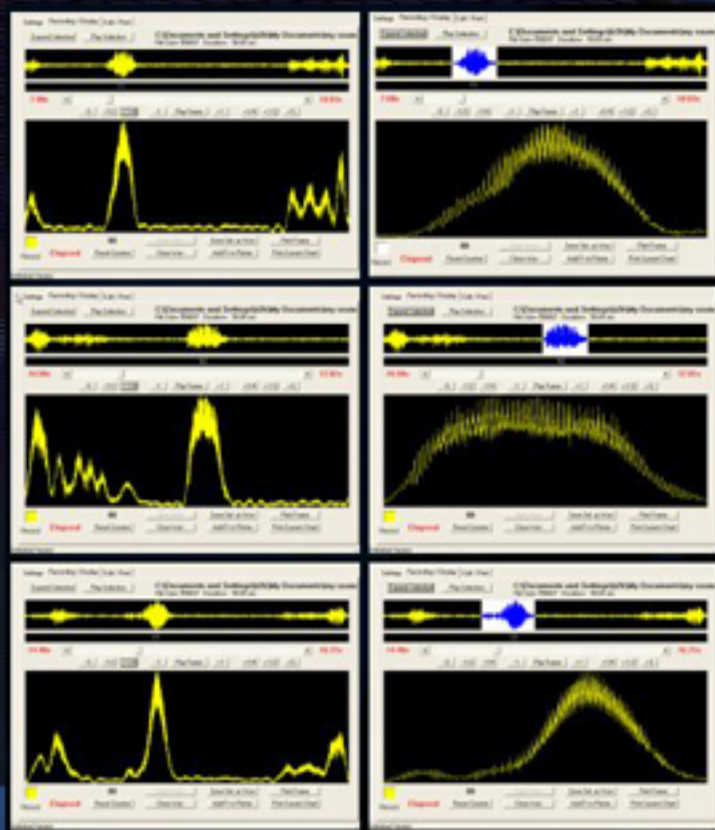
***After conducting the pre-test interview using system protocols, you are ready to conduct formal question testing***

***Select the record function and you can begin test questions knowing that the entire test will be recorded for analysis***

***On completion of test questions, select the stop record function and you are ready to start the analysis phase***



## Formal Test Analysis - chart comparisons



Displayed here are the first three questions in an 11 question formal test set

Charts are displayed in normal view on the left and expanded view on the right

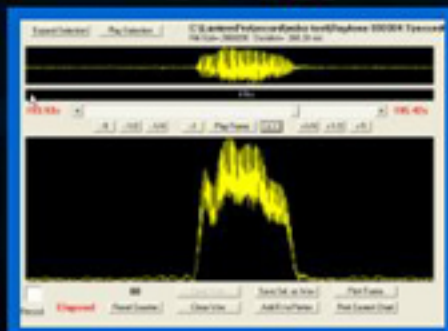
In this example, the middle charts display the highest stress value  
Using DVSA system test protocols, comparisons are made of all question responses to obtain a final analysis

A final call of DI "Deception Indicated" or NDI "No Deception Indicated" can be easily identified

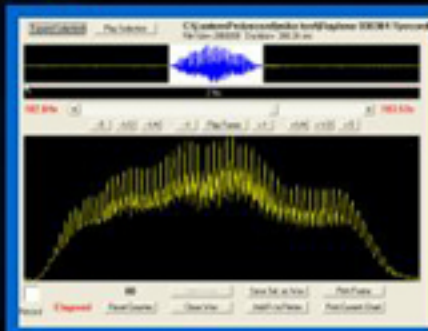


## Formal Test Analysis - chart comparisons

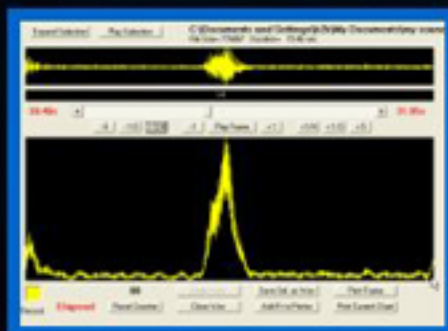
single utterance HIGH stress



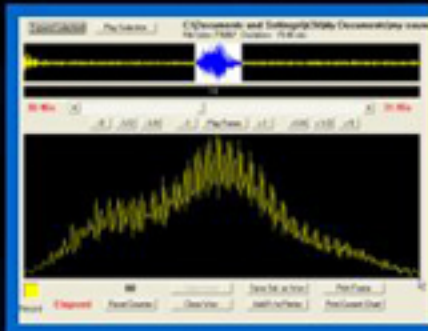
HIGH stress expanded



single utterance LOWER stress



LOWER stress - expanded

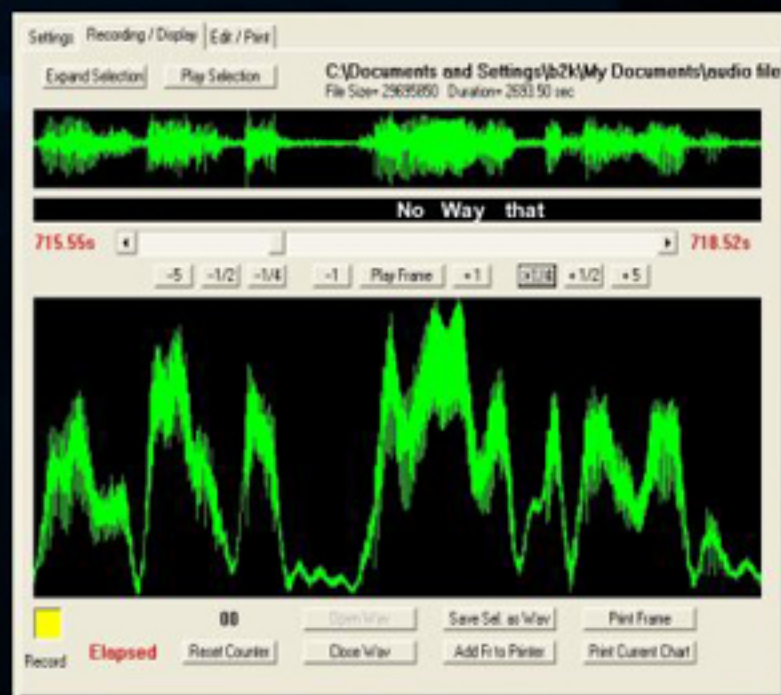


The differences in high stress or low stress are easily identifiable

The expanded view ensures the highest accuracy is obtained and provides a new and improved method of VSA analysis



## DVSA System program main screen view



**Our new system version provides a simple method for conducting Narrative Analysis of unstructured conversations**

**A logical working front end makes analysis and navigation an easy process**

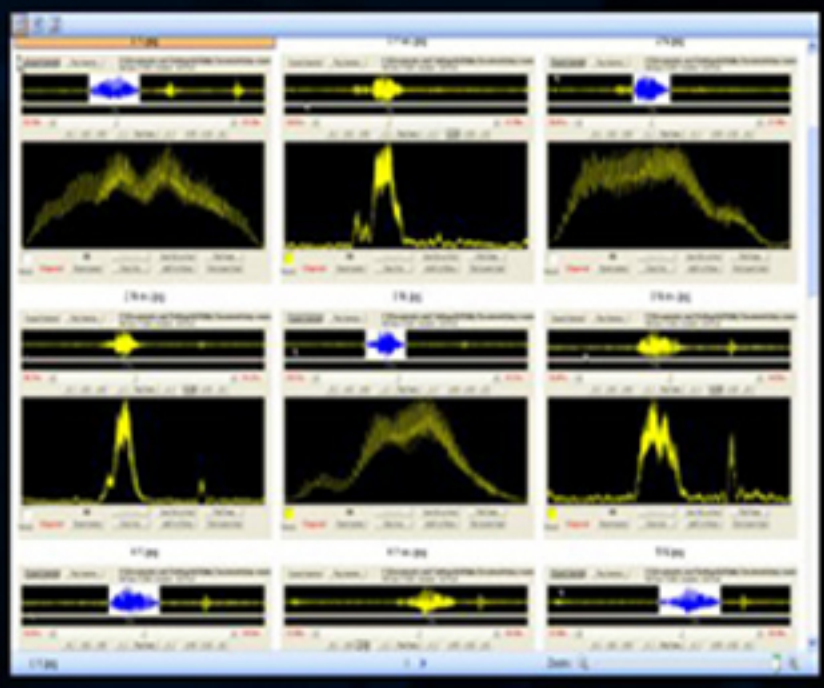
**Text can be added below the relevant waveform for easy identification and reference when conducting Narrative or Single Utterance analysis**

**Play back of audio enables instant matching of relevant speech to its wave pattern**



## *On-screen multi-view of charts*

### *On-screen multi-view of normal & expanded chart comparisons*



**Multi-view & expanded on-screen chart analysis provides the highest accuracy analysis of any VSA system**

**Charts can be easily rearranged on screen. This function is particularly useful when comparing charts of similar stress values.**



## **Digital Audio Recording Options**

***Recording options to suit Formal, Unstructured or Covert Truth Testing***

**Depending on requirements, you can input audio directly into your DVSA computer, or record it onto the supplied Sony Digital Voice Recorder.**

**Direct input enables you to instantly see the electronic processing response to each question.**

**The supplied Sony MS515 with memory stick allows recording of 12 hours of high quality digital audio, with direct USB download for processing into the DVSA computer**



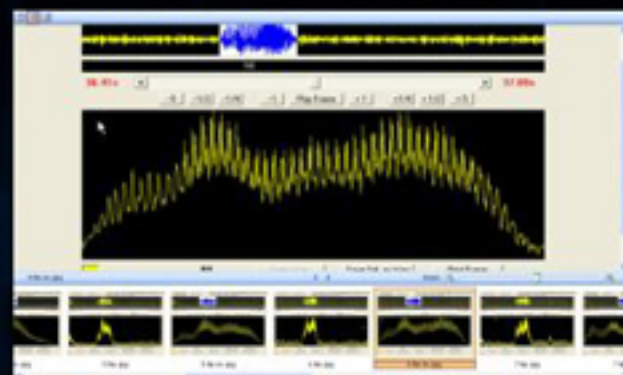
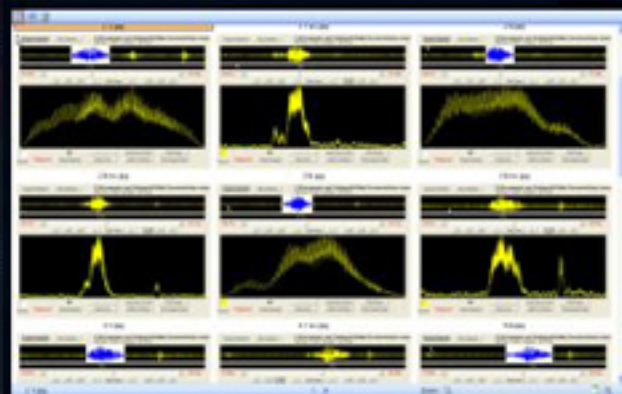


## Benefits of FTG DVSA Systems

**Only FTG systems provide single utterance, multi utterance and narrative analysis capabilities with audio play back and wave expansion functions**

**Other benefits include multi-view on screen chart comparison for in-depth analysis & easy identification of sound waves**

**The highest "Chain of Evidence" safeguards and reproducible results ensure protection for both the subject and certified examiner**





## **Benefits of FTG DVSA Systems** *continued*

***FTG Systems provide sound capturing via microphone, tape recordings, or any other type of sound source, including analog, digital, television, radio and telephone, facilitating 000/911 or wire taps (DAT or digital recording recommended)***

***Computerised digital screen displays of each utterance can be re-played, audibly and visually, as many times as required for detailed analysis, reliability and validity***

***Facilitates USB input from digital recorders***

***Narrative speech charting capabilities with single or multi utterance display***

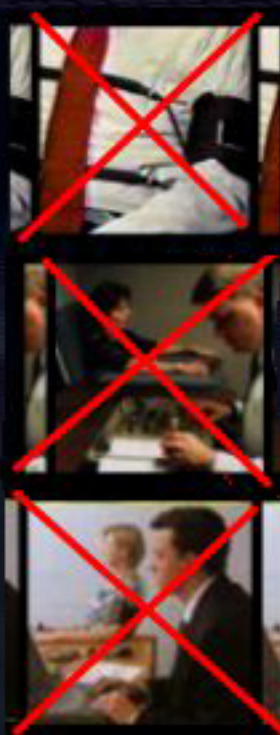
***Duration of displayed utterance is calculated in seconds and decimals***

***FTG Systems display multi-view, continuous narrative analysis, providing the most in-depth and detailed analysis of any VSA system***





## ***Unique differences to Polygraph***



***FTG DVSA Systems*** are noninvasive, requiring no attachments or physical contact with the subject - a major human rights consideration

There are no known "counter measures" to FTG's DVSA Systems

***FTG DVSA Systems*** provide narrative analysis capabilities, including analysis of covert recordings

Processed files can be transmitted by E-mail for "Reproducible Results"

Interviews can be conducted remotely, digitally recorded and sent for analysis by telephone.

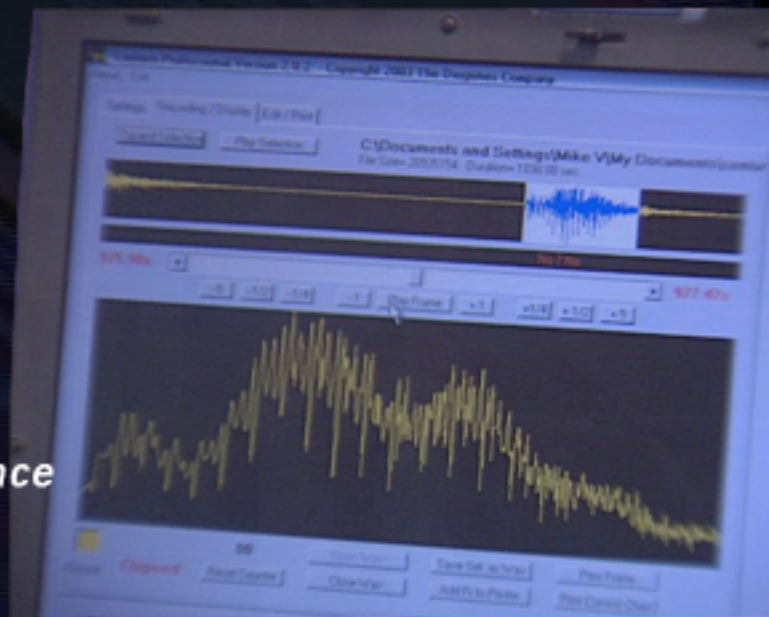
There is no need for a clinical environment



## DVSA System Applications

**FTG DVSA Systems & Services are being successfully applied in:**

- ✓ corporate risk management - data mining
- ✓ government security / risk / pre employment
- ✓ background / integrity & CV verification
- ✓ insurance claims / fraud & abuse
  
- ✓ law enforcement / customs / immigration
- ✓ military / covert investigations - screening
- ✓ transportation security / controlled access
- ✓ criminal justice / security / screening
  
- ✓ call centre management - actionable intelligence
- ✓ sporting associations - volunteer groups
- ✓ dispute resolution - tenant screening





## **Risk Assessment Technologies**

*corporate, security, law enforcement*

***please contact us for further client specific information  
on our technologies and services***

***DVSA Forensic Voice Stress Analysis - Neuro Linguistic Programming  
Scientific Content Analysis (SCAN) - Layered Voice Analysis - Kinesics  
Fraud & Abuse Prevention / Detection & Monitoring - Data Mining***

***Corporate Investigations***

***Factual Assessing - Covert Surveillance***

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