Approved	3-31-	92	
		Date	

MINUTES OF THE <u>House</u> COMMITTEE ON C	Computers, Communications & Technology.
The meeting was called to order by	George Dean at Chairperson
12:00 axixxixonMarch 3,	
All members were present except:  All Present	t
Committee staff present:  Julian Efird, R  Jim Wilson, Rev	

Donna Stadel, Committee Secretary

Conferees appearing before the committee:

Dr. Herb Hayre - University of Houston
Ms. Bobbi Mariani - Dept. of Admin.-Div. of Personnel

Diane Duffy, Research

Others attending: See attached list.

Chairman Dean called the meeting to order and asked Jim Wilson, Revisor to give the committee an overview of H.B. 3090 relating to certain alcohol and drug testing procedures. The bill amends the two statutes which authorizes the state officers and employees drug testing. The policy change of the bill is to clearly authorize, that in addition to chemical and other laboratory testing methods, the drug screening program may include remote testing method utilizing speech analysis information technology. The first section of the bill relates to that program which was established essentially for safety sensitive positions; the second section deals with a similar program, in this case established for institutions under SRS.

Professor Herb Hayre, University of Houston appeared before the committee testifying in favor of  $\underline{\text{H.B.}}$  3090 and presented his testimony on Remote Speech Based Chemical Abuse Screening (attachment 1). A demonstration followed on how the system works by dialing into an 800 number. A computer answers the phone giving sequencial instruction for the user to follow. The user states their name, company/departmental affiliation, then says 1-1, followed by 2-8-9. The computer responds with an impairment level within two minutes.

Dr. Hayre went on to explain how interpretation of impairment levels are derived, saying the system determines a base-line reading at the same time it determines level of impairment, if any.

Rep. Rock asked how the voice stress analyzer compares to this system. Dr. Hayre said they have nothing whatsoever to do with each other. The voice stress analyzer is not admissible in the courts; whereas the remote testing speech analysis system not only has been in the courts, but has a scientific base.

#### **CONTINUATION SHEET**

MINUTES OF THE House COMMITTEE ON Computers, Communications & Technology room 529-S, Statehouse, at 12:00 Noon March 3, 1992

Discussion followed regarding validity testing by independent third parties and the system's acceptance by the courts. Dr. Hayre stated, cases have been won/lost based on evidence presented by this system. Also, the question of costs associated with use of this system was discussed. Dr. Hayre said cost would be half, or less, of what is presently being spent for drug testing.

Chairman Dean announced the next item on the agenda was <u>H.B. 3028</u>

Telephone Call Identification Service. Rep. McKechnie moved the bill be passed out favorably. Jim Wilson, Revisor commented the sponsor of the bill had recommended some amendments. He reminded the committee, there had been discussion as to whether or not the blocking would be on a "per call" basis, or a "by line" basis. The sponsors recommendation was that blocking be done on an individual call basis. There was written testimony from the Corporation Commission recommending using the word "public utility" in place of the word "corporation" when referring to the wording "telephone public utility be incorporated". At this point Rep. McKechnic withdrew his motion. Discussion followed on the exact wording of the proposed amendments. Rep. McKechnie moved for adoption of the KCC amendments. Seconded by Rep. Pauls. Motion carried. After further discussion regarding this bill, Rep. Patrick said he believed this was bill was premature at this time and Rep. Patrick moved to table H.B. 3028. Seconded by Rep. Kline. Motion carried.

Chairman Dean presented the minutes of February 26, for review and approval. Rep. Mead moved to approve the minutes. Seconded by Rep. Rock. Motion carried.

Bobbi Mariani, Department of Administration-Division of Personnel Services was called upon by the Chairman to address questions by the committee. There was discussion regarding pre-employment screening and what that consisted of. Ms. Mariani indicated they did urinalysis screening for drugs consisting of an initial screen, with a required confirmatory screen reviewed by a medical officer, before it would stand in court. She also commented on the H.B. 3090 as outlined in (attachment 2). She indicated most of the testing they do in their department is pre-employment testing. They can do on-the-job testing if reasonable suspicion exists to warrant testing.

Dr. Hayre closed by saying he has offered to meet with Ms. Mariani and her staff that afternoon to answer all questions and concerns they have.

With no further business, the Chairman adjourned the committee until Wednesday, March 4.

## GUEST LIST

MMITTEE: House CCT		DATE: 3-3-92			
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## TESTIMONY ON REMOTE SPEECH BASED CHEMICAL ABUSE SCREENING

### PRESENTED TO

THE COMMITTE ON COMPUTERS, COMMUNICATIONS, AND TECHNOLOGY

OF THE

HOUSE OF REPRESENTATIVES, STATE OF KANSAS TOPEKA, KANSAS

BY

DR. HARB. S. HAYRE

ON

MARCH 3,1992

MR. CHAIRMAN, AND THE HONORABLE MEMBERS OF THE COMMITTEEE, I WANT TO THANK YOU FOR AFFORDING ME THIS OPPORTUNITY TO TESTIFY IN SUPPORT OF HOUSE BILL NO. 3090.

I AM ALSO VERY PLEASED TO VISIT MY HOME STATE, AND THE STATE OF MY RESIDENCE FOR FOUR YEARS, DURING WHICH TIME I BECAME A U.S. CITIZEN, HAD MY FIRST BABY BOY, AND WAS EMPLOYED AS A PROFESSOR OF ELECTRICAL ENGINEERING AT ONE OF YOUR MAJOR UNIVERSITIES.

OUR STAY IN KANSAS WAS BOTH ENRICHING AND MOST REWARDING. WE CHERISH MANY A FRIENDSHIPS, AND PLEASANT MEMORIES OF THE SUN FLOWER STATE.

#### TIMELINESS:

HOUSE BILL 3090, IN MY OPINION, IS ONE OF THE MOST TIMELY AS WELL AS PROGRESSIVE LEGISLATION IN THE USA, SINCE IT NOT ONLY INCLUDES THE LATEST TECHNOLOGY IN CHEMICAL ABUSE DETECTION I.E. SPEECH ANALYSIS, BUT ALSO THE EMPLOYEE ASSISTANCE PROGRAM- EPA. THE COMMITTEE AS A WHOLE, IS TO BE COMMENDED FOR THIS BIPARTISAN LEADERSHIP. FURTHERMORE YOU ARE ALSO TO BE SPECIALLY THANKED FOR PROMOTING NATIVE AMERICAN TECHNOLOGICAL ADVANCES BEFORE OUR COMPETITITORS IN THE WORLD ADOPT IT AND RE-EXPORT IT TO THE USA.

#### **MULTICHEMICAL USE:**

-----IT HAS BECOME QUITE COMMON AND FASHIONABLE TO USE/ABUSE MULTIPLE CHEMICALS (DRUGS), BOTH LEGAL AND ILLICIT, NEW AND OLD, PERSCRIPTION AND DESIGNER DRUGS, ALCOHOL AND DOWNERS ETC ETC. THIS MULTIPLE CHEMICAL USE HAS PRACTICALLY RENDERED THE OLD METHODS OF DRUG SCREENING RATHER INEFFECTIVE, AND MOREOVER CUMBERSOME, AND COSTLY TO ADMINISTER, LET ALONE THE THE LEGAL CHALLENGES ASSOCIATED WITH SAMPLE IDENTIFICATION, SAMPLE SUBSTITUTION, CHAIN OF CUSTODY, OPERATOR ERROR, INDIVIDUAL TOLERANCE, FITNESS-ON-THE-JOB VERSUS NANOGRAMS OF CERTAIN CHEMICALS. INVASION OF PRIVACY ETC ETC.

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FAIRNESS OF THIS BILL CONSIDERABLY ENHANCED BY THE INCLUSION OF SPEECH BASED ANALYSIS/SCREENING MATHOD, SINCE THE LATER DOES NOT DISCRIMINATE ON THE BASIS OF

- -- REGIONAL ACCENT
- --NATIONAL ORIGIN
- -- ETHNIC BACKGROUND
- --GENDER

FOR INSTANCE SOME EXPERT WITNESSES HAVE BEEN ABLE TO CONVINCE THE COURTS THAT THC IS FOUND IN THE URINE OF SUN FLOWER SEED EATING HISPANICS OR THAT AFROAMERICANS ARE SUPPOSEDLY MORE PRONE TO CARRY HIGHER LEVELS OF THC IN THEIR URINE THAN OTHERS ETC ETC. SPEECH DETECTION LEAVES LITTLE OR NO ROOM FOR DOUBT THAT THE SUBSTANCE CONSUMED HAS RENDERED THE INDIVIDUAL UNFIT FOR THE JOB, WHICH IS ANOTHER CRITERION UPHELD BY MANY STATE AND FEDERAL COURTS.

#### HIGH TECHNOLOGY:

WITH THE ADVENT OF RAPIDLY ADVANCING TELECOMMUNICATION TECHNOLOGIES, AND EAY AVAILABILITY OF COMPUTERS AT REASONABLE COSTS, IT HAS BECOME RATHER SIMPLE AND ROUTINE TO USE SUCH NEW TECHNOLOGIES AS SPEECH DETECTION OF CHEMICAL ABUSE INSTEAD OF PUTTING UP WITH THE NUIANCES OF BLUE OR RED COLORED TOILET WATER, CLEAN URINE SAMPLE SUBSTITUTION, SUPERVISION OF PERSONS URINATING FOR SAMPLE, LABELLING AND TRANSPORTATION, LABORATORY ANALYSIS WITH ASSOCIATED OPERATOR ERRORS, WORST OF ALL WAIT FOR RESULTS. OH THE NEED FOR CONFIRMATION TESTS IS ELIMINATED IN THE CASE OF SPEECH ANALYSIS.

#### SCIENTIFIC BASIS:

ALL DRUG ABUSE DETECTION METHODS OTHER THAN SPEECH BASED ONES UTILIZE SECONDARY OR TERTIARY PHYSIOLOGICAL RESPONSES OF THE BODY TO THE CHEMICAL INTAKE, WHEREAS THE SPEECH BASED DETECTION/SCREENING USES THE PRIMARY AND IMMEDIATE RESPONSE OF THE 67% OF THE CEREBRAL FUNCTIONS, SINCE THESE ARE USED TO PERCEIVE, FORMULATE, COORDINATE AND PRODUCE SPEECH, WHICH OFFERS A READY AND NONINVASIVE OUTPUT OF HUMAN BODY AND MIND TO SUCH CHEMICAL ABUSE.

OVER THE LAST TWO DECADES, RESEARCHERS IN THE USA, GERMANY, RUSSIA, AND SCANDANAVIA HAVE ESTABLISHED DEFINITIVELY THAT DRUGS/ALCOHOL (CHEMICALS) CAUSE NEUROPHYSIOLOGICAL DEFICITS, AND CEREBRAL DYSFUNCTIONS, AND SPEECH ANALYSIS PROVIDES A DIRECT MEASURE OF THESE IMPAIRMENTS CAUSED BY CHEMICALS.

#### INDIVIDUAL TOLERANCES:

EACH INDIVIDUAL HAS A DIFFERENT LEVEL OF TOLERANCE TO DRUGS/ALCOHOL-CHEMICALS. THE INDIVIDUAL IMPAIRMENT OF THE NEUROPHYSIOLOGICAL FUNCTIONS AUTOMATICALLY TAKES THE INDIVIDUAL TOLERANCE INTO ACCOUNT RATHER THAN MAN MAND MASS AVERAGE NORMS SET IN ALL OTHER SCREENING TECHNIQUES. FOR INSTANCE, IT IS WELL KNOWN THAT SOME PERSONS GET IMPAIRED OR DRUNK WITH A SINGLE GLASS OF WINE WHEREAS OTHERS ARE ABLE TO FUNCTION ALMOST NORMALLY WITH 3-4 DRINKS. ,BUT SPEECH DETECTS THE TRUE MEASURE OF DRUG IMPAIRMENT.FOOD INTAKE LEVELS, AS WELL AS ALTITUDE ARE ALL ACCOUNTED FOR IN ONES NEUROPHYSIOLOGICAL RESPONSE MEASURED BY SPEECH ANALYSIS.

EFFECT OF FATIGUE, PSYCHOLOGICAL STRESS OR SPEECH OR BRAIN DISORDERS:

THE SPEECH ANALYSIS RSEARCH OVER THE LAST TEN YEARS HAVE SHOWN THAT PSYCHOLOGICAL STRESS, FATIGUE, BRAIN DISORDERS, AND SPEECH DISORDERS NOT ONLY DONT BIAS THE CHEMICAL IMPAIRMENT DUE TO DRUGS, BUT ARE SEPARABLE AND ARE DISTINCTLY DIFFERENT PARAMETERS IN SPEECH AS ILLUSTRATED BY MANY PUBLISHED PAPERS BY ME.

NON-INVASINESS, AND SELF NORMALIZING:

THE NEED AND TIMELINESS OF A COST EFFECTIVE, REMOTELY APPLICABLE, NONINVASIVE, SELF NORMALIZING, PERSONALISED, ETHNIC AND GENDER NEUTRAL MEASURE OF DRUH/ALCOHOL-CHEMICAL IMPAIRMENT BASED ON SPEECH ANALYSIS IS HERE AND NOW IN VIEW OF THE FINANCIAL BELT TIGHTENING, AND SOCIOLOGICAL CHANGING PATTERNS OF DRUG ABUSE. SPEECH ANALYSIS TECHNOLOGY USING TELEPHONES AND COMPUTERS MAKES IT POSSIBLE TO DETECT AND MEASURE CHEMICAL DRUG IMPAIRMENT IN LESS THA 3 MINUTES WITHOUT ANY PRIOR BASELINE ON THE INDIVIDUAL. IT REQUIRES NO CONFIRMATION AND IS NOT SUBJECT TO LEGAL CHALLENGES COMMON TO OTHER METHODS.

THIS BILL SHALL PROVIDE PREVENTION AS WELL AS DETECTION SINCE THE PSYCHOLOGICAL EFFECT OF THE USE OF SPEECH SCREENING WOULD SCARE CAUSUAL USERS INTO ABSTAINING AND PERHAPS QUITING THEIR DRUG ABUSE HABITS.

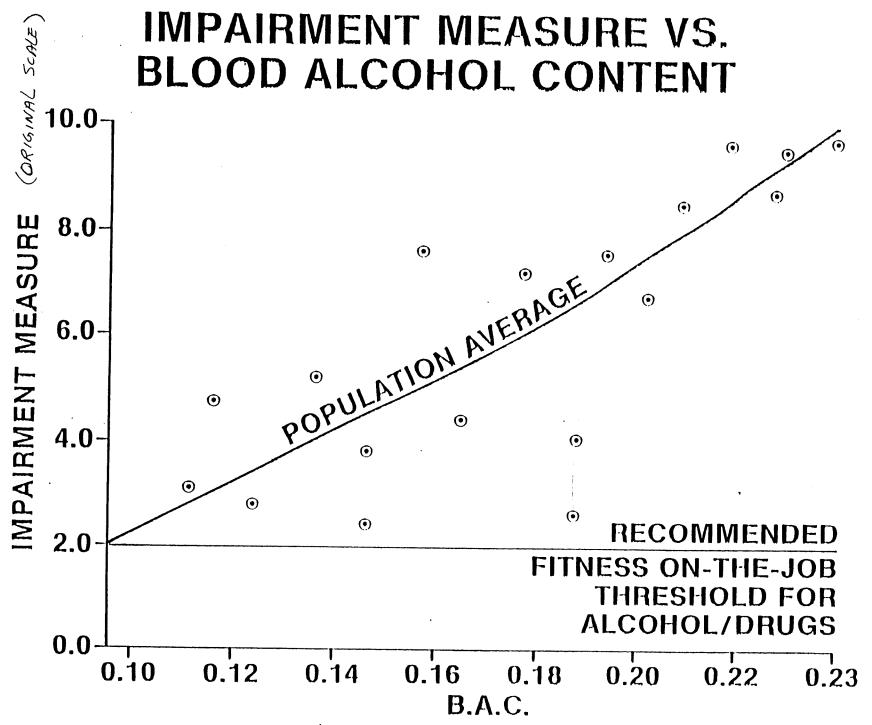
FINANCIAL IMPACT:

THA STATE OF KANSA SHALL SEE CONSIDERABLE SAVINGS IF THIS BILL BECOMES LAW, SINCE THIS 21ST CENTURY SPEECH ANALYSIS TECHNIQUE REQUIRES NO PERSONNEL, TRAINING, OR EQUIPMENT. EVEN THE LEGAL DEFENSE EXPENDITURES ON DRUG CASES MAY BE CONSIDERABLY REDUCED.

FINALLY ,I WANT TO AGAIN EXPRESS MY SINCERE APPRECIATION TO THE COMMITTEE FOR YOU PATIENCE, AND ATTENTION TO THE MATTER OF NEW TECHNOLOGY AS WELL AS YOUR FARSIGHTEDNESS IN LEGISLATING. IAM ENCLOSING SOME ADDITIONAL MATERIAL FOR YOUR FILES.

I SHALL BE GLAD TO ANSWER ANY QUESTIONS.

THANK UO VERY MUCH AND HAVE A GOOD DAY.



NOTE: POPULATION STUDY EXTRAPOLATED FROM POPULATION AVERAGE FROM HOUSTON TEXAS AREA DWI DATA

## IMPAIRMENT MEASURES INC.

P.O. BOX 19756 HOUSTON, TEXAS U.S.A. 77224-9756 Tel: (713) 747-6753 Telex: 6501107692 MCI

#### PERSONAL INJURY EXPERT WITNESS TESTIMONIES/ANALYSIS

DR. H.S. HAYRE

C.E. & I.E. SPECS., P.O. BOX 19756, HOUSTON, TX 77224-9756 TEL (713) 747-6753 OR 468-7136:FAX:713-467-2475

Air Crashes Auto & Truck Accidents Ship Collisions

Rail Accidents

Drug & Alcohol Imp.

Toxic Effects Industrial Accidents Electrocution

Bus Accidents

- 🔻 1. A Medical Doctor vs. Cessna ; Attorney Papadakis , Houston , Texas ; air crash , pilot voice analysis , 1974
  - 2. State of Texas vs. Mark Allen Clark, Texas State District Court State of Texas , Attorney General. Validity of Voice Stress analyzer for lie detection ; 1981
  - 3. Champion Paper Company vs. General Electric ; Fischer, Roach and Gallagher, Houston, Texas Motor Start Fire / Operator Injury, 1981
- 4. Rein vs. Cessna , et al. : New Orleans Federal Court : Podhurst, Orseck, Parks, Josefburg, Eaton, Meadow, & Olinpa. Miami, Florida 338130-1780. Pilot Hypoxia/air crash, 1981-1982
  - 5. Lane vs. U.S.A., et al, Federal Court Houston : Young, Cook, Pfeifer and Hampton, Houston, Texas. Voice Identification of Pilot-Air Crash, 1981-92.
- 6. Bryant vs Sun West Airlines, Phoenix, Arizona State Court: Beer and Toone P.C., Phoenix, Ariz. 85003 Pilot Voice analysis Test for Hypoxia.air crash-1983-84-contd.
- 77.Pole vs Mooney A.C. et al. Clapper and Brayton, Novato, Calif. 94947. Pilot Voice analysis Test for Hypoxia, air crash-1984.
  - 9. Paul and Carol Smith et al vs League City et al Schmidt and Reich P.C., houston, Texas. 77027 Electric Code Compliance, 1984-contd.
  - 9.Pilot FAA-Recorded Voice Analysis for Drug/Alcohol Impairment analysis, Att. W. Campell , houston, tx. 77079, 1986.
  - 10. Truck Drivers Telephone Voice analysis for Alcohol/Drug Impairment, a major Houston Trucking Firm, 1986.
- 11. Pilot Chemical Impairment Determination for a Law Firm, 1988 (confidential)
- 🔰 12. Mary Melissa Previdi et.al. vs Beech Aircraft Corp. & Beechcraft East, Inc., Jud. Dist of Danbury, Conn. CV 89-02994775 Habush, Habush & Davis, S.C., Milwaukee, Wisconsin. 1988-91



# DEPARTMENT OF ADMINISTRATION Division of Personnel Services

JOAN FINNEY, Governor

NANCY M. ECHOLS, Director of Personnel Services

March 3, 1992

Room 951-South Landon State Office Building 900 S.W. Jackson Street Topeka, Kansas 66612-1251 913-296-4278 FAX 913-296-6793

The Honorable George R. Dean, Chairperson Committee on Computers, Communication and Technology Kansas House of Representatives Room 279-W, Capitol Building Topeka, KS 66612

Dear Representative Dean:

HB 3090 is before the House Computers, Communication and Technology Committee for review. I am writing to express my concern about the bill.

House Bill 3090 would amend K.S.A. 75-4362 and 75-4363 to allow for testing methods utilizing speech analysis information technology in the drug testing program. The amendments are not needed to carry out the intent of the bill. Current regulations grant authority to the Director of Personnel Services to choose any valid means of testing. If speech analysis impairment testing is perceived by the director as a legitimate means of testing, then it can be used without amendments to the statutes.

We have been unable to properly assess the validity of the "Vocalyzer" that purportedly measures impairment over the phone because Impairment Measures Inc. has been uncooperative in providing information. Because of a lack of information numerous questions have been raised:

- 1. Are there other customers of this service? If so, who are they, and are they satisfied with the service?
- 2. Have federal courts upheld the "Vocalyzer", and if so, what cases?
- 3. How does the "Vocalyzer" work, and what exactly does it measure? How does it distinguish between what is normal and what is an impairment when it does not have information pertaining to the physical and mental capacities of the person being tested?

Representative George R. Dean March 3, 1992 Page two

- 4. Have any reports or studies been conducted to verify this process of drug testing?
- 5. What kind of protection is there for the employer and employee in case of a mix up in data, or a failure in the process?

Additionally, the voice monitoring system cannot distinguish between impairment caused by alcohol, illegal drugs, legal medications, or other factors. Because it cannot distinguish between factors, each positive identification of impairment would have to be followed up by urinalysis testing to determine the legality of the substance. It is not sufficient for the purposes of the state's drug testing program to know just that there is an impairment, because the type of impairment is the factor that determines whether there is cause for disciplinary action. It is also uncertain whether this process would meet our pre-employment testing needs, which is the largest part of the testing program.

Because we have been unable to obtain much information about this impairment testing method, we cannot adequately assess the amendments to the statutes within this bill. More concrete data should be obtained before the State of Kansas ventures into such an endeavor.

I appreciate the opportunity to comment on House Bill 3090. Please let me know if you have any questions.

Sincerely,

Manay M. Echols

NME: kat

Attachment

cc: Susan Seltsam Art Griggs