

**SUNRISE ANALYSIS OF A PROPOSAL
TO REGULATE POLYGRAPH EXAMINERS**

A Report to the Governor and the Legislature of the State of Hawaii

**Submitted by the
Legislative Auditor of the State of Hawaii
Honolulu, Hawaii**

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Introduction

In 1984, the Legislature amended the Hawaii Regulatory Reform Act, or the "Sunset Law," by incorporating a "sunrise" provision requiring the Legislative Auditor to analyze proposed legislation that seeks to impose licensing or other regulatory controls on unregulated occupations.

The Legislative Auditor is required to assess the probable effects of the proposed measure and to determine whether its enactment would be consistent with state regulatory policies in the Sunset Law. These policies establish criteria for regulation such as the following:

- . Regulation is warranted only where reasonably necessary to protect the health, safety, and welfare of consumers.
- . Evidence of abuse shall be awarded great weight in determining whether regulation is desirable.
- . Regulation shall not be imposed except to protect relatively large numbers of consumers who may be at a disadvantage in choosing the provider of the service.
- . Regulation should not unreasonably restrict entry into the occupation by qualified persons.
- . The purpose of regulation is to protect the consumer and not the regulated occupation.

During the 1986 legislative session, Senate Bill No. 1936 was introduced. (Throughout this report, we refer to the bill by its 1986 bill number, but if it is reintroduced in the 1987 session, it will very likely bear a different bill number.) The bill proposes to establish licensing requirements for polygraph examiners. Pursuant to Section 26H-6, Hawaii Revised Statutes, it was referred to the Legislative Auditor for sunrise analysis of whether its enactment would be consistent with sunset law policies.

This analysis contains some background information on the practice of polygraphy, an examination of the need to regulate the practice, and an assessment of the proposed legislation.

Background on the Occupation

The use of polygraphs, or what is commonly known as lie detectors, is a relatively recent phenomenon. In 1895, Cesare Lombroso, an Italian psychiatrist and criminologist, conducted experiments on criminal suspects using medical machines that recorded blood pressure and pulse rate. He hoped to establish a scientific basis for testing whether suspects were telling the truth.¹

These early experiments were continued by William Moulton Marston in 1915, who added measures of changes in respiration and skin resistance.² The version of the modern polygraph that is currently in use is largely attributable to the work of three men in California in the 1920s. They were Dr. John Larson, a policeman and

1. John E. Reid and Fred E. Inbau, *Truth and Deception, The Polygraph ("Lie Detector") Technique*, 2d. ed., Baltimore, Williams and Wilkins Co., 1977, p. 2.

2. *Ibid.*

later the assistant state criminologist in Illinois; August Vollmer, a criminologist at the University of California; and Leonarde Keeler, who was later a staff member at the Northwestern University Crime Laboratory.

Two other important figures in the field of polygraphy were Dr. Fred Inbau, who taught criminal law at Northwestern University, and John Reid, who invented the Reid Polygraph. Reid and Keeler established competing schools of polygraphy in Chicago in the late 1940s. Most of the techniques being used today can be traced to these men and their students.³

It was estimated in 1984 that there were about 8,000 polygraph examiners practicing in the United States.⁴ Their major professional organization is the American Polygraph Association (APA) which was established in 1966.⁵ The APA seeks to upgrade professionalism in the field through programs establishing standards for the occupation, its ethics, and principles of practice; and through training, research, publications, and public service. The APA has an accreditation program for schools which train polygraphers. There are currently 32 APA-accredited polygraph schools.⁶

3. David Thoreson Lykken, *A Tremor in the Blood, Uses and Abuses of the Lie Detector*, New York, McGraw-Hill, 1981, p. 30.

4. David Lykken, "Detecting Deception in 1984," *American Behavioral Scientist*, Vol. 27, No. 4, March/April 1984, p. 482.

5. Norman Ansley and Stanley Abrams, *The Polygraph Profession*, Linthicum Heights, Md., American Polygraph Association, 1980, p. 2.

6. American Polygraph Association, *Directory of Membership*, Chattanooga, Tenn., no date.

The APA has strict standards for full membership in the organization. To qualify as a full member, an applicant must have received a baccalaureate degree from a regionally accredited college or university, completed a formal training course at an APA-accredited school, administered at least 200 polygraph examinations within a three-year period, and demonstrated his or her proficiency in the use of the polygraph to the local APA chapter.

There are local APA chapters in each of the states. The Hawaii chapter has 19 members; of these, two are honorary members residing on the mainland. The Hawaii members consist of three polygraph examiners in full-time private practice, three part-time private examiners, seven in law enforcement agencies, and the remainder are in the military.

The polygraph machine. The use of polygraphs is based on the theory that those who give false information will experience fear and stress which will create measurable changes in the physiological functions measured by the machine. The results, when interpreted by an expert, would indicate whether the suspect is lying.

The polygraph machine generally provides four physiological measures: two of respiration; one of heart beat, blood pressure, and pulse rate; and one of increase or decrease in perspiration. The latter measurement may be referred to as galvanic skin response, electrodermal response, or skin conductance response.

To measure respiration, pneumograph tubes are placed around the chest and abdomen of the subject; a sphygmograph or "cardio cuff" is placed around the subject's left arm to measure blood pressure and pulse rate; and electrodes are attached to two fingers of the right hand to measure changes in electrical conductivity due to increased perspiration. Each of these attachments drives a pen on the polygraph machine and produces a chart showing four graphs.

Since there is no specific response that is associated with lying, the machine is not a "lie detector" in that it does not directly indicate when a lie is told. Instead, the graphs produced by the machine must be reviewed by an examiner who analyzes the subject's physiological responses to a set of carefully structured questions and makes a determination as to whether the subject is truthful.

Procedures used in testing. Polygraph testing generally consists of a pretest interview, the test itself, and a post-test interview. Depending on the purpose of the examination, testing may range from 15 minutes to several hours. Preemployment screening tests are of relatively short duration while testing in criminal investigations may take several hours.

During the pretest interview, the polygraph examiner assesses the subject's physical and mental state to determine whether the subject is fit to take the examination. The subject is informed of his or her legal rights, and the examiner familiarizes the subject with the test and previews the test questions with the subject.

During the examination, the subject is connected to the machine. Before beginning the actual examination, the examiner asks a series of innocuous questions to get a baseline reading on the subject. Three basic techniques are used in questioning subjects: the relevant/irrelevant technique (R/I), the controlled question technique (CQT), and the concealed information technique (CIT). Examiners often use variations or combinations of these techniques.

In the R/I technique, subjects are asked relevant and irrelevant questions based on the theory that reactions to the relevant questions will be greater for guilty subjects than irrelevant questions. Thus, there would be little or no physiological change following a relevant question for nondeceptive subjects.

However, problems have been found with this technique. Subjects can easily tell which questions are relevant and use countermeasures to control their responses. Or a question on theft which is supposed to be irrelevant may cause surprise, anger, fear, or misunderstanding in an innocent subject and may result in a suspect reaction.

The CQT was designed to correct some of the shortcomings of the R/I method. Subjects are asked control questions which cannot be answered truthfully with an unqualified no. An example of a control question is, "Did you ever steal anything in your life?" Truthful subjects are expected to respond more strongly to control questions than to relevant questions. A determination is made of the subject's truthfulness by comparing responses to controlled questions and relevant questions.

The CIT works on a different premise. Instead of trying to determine whether the subject is telling the truth, the CIT tries to determine whether a subject has knowledge about a crime. For example, a wide range of questions are asked about a case. The detail that produces a significant response provides a clue in the investigation.

In the post-test interview, the examiner reviews the responses and may ask the subject additional questions to clarify the reason for various responses.

The diagnosis by the examiner may be made in several ways. The examiner may rely only on the results of the polygraph and may score each relevant and control question, giving a plus score if the subject responds more to the control question and a minus score if the response is greater to the relevant question. Subjects with scores above a certain cutoff point are then considered to be truthful. Those with scores below that point are considered deceptive.

Other examiners may take a more global approach by considering the subject's responses to all the questions as well as the subject's demeanor throughout the examination. According to some practitioners, experienced and ethical examiners will obtain 95 percent of a subject's admissions during the pretest interview.

Uses of polygraphs. It is estimated that more than 2 million polygraph examinations are given each year in the United States.⁷ Their use has quadrupled over the past ten years. The most frequent use of the polygraph is by private industry for preemployment screening, followed by the use of polygraphs for local criminal investigations, and lastly, its use by the federal government.⁸

Use in the private sector. In the private sector, polygraphs are used primarily to prevent employee theft. Theft by employees in the retail trade is said to amount to billions of dollars annually. Many drug and retail stores, jewelry manufacturers, and financial institutions use preemployment screening to weed out high risk job applicants. Polygraph examinations are conducted in order to verify the information supplied by applicants on their background and past employment. The examination may also touch on areas that may be relevant to the employer.⁹ In addition to preemployment screening, some employers may also conduct random checks of employees as a deterrent or to detect employees who have been stealing.

7. U.S., Congress, Senate, Committee on Labor and Human Resources, *Report on the Polygraph Protection Act of 1985, Report 99-447*, 99th Cong., 2d sess., 17 September 1986, p. 5.

8. U.S., Congress, Office of Technology Assessment, *Scientific Validity of Polygraph Testing, A Research Review and Evaluation*, Washington, D.C., U.S. Government Printing Office, November 1983, p. 23.

9. Robert J. Ferguson and Chris Gugas, Sr., *Preemployment Polygraphy*, Springfield, Ill., Charles C. Thomas, 1984, p. 17.

Employers see polygraph tests as less expensive and faster than background investigations. A thorough background investigation can cost up to \$150 while polygraph screening ranges from \$25 to \$50 per test.¹⁰ In addition, employers state that it is often difficult to conduct background checks because civil suits and complaints charging defamation of character have made previous employers wary of giving information.

The cost-effectiveness of polygraphs is now being questioned because of the growing number of civil suits. Courts have handed down large damage awards in cases charging that the use of polygraph evidence resulted in discrimination, defamation, emotional distress, or wrongful discharge. Certain large companies, such as General Electric, Sears Roebuck and Co., and J. C. Penney, will not use polygraphs. Some employers find that although thorough examinations may have a higher initial cost, they provide more information with greater accuracy and reduce exposure to lawsuits and civil liability.¹¹

Use of the polygraph by the federal government. Polygraphs are used primarily by the Department of Defense (DOD). In 1983, the DOD employed 153 polygraph examiners and conducted about 18,000 polygraph examinations a year.

10. Elizabeth M. Lundell, *Polygraphs and Employment, A BNA Special Report*, Rockville, Md., Bureau of National Affairs, 1985, p. 10.

11. Robert B. Fitzpatrick and Mark D. Laponsky, "Legal Issues Concerning Lie Detectors in the Workplace," in American Bar Association, Annual Meeting Presidential Showcase Program, *Big Brother in the Workplace II: The Use of Lie Detectors - Privacy Rights Versus Employer Needs*, New York, August 12, 1986, p. 33.

Approximately 10,000 of these were noncriminal screening type examinations.¹² Polygraphs are used for investigations of specific criminal cases or other incidents, preemployment screening, screening for access to various kinds of classified information, and intelligence/counterintelligence screening.

The U.S. Army was the first branch of the military to employ its own polygraph examiners. It has its own polygraph training school which offers a 12-week "Basic Polygraph Examiner Training Course." The course includes instruction in psychology, physiology, pharmacology, interrogation techniques, polygraph instrumentation procedures, and constitutional and legal issues. The school produces the examiners for almost all federal agencies.

An applicant for training must have two years of investigative experience, hold a baccalaureate degree, be a U.S. citizen, be 25 years old, pass a special background investigation, and undergo a "suitability" polygraph examination.¹³ Trainees conduct 45 to 50 practical polygraph examinations before graduating from the course. After graduation they serve another 6 to 12 month internship under a certified examiner. The U.S. Army also offers a three-week advanced course on new and more sophisticated procedures and techniques.

The DOD's current policy on polygraphs, Directive 5210.48, provides certain kinds of protection to subjects. The directive states that the subject must consent, in writing, to the examination and be given timely notification of the date, time,

12. U.S., Congress, House, Committee on Education and Labor, *Polygraphs in the Workplace: The Use of "Lie Detectors" in Hiring and Firing, Hearings Before the Subcommittee on Employment Opportunities, on H.R. 1524, Polygraph Protection Act of 1985, and H.R. 1924, Polygraph Control and Privacy Protection Act of 1985*, 99th Cong., 1st sess., July 30 and September 18, 1985, p. 151.

13. Lundell, *Polygraphs and Employment*, p. 17.

and place of the examination. The subject has the right to legal counsel, the right to stop the examination at any time, and a privilege against self-incrimination.

Other federal agencies that use the polygraph include the Office of Personnel Management which regulates preemployment screening. It has rules limiting polygraph use and requires annual reapproval of polygraph screening programs. The State Department uses the polygraph for criminal investigations, and all such testing must be approved by the Secretary of State. The Treasury Department has limited authority to use polygraphs in criminal investigations. The Central Intelligence Agency requires a polygraph test for preemployment and will not hire anyone not passing the test. The National Security Agency also requires a preemployment polygraph test. The Federal Bureau of Investigation occasionally uses the polygraph for preemployment testing. Finally, the U.S. Postal Service uses polygraphs extensively for investigations of specific incidents such as mail theft.¹⁴

Studies on the Validity of Polygraphs

There is no debate about the ability of the polygraph to measure physiological changes in a subject. The controversy centers on the causes and meaning of these changes and on the interpretation of changes in response to questions.

The question of the reliability and validity of the examination remains unresolved. Reliability is the extent to which different examiners agree on the results of the examination and also the extent to which the same outcome would result if the subject were retested. Validity is the extent to which the examiner accurately assesses the truthfulness of the subject's response. Although there have

14. *Ibid.*, p. 20.

been numerous studies on the effectiveness of polygraph examinations, the results vary widely, and there is disagreement on the scientific value of many of the studies.

In 1983 and 1984, two major assessments were made on the validity of polygraph testing. One was conducted by the U.S. Office of Technology Assessment (OTS) and the other by the DOD. These two studies provide a useful assessment and summary of current research from different points of view.

In 1983, the Committee on Government Operations of the U.S. House of Representatives requested OTS to conduct a critical review and evaluation of current scientific evidence about the validity of polygraph testing. The committee wanted the information in considering federal administration policy on polygraph use in federal agencies.

The conclusion of OTS was that despite much debate over many decades, there is no consensus about the accuracy of polygraph testing. It stated:

"A major reason why scientific debate over polygraph validity yields such conflicting conclusions is that the validity of such a complex procedure is difficult to assess and may vary widely from one situation to another. The accuracy obtained in one situation or research study may not generalize to different situations or to different persons being tested. Scientifically acceptable research on polygraph testing is hard to design and conduct.

"While there is some evidence for the validity of polygraph testing as an adjunct to typical criminal investigations of specific incidents, and more limited evidence when such investigations extend to incidents of unauthorized disclosure. However, there is very little research or scientific evidence to establish polygraph test validity in large-scale screening as part of unauthorized disclosure investigations, or in personnel security screening situations, whether they be preemployment, preclearance, periodic or aperiodic, random or 'dragnet.'"¹⁵

15. U.S., Congress, Office of Technology Assessment, *Scientific Validity of Polygraph Testing*. p. 102.

The study by OTS had two main concerns: *First*, the use of polygraphs for personnel security screening may be especially susceptible to countermeasures by those trained to use techniques that enable them to avoid detection; and *second*, when polygraphs are used for screening purposes, the chances are highest that innocent persons may be incorrectly identified as deceptive.

The 1984 DOD study on the accuracy and utility of polygraph testing was directed by Norman Ansley, the Chief of the Polygraph Division of the National Security Agency. The following is one of the basic points made in the study:

"It is difficult to estimate the precise accuracy of the polygraph technique in everyday applications because of the number of variables involved. There are a variety of polygraph applications, each with its peculiar problems and issues: criminal investigation, intelligence operations, pre-employment screening, and aperiodic security screening of current employees. Within each of these applications are many subcategories. Polygraph accuracy is probably different for each of these settings."¹⁶

The study found that there is some evidence to suggest that control question tests may be more accurate in detecting the deception of the guilty person and in verifying the truthfulness of the innocent. It noted that the examiner's level of experience affected the accuracy of the examinations. However, the critical level of experience needed had not been determined. It found that although a great deal of government use was in screening, there was little evidence on the accuracy of the polygraph in these situations.

16. Norman Ansley and Marcia Garwood, *The Accuracy and Utility of Polygraph Testing*, Washington, D. C., Department of Defense, 1984. Reprinted in U.S., Congress, House, Committee on Education and Labor, *Polygraphs in the Workplace: The Use of "Lie Detectors" in Hiring and Firing, Hearings Before the Subcommittee on Employment Opportunities, on H.R. 1524, Polygraph Protection Act of 1985, and H.R. 1924, Polygraph Control and Privacy Protection Act of 1985*, 99th Cong., 1st sess., July 30 and September 18, 1985, p. 204.

Despite these problems with accuracy, DOD came to the conclusion that polygraphs work better than chance in a wide range of testing situations including criminal investigations, intelligence operations, and security screening.

The DOD study made the distinction between accuracy and *utility*. It defined utility as the ability of the procedure to obtain the desired results. It noted that the experienced examiner can obtain useful information and elicit confessions from many subjects during the interview.

Some Current Issues

Bills were introduced in both the U.S. House of Representatives and the U.S. Senate in 1985 to prohibit the use of polygraphs by employers. Hearings held on the Polygraph Protection Act of 1985 (HR 1524 and S. 1815) brought both positive and negative testimony on the use of polygraphs. They illustrate the controversy surrounding the use of polygraphs today.¹⁷

Arguments against prohibiting polygraph use. Among those opposing the bill were the National Association of Chain Drug Stores (NACDS), the Jewelers of America, the Manufacturing Jewelers and Silversmiths of America, the Borg-Warner Corporation, and the American Polygraphic Association.

They testified that the bill would have an adverse impact on hundreds of companies that depend on polygraph screening to maintain acceptable profit margins to stay in business. They felt that polygraphs helped them to select better quality employees. They said that polygraphs were a critical and necessary tool in

17. U.S., Congress, Senate, Committee on Labor and Human Resources, *Report on the Polygraph Protection Act of 1985*, and U.S., Congress, House, Committee on Education and Labor, *Polygraphs in the Workplace*.

combating theft. Without polygraphs, they contended that many would be forced out of business by the higher theft rates.

The NACDS testified that retail drugstores lose \$480 million a year to internal theft. The drugstores are also concerned with drug diversion. The stores believe that polygraphs are among the most effective techniques used to identify potential security risks among those who would be working with or are in proximity to narcotics, and that polygraphs had also proven to be effective in investigations of shortages of controlled substances. The U.S. Drug Enforcement Administration officially supports the use of polygraphs as one aspect of an employee screening program. They stated that employers should have the right to use numerous means, including polygraphs, to protect their businesses and the public.

The jewelers' associations testified that checking employment references had become difficult because of litigation by employees who have charged former employers with defamation of character. Many employers will do no more than confirm the dates of employment. The jewelers believe that polygraphs not only limit losses to employee theft but also keep insurance costs down.

The past president of the APA, J. Kirk Barefoot, testified that polygraph opponents hold them to an unrealistically high standard of accuracy while they accept a far lower standard for physicians, psychologists, attorneys, and counselors. He stated that polygraphs should be considered no more than a diagnostic tool which is used by an examiner for assistance in making decisions. The examiner should be considered a personnel or interviewing specialist.

Arguments for prohibiting polygraph use. Opponents of polygraphs supported the bills prohibiting the use of polygraphs on the grounds of the constitution, privacy, and civil rights. Among those objecting to the use of

polygraphs were the United Food and Commercial Workers International Union (UFCW), the Food and Allied Services Trades of the AFL-CIO, the American Civil Liberties Union, and psychologists.

Unions were concerned about the use of polygraphs to circumvent federal and state laws. For example, prospective employees may be asked about past union activities, about arrests not leading to convictions, or other information that may lead to discrimination. They noted that polygraph examiners may be unfamiliar with legal requirements relating to preemployment interviewing and may ask questions that employers are legally precluded from asking.

The UFCW testified that lie detectors do not work "because there is no scientifically identifiable response associated with lying." The union argued that the validity of these devices has never been proved and that the use of polygraphs raises constitutional questions relating to self-incrimination, unreasonable search and seizure, and the fundamental tenet of a person being innocent until proven guilty.

Dr. Leonard Saxe, the principal author of the OTS review, testified that it is inaccurate to refer to the polygraph as a lie detector. He said that it merely records simple physiological data and that it is more accurate to describe it as a method of interrogation. Dr. Saxe's view was that the polygraph examination has the characteristics of a psychological test but that it is poor because it is nonstandardized and relies on the examiner's behavior and judgment.

Dr. David Lykken, a professor of psychiatry and psychology at the University of Minnesota Medical School's Psychiatric Research Division, testified that the diagnosis could be expected to be in error about one-third of the time and that it is biased against the truthful individual. He also reported that poorly socialized

individuals are more likely to pass polygraph tests while highly socialized people with clear moral standards tend to fail the polygraph even though they may be truthful. This would have the counterproductive effect of barring from employment some of the very best people.

Opponents suggest that there are more valid and less offensive methods of preventing employee theft than using the polygraph; e.g., good recordkeeping, attractive discounts for employees, a healthy organizational climate, loss prevention systems to protect assets, and good management.

The New York Civil Liberties Union testified that lie detector tests are inherently abusive, degrading, and humiliating and that they violate humanitarian principles of fairness and justice, and they simply do not work.

There was testimony from numerous individuals who stated they had been the victims of unfavorable polygraph examinations. They reported that there is no recourse from an unfavorable test result. They decried that in many cases applicants do not know or see the test results and that employees had lost their jobs and had been denied other employment based on the false polygraph results.

Statement of the American Psychological Association. The American Psychological Association has entered into the controversy as well. Recently, the Council of Social and Ethical Responsibility for Psychology of the American Psychological Association adopted the following policy position:

- "1. The conduct of polygraph tests to select employees to ascertain the honesty of employees and to determine the truthfulness of aspects in criminal investigations has increased significantly in recent years. APA [American Psychological Association] has great reservations about the use of polygraph tests to detect deception.

- "2. Despite many years of development, the use of psychophysiological indicators to infer deceptive behavior remains controversial, partly because the scientific validity of these procedures is still unsatisfactory. Such evidence is particularly poor concerning polygraph use in employment screening and in dealing with victims of crime.
- "3. There is the possibility of great damage to innocent persons who must inevitably be labeled as deceptors in situations where the base rate of deception is low. An unacceptable number of false positives would occur even should the validity of the testing procedures be quite high.
- "4. The use of polygraph tests in all applied settings should be based on adequate psychological training and sophistication. Their use by psychologists must be consistent with the *Standards for Educational and Psychological Testing* and the *Ethical Principles of Psychologists*. They should be used only when such use is justified by the existence of sufficient data on their reliability and validity for the specific population, context, and purpose."¹⁸

Current Regulation

The controversy over the use of polygraphs is reflected in the varied nature of state laws and regulations that are currently in effect.

State regulation. Forty-one states have enacted some form of regulation relating to polygraphs. There is little uniformity among these state laws and regulations. They vary widely from prohibiting employers from using polygraphs to the licensing of polygraph examiners and specifying the type of instruments that may be used. Only nine states have no laws dealing with polygraphs.¹⁹

Many states that regulate the use of polygraphs by employers exempt certain categories of workers, such as public employees, law enforcement personnel, or

18. *American Psychologist*, Vol. 41, No. 6, June 1986, p. 659.

19. William E. Hartsfield, "Polygraphs," *Labor Law Journal*, Vol. 36, 1985, p. 817.

employees with access to controlled substances. On the other hand, California forbids polygraph testing of all workers but allows testing of all public employees except police officers.

The APA reports that 31 states license polygraph examiners. The APA is the major proponent of state polygraph examiner licensing laws. It has been found that polygraph use is greater in states with licensing laws than those states without such laws. Qualifications for licensing vary from state to state. They include completion of a polygraph course, six month internship, completion of a baccalaureate degree, investigative experience, age, or passing an examination promulgated by a state board.

Some states limit the kinds of subjects that polygraph examiners may inquire about. In several states, examiners may not ask questions about sexual behavior. Some states forbid examiners from asking questions about union sympathies, religion, or labor and political affiliation. Examiners may also be required to inform subjects that the test is voluntary and to tell subjects about the nature of the test, the results, and what questions will be asked.

Federal regulation. Currently, there is no federal law regulating the use of polygraphs. However, there has been considerable interest in the matter in recent years. Bills to regulate the use of polygraphs have been introduced in Congress regularly. In March 1986, the U.S. House passed a polygraph protection bill that would bar most private employers from requiring employees to take a polygraph test in order to obtain or keep a job. The legislation exempts state, local, and federal government employees. It also exempts nursing homes and day-care centers and allows the pharmaceutical industry to give polygraph tests to current and prospective employees who have direct access to controlled substances.

In September 1986, the Senate Labor and Human Resources Committee approved a companion measure barring the use of lie detectors as a condition for employment. However, the proposed legislation was not enacted.

It is likely that similar bills will again be introduced in the next session of Congress. If enacted, the federal legislation will preempt state laws on the use of polygraphs by private sector employers.

Regulation in Hawaii

Although polygraph examiners are unregulated in Hawaii, the use of polygraph tests for employment purposes has been restricted by law since 1965. Act 168 enacted that year prohibited an employer from requiring an employee to submit to a polygraph test as a condition of employment or continued employment. Sanctions against such unlawful practice included a fine of not more than \$1,000 or imprisonment of not more than one year or both.

The Senate Committee on Judiciary reported:

"The purpose of this bill is to prevent employers from requiring employees to submit to lie detector tests as a condition of employment. Some employers require their employees, as a condition of employment, to agree in advance to take a lie detector test if their honesty is questioned at a future date. Your Committee feels that this is an oppressive practice and violates the spirit, if not the letter, of the constitutional provision against self-incrimination."²⁰

20. Senate Standing Committee Report No. 914 on House Bill No. 640, Third Legislature, 1965, State of Hawaii.

In a report to the Governor on the proposed law passed by the Legislature, the Department of the Attorney General commented:

"The effect of this bill is to eliminate the oppressive practice of some employers who require their employees to take a lie detector test if their integrity is questioned.

"The courts almost uniformly reject the results of lie detectors when offered in evidence for the purpose of establishing the guilt or innocence of one accused of a crime. The reason most commonly assigned for the exclusion of such evidence is the contention that the lie detector has not as yet attained scientific acceptance as a reliable and accurate means of ascertaining the truth or deception. Similarly, if employees were subjected to lie detector tests as a condition of employment, such test results would not constitute a reliable and accurate basis for whatever action the employer may take against the employee."²¹

The legislation providing for the regulation of the use of polygraph examinations remained unchanged until 1985 when it was repealed in its entirety and replaced by Act 241. According to officials of the Department of Labor and Industrial Relations (DLIR), the primary objective of amending the law was to obtain enforceable legislation to protect the worker against the illegal use of lie detector tests. Under the previous law, DLIR could not order affirmative action or fine an employer for violations, because the law did not provide for civil penalties. The previous law did specify criminal penalties, but no sanctions were taken because of a jurisdictional dispute between the Attorney General and the county prosecutors.

Current regulation of the use of polygraph examinations. Act 241, codified as Chapter 378, Part II, Hawaii Revised Statutes, gives DLIR the authority and responsibility for regulating the use of lie detector tests by employers. A lie detector test is defined in Section 378-21.1 as "a test to detect deception or to

21. Lloyd L. Ching, Deputy Attorney General, "Report to the Governor on Bill Passed by the Legislature: H. B. No. 640 – Relating to the Use of Polygraph or Lie Detector Tests," Honolulu, Department of the Attorney General, June 18, 1965.

verify the truth of statements through the use of any psychophysiological measuring device, such as, but not limited to, polygraph tests and voice stress analyses."

Section 378-22.1 specifies that it shall be unlawful for any employer to:

- "(1) Require a prospective employee or employee to submit to a lie detector test as a condition of employment or continued employment;
- "(2) Terminate or otherwise discriminate against any employee or prospective employee for refusing to submit to a lie detector test;
- "(3) Ask an employee or prospective employee whether the employee or prospective employee is willing to submit to a lie detector test unless the employee or prospective employee is informed orally and in writing that the test is voluntary and the refusal to submit to the test will not result in termination of the employee or will not jeopardize the prospective employee's chance of a job;
- "(4) Subject a prospective employee to a lie detector test which includes inquiries deemed unlawful under section 378-2 [unlawful discriminatory practices];
- "(5) Utilize any device that intrudes into any part or cavity of the body for the purpose of truth verification; or
- "(6) Discharge or otherwise discriminate against any employee or prospective employee because such person has filed a complaint, testified, or assisted in any proceeding respecting the unlawful practices prohibited under this part."

Exceptions to these restrictions are provided for the U.S. government, law enforcement agencies, and employment security regulations established by the federal or state government.

The law authorizes DLIR to investigate complaints and empowers the department to have access to the employer's premises and all material relevant to such complaint. The department can administer oaths and issue subpoenas to compel the testimony of witnesses and production of any material relating to the complaint.

If the investigation indicates that the employer has violated the law, DLIR can demand that such unlawful practice stop and can assess the employer with a fine of up to \$1,000. In addition, DLIR may order appropriate affirmative action, including "hiring, reinstatement, or upgrading of employees, with or without back pay."

In the event that the employer does not comply with the fine assessed or the ordered affirmative action, DLIR may commence a civil action on behalf of the State or the complainant in circuit court. In addition, criminal actions can be taken by the Attorney General or county prosecutor with violators being subject to sanctions involving fines or imprisonment or both.

The DLIR adopted rules in April 1986 to implement and clarify the law. The rules specify the procedures and requirements for the filing, withdrawal, dismissal, investigation, and resolution of complaints regarding the unlawful use of lie detector tests. Cases that require civil action are to be referred to the Attorney General.

The rules prohibit an employer from including questions regarding the taking of a lie detector test as part of an employment application form. The rules also require the employer to provide an employee with written notification that polygraph testing is voluntary and that refusal to be tested will not result in any repercussions. The employer must retain, for one year, a copy of the written notice signed by the employee.

The officials of DLIR report that the department will be able to enforce the present law to protect the rights of employees now that civil penalties can be imposed and the enforcement jurisdictional problem has been resolved. For the period July 1985 to December 1986, DLIR received a total of seven complaints against employers for using coercion relative to polygraph testing. None of these complaints had been resolved as of December 1986.

According to DLIR officials, they would prefer that polygraph testing be banned from the workplace because of the questionable validity and reliability of such testing. They are apprehensive about the use of polygraph test results for making employment decisions.

Proposal to Regulate Polygraph Examiners

The stated purpose of Senate Bill No. 1936 which was introduced during the 1986 legislative session is "to regulate all persons engaging in the business of polygraph examiner or who hold themselves out to be capable of detecting deception or verifying the truth of statements through the use of instrumentation such as lie detectors, polygraphs, deceptographs, and other similar or related devices and instruments, without regard to the nomenclature applied thereto, to protect the general public from unlawful and unethical conduct in the business of polygraph examiners."

Senate Bill No. 1936 defines polygraph examiner, polygraph instrument, and polygraph examination as follows:

"Polygraph examiner means any person who engages in the business of or represents, advertises, or holds the person's self out as being capable of conducting polygraph examinations or detecting deception or verifying truth of statements through the use of a polygraph instrument.

"Polygraph instrument means a mechanical device capable of at least recording visually permanently and simultaneously the respiratory, cardiovascular and galvanic skin resistance patterns. Such a mechanical device may record additional physiological changes pertinent to the detection of truth or deception.

"Polygraph examination means the procedure utilized by a polygraph examiner to reach and render an opinion as to the veracity of statements made by an examinee."

Senate Bill No. 1936 prohibits anyone from representing oneself as a polygraph examiner or engaging in the business of polygraph examiner or conducting polygraph examinations unless the person is licensed in accordance with provisions in the bill.

A Board of Polygraph Examiners consisting of five members is to be created for the regulation of polygraph examiners. The Director of the Department of Commerce and Consumer Affairs (DCCA) or a designated representative shall be an ex officio nonvoting member and one member shall be a public representative. Initially, the other three members must be polygraph examiners who would qualify for licensure under the proposed bill. Subsequent to licensure, the three members must be engaged in licensed practice. Two of the professional members are to be from Honolulu—one in private practice and one in law enforcement. The other professional member can be in either private practice or law enforcement but must be from a county other than Honolulu.

The board is empowered to examine the qualifications of applicants for licensure; issue licenses to qualified individuals; approve polygraph instruments; adopt, amend, and repeal rules as are necessary to carry out the purpose of the proposed law; conduct hearings; and deny, revoke, or suspend licenses for violation of the proposed law or for other specified causes.

Two categories of licensure are proposed. One would be an "intern license," which permits the holder to conduct polygraph examinations in an internship. To qualify for intern licensure, a person must meet the following requirements: be at least 21 years of age, a citizen of the United States, and of good moral character; obtain a bachelor's degree, or instead, have five years of investigative experience; complete a course of study of at least 250 hours at a polygraph examiners school;

and complete an internship of not less than six months.²² The second category would be a "general license" which permits the holder to administer polygraph examinations, other than in an internship. To qualify for general licensure, a person, while in internship, must complete at least 200 polygraph examinations including 100 "specific" examinations and pass a licensing examination.

The bill provides for exemptions and the grandfathering of those who are offering polygraph examination services as of the effective date of the law. Any person employed in the occupation of a polygraph examiner who uses the instrumentation prescribed in the bill qualifies for licensure. The board may require satisfactory proof of such employment. The bill exempts from licensure: (1) polygraph examiners employed by the U.S. government while performing their official duties; and (2) licensed psychologists who use polygraphs in their professional practice, provided they do not hold themselves out to the public by the title, "polygraph examiner."

The bill grants licensing through reciprocity to those persons who have passed an equivalent examination or who are licensed by another state having substantially equivalent licensure requirements. The proposed bill also requires a licensed polygraph examiner to comply with a biennial continuing education requirement of 24 hours in order to renew the license.

Grounds for the denial, suspension, and revocation of licenses include physical or emotional inability or incompetency to carry out the duties of a polygraph examiner, making a material misstatement in an application for licensure, failure to

22. According to representatives of the polygraph profession, this last requirement is in error. The intern license is supposed to be granted prior to beginning the six-month internship.

inform an examinee that participation in an examination is voluntary, and the willful making of a false report of a polygraph examination. A fine of not less than \$100 nor more than \$1,000 may be imposed for any violation of the proposed law.

At hearings on Senate Bill No. 1936, the Hawaii Organization of Polygraph Examiners (HOPE) testified in support of the bill saying that licensing is necessary because there is a direct correlation between examiner qualifications and the validity and reliability of polygraph results. According to HOPE:

"National, state and local societies of polygraph examiners have been established and are actively engaged in efforts to upgrade their knowledge, skills, and techniques through publications, seminars and advanced training. The dominant organization, the American Polygraph Association, has established a code of ethics, accepts and evaluates complaints, accredits training facilities, conducts seminars, provides research assistance and publishes several periodicals.

"The most important activity of the national and state associations however has been their support of licensing legislation. Thirty-one (31) states have now recognized the importance of standardization and professionalism in the field and enacted licensing laws.

"The standards we ask you to consider in this licensing law are not only nationally recognized as that acceptable by the industry, but absolutely necessary for the protection of the general public."²³

The Honolulu Police Department (HPD), testifying on behalf of the polygraphers from the Attorney General's office and HPD, recommended passage of the bill. The police, however, recommended that the licensure qualifications be amended to require an associate degree in a field that deals with the social sciences or a pertinent field instead of a baccalaureate degree.

23. Testimony on Senate Bill No. 1936 submitted by Larry Anderson, President, Hawaii Organization of Polygraph Examiners, to the Honorable Steve Cobb, Chairman, Senate Committee on Consumer Protection and Commerce, February 10, 1986.

The Board of Private Detectives and Guards supported the concept of regulating and licensing polygraph examiners but proposed that polygraph examiners be regulated and licensed under Chapter 463, HRS, by the Board of Private Detectives and Guards.

Analysis of the Proposed Legislation

Summary of findings. Our analysis of Senate Bill No. 1936 is based on criteria in the Sunset Law. We find that regulation of polygraph operators is not warranted because it does not comply with state regulatory policies in the Sunset Law. In summary, our findings are:

1. There have been no documented cases of harm being inflicted by polygraph examiners in Hawaii.

2. The State should not license polygraph examiners because it may provide the public with the incorrect notion that the State sanctions and approves of polygraph examinations, a notion which is unwarranted given the considerable national controversy regarding the validity and reliability of such examinations.

3. The public is afforded adequate protection against abuse under Chapter 378 which restricts the type of questioning allowed and prohibits employers from mandating polygraph examinations for any purpose. The business people who purchase polygraph services are not likely to be disadvantaged in selecting a provider.

4. The impetus for regulation comes from the polygraph profession, and regulation will benefit primarily polygraph examiners and not consumers.

5. There are numerous problems with Senate Bill No. 1936 including the questionable validity of standards for licensure, the requirement that polygraph

examiners employed by law enforcement agencies must obtain a license, and other inconsistent, confusing, and contradictory provisions.

No evidence of harm. According to the testimony by HOPE on Senate Bill No. 1936, a licensing law that imposes professionally accepted standards for polygraph examiners is absolutely necessary for the protection of the general public. It noted that members of the profession are very aware of the inherent dangers and potential abuses involved in the use of polygraphs. Without a licensing law, anyone can call themselves polygraph examiners. The HOPE contended that this could endanger the public because there is a direct correlation between examiner qualifications and the validity and reliability of polygraph examinations. The HOPE did not, however, provide any evidence of public harm that had resulted from unregulated polygraph practice. It provided an example of a company that had offered polygraph services out of the back of a truck but said nothing about harm to consumers.

We find no documented evidence that polygraph examiners have caused harm to consumers in Hawaii or are likely to do so. The HOPE was unable to provide our office with any documented evidence relating to malpractice by polygraph examiners which resulted in public harm.

The HOPE's evidence of malpractice consisted of two examples from the past where companies had provided polygraph services in an unprofessional or unethical manner. In one case, we were provided with a copy of a 1980 polygraph test report that did not meet professional standards. The other example was the previously mentioned situation of someone providing polygraph services out of the back of a truck. The HOPE was unable to provide any documented evidence of harm to consumers in either case.

According to the Office of Consumer Protection and the Office of the Ombudsman, no complaints have been made against polygraph examiners in Hawaii in the past three years. Likewise, the Board of Private Detectives and Guards has never received a complaint related to the conduct of polygraph examinations. Most of the polygraph examinations are conducted by persons who are either licensed or are employed by a person licensed by that board. We conclude that there is no justification for the State to regulate polygraph examiners as there are no documented cases of harm involving polygraph examiners in Hawaii.

Licensing could be counterproductive relative to public protection. As discussed previously, there is considerable controversy surrounding the use of polygraphs today. We are especially concerned with the controversy that centers on the validity and reliability of polygraph examinations. While the profession makes claims of validity and accuracy, some opponents say that the accuracy is only slightly better than chance. We can only conclude that the question of the reliability and validity of polygraph examinations remains unresolved.

The polygraph profession contends that examinations conducted by experienced, qualified examiners have a very high accuracy rate. However, the DOD study which supported polygraphs, concluded that while the examiners' level of experience affected accuracy, the critical level of experience needed had not been determined.

During the hearings held on the proposed federal Polygraph Protection Act of 1985, several individuals noted that licensing laws were counterproductive in providing public protection because licensing gave credibility to an unreliable and invalid procedure. They contended that licensing was dangerous because it gave a government seal of approval which legitimized the machine and the entire process.

It was stated that licensing requirements cannot ensure examination validity, but that licensing often results in the greater use of polygraphs which subjects the public to more potential abuse. It was noted that more businesses use the polygraph in states that require licensure than in states with no licensing requirements.

We believe that the Legislature should delay any decision on licensure until the controversy surrounding the accuracy of polygraphs is resolved.

The State would be premature if it were to license practitioners in a field undergoing scrutiny by Congress and being considered for prohibitions or restrictions.

Employees have adequate protection. The polygraph is used most frequently in private industry for preemployment and other employment-related testing. Consequently, the group most likely to be harmed by the improper use of polygraphs would be employees being screened for employment purposes. In Hawaii, employees are adequately protected against abuse resulting from polygraphs under Chapter 378, HRS.

The law prohibits employers from mandating polygraph examinations for any purpose. The employee must be provided with written notification that polygraph testing is voluntary and that refusal to be tested will not result in any adverse personnel action. Also, no questions regarding polygraphs can be included in employment application forms. If an employee agrees to polygraph testing, the law prohibits questioning for information that could be used for discriminatory purposes.

The DLIR is authorized and empowered to investigate complaints against employers and to take appropriate action against employers who violate the law. Sanctions include civil as well as criminal penalties. In addition, the DLIR may order affirmative action by the employer to provide appropriate relief to the employee for such illegal actions.

Clients are not disadvantaged. Whereas employees are the most vulnerable to polygraph abuses and questionable practices, employers are the actual clients of the polygraph examiners. Employers are businesses that can choose whether to use polygraphs as a preemployment screening device. Since the employer can be held responsible for any violations of the law restricting the use of polygraphs that may be committed by a polygraph examiner, employers have a vested interest in choosing a qualified polygraph examiner.

Employers who are dissatisfied with the services provided by a polygraph examiner can file a complaint with the Office of Consumer Protection. Employers and employees can bring civil suit against a polygraph examiner if they are victims of malpractice.

Impetus for regulation. The impetus for regulation comes from the polygraph profession, not injured consumers. At hearings on Senate Bill No. 1936, the HOPE testified that national, state, and local societies of polygraph examiners have been established for the purpose of upgrading their profession. The dominant organization was identified as the APA and the most important activity of these associations was said to be their support of licensing legislation.

The APA has been a major force in obtaining legal regulation of the practice of polygraph examiners in order to promote public recognition of the profession. Evidence supports the APA belief that polygraph use is greater in states with licensing laws than in states without them. The APA strives to upgrade professionalism, supports passage of licensing legislation, and opposes legislation that prohibits or restricts the use of polygraph examinations.

The first stated objective under the constitution and bylaws of the APA is "to advance the use of the polygraph as a profession and as a means of promoting social

welfare by the encouragement of the use of the polygraph in its broadest and most liberal manner."

The desire of the polygraph profession to obtain legal recognition is an entirely separate issue from the need to regulate polygraph examiners to protect the public. While it is true that licensing could serve to promote professionalism, this would be contrary to sunset law policy which holds that licensing should not be used to promote the self-interests of any particular occupation.

Deficiencies in Senate Bill No. 1936. The proposed regulatory measure is deficient in a number of respects. The composition of the board is inadequate. The requirements for licensure are questionable and unrelated to ensuring a minimal level of competency. The requirement that polygraph examiners in the employ of law enforcement agencies must be licensed is unnecessary. In addition, the licensing requirements are inconsistent, contradictory, and confusing. Finally, the bill includes archaic provisions that have been deleted from most licensing laws such as requirements for citizenship and good moral character.

Composition of board inadequate. The bill proposes to establish a new board composed of five members. The Director of DCCA will be an ex officio member. The remaining four consist of three polygraph examiners and one public representative. Thus, the bill establishes an industry dominated board.

The trend in recent years has been to appoint public members to regulatory boards. Regulatory boards make many decisions that affect the business and earnings of the industry regulated. Board members could make decisions that have a restrictive, anticompetitive impact. The appointment of public members to regulatory boards is intended as a countervailing influence to moderate the self-interest of industry board members. To have such influence, it is desirable for

the number of public members on a board to be at least equal to or exceed the number of industry members. This is not the case with the proposed board since it has three industry members but only one public member.

Questionable validity of requirements for licensure. The minimum qualifications required by Senate Bill No. 1936 to obtain a general polygraph license includes a baccalaureate degree or five years investigative experience, a polygraph course, an internship, a minimum number of polygraph examinations plus a licensing examination. Taken as a whole, these requirements appear to be excessive and create restrictive entry standards. These requirements are similar to the qualifications required for the most exclusive class of membership in the APA.

We question whether the imposition of such restrictive entry standards are for the purpose of public protection or professionalism. For example, the requirement for a baccalaureate degree in any field of study would appear to be of questionable validity as a measure of competency. It does, however, enhance the professional image of polygraph examiners.

There is considerable evidence that appropriate experience requirements can be related to competency. However, the provision that allows applicants to substitute five years of investigative experience for the baccalaureate requirement appears to be restrictive rather than competency based. It is not clear in what way the five years of experience in investigative work is equivalent to a baccalaureate degree. It also appears to be excessive since the bill already requires that after completing requirements in a polygraph school, an applicant must also complete at least 200 polygraph examinations under the personal supervision of a licensed polygraph examiner while serving an internship of at least six months and then pass a licensing examination.

Unnecessary regulation of polygraph examiners employed by law enforcement agencies. The bill exempts polygraph examiners employed by the U.S. government, but it proposes to regulate and require licensure for those polygraph examiners employed by law enforcement agencies.

Law enforcement agencies are capable of ascertaining and establishing proper standards for the hiring of qualified polygraph examiners. Furthermore, should a member of the public be harmed or abused, a complaint can be filed directly with the law enforcement agency and appealed, if necessary, in accordance with the procedures established for that agency.

Inconsistent licensing requirements. The bill establishes two license categories. The licensing requirements for both the intern and general licenses are inconsistent and confusing. It is not clear from the language of Section ___-10 whether an intern license shall be granted prior to or subsequent to completion of at least six months of an internship.

According to members of HOPE, the intent is to issue the intern license prior to beginning an internship. If this is the case, then the requirements for a general license need to be amended to include the completion of at least six months of internship in addition to the completion of 200 polygraph examinations and the successful completion of a licensing examination.

Section ___-11 lists the eight requirements for licensing as a general polygraph examiner. The section states that applicants must satisfy all eight requirements. This includes the requirements for citizenship, a baccalaureate degree, etc. The eighth requirement is to successfully complete a licensing examination.

At the same time, Section ___-11 also says that any individual meeting the first seven requirements shall be issued a license and shall be required to pass the

licensing examination within 12 months of the date of issuance of license. According to members of HOPE, this provision to grant a license and provide a 12-month grace period for passing the licensing examination applies only to persons employed as polygraph examiners as of the effective date of the proposed law. This, however, contradicts Section ___-13 which specifies that any person who is actively engaged in the polygraph examiner business on the effective date of the act need only apply within 90 days and shall be issued a polygraph examiner's license.

The proposed legislation needs to be amended to clearly specify the licensure requirements for the two license categories as well as for grandfathering individuals currently practicing as polygraph examiners.

Other technical problems. The bill requires applicants to comply with a citizenship requirement and to be of good moral character. These requirements are irrelevant and defective. Citizenship requirements have been found to be unconstitutional. Requirements for good moral character are unenforceable. Most occupational licensing statutes have been amended to remove these requirements.

Conclusion

Licensing is an exclusionary measure that places restraints on the freedom of individuals to pursue an occupation. Unless there is clear evidence that it is needed to protect public health, safety, and welfare, licensure should not be imposed.

There are a number of reasons for not regulating polygraph examiners at the present time. Our analysis shows that the proposed legislation does not meet criteria set forth in the Sunset Law. There is no evidence that the public needs to be protected against misconduct or malpractice by polygraph examiners. There continues to be considerable controversy over the scientific validity of polygraph

testing. Finally, federal legislation may be forthcoming which would preempt state regulation on polygraph examiners. Consequently, there is no justification for the State to regulate polygraph examiners.

Recommendation

We recommend that Senate Bill No. 1936 not be enacted.