

THE ASA M SENSOR

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THE QUARTERLY NEWSLETTER OF THE
AMERICAN SOCIETY OF ANESTHESIA TECHNOLOGISTS AND TECHNICIANS

PRESIDENT'S MESSAGE...

A MIDTERM REPORT

by *Chris Patterson*



I am pleased to provide several positive reports to you concerning our Society. Since our Fifth Annual Seminar, last

October, we have had a large increase in membership, thanks to the combined efforts of everyone in the ASATT organization. You will find the names of our new members printed in this edition of our newsletter. All of us offer a warm and hearty welcome to our new colleagues and we thank them for joining us and supporting this Society. The larger our team grows, the easier it is for all of us to accomplish many worthwhile goals.

LEVEL I has joined the list of ASATT Benefactors. They recently contributed \$1,000 to our special fund set up strictly for paying costs arising from the development of our national certification program. The Board of Directors and the entire membership of the ASATT, extend our appreciation and gratitude to LEVEL I and acknowledge the following individuals:

Ms. Barbara J. Lambert, Marketing Manager, IV Products
Mr. Douglas R. Cannon, Director, IV Products
LEVEL I - Rockland, Massachusetts

In this edition of our newsletter you will find a special section showing an honor list of all contributors to ASATT's certification fund. The editor of our newsletter, Ms. L. Dianne Holley, has advised me that she will continue to print the honor list in all succeeding editions of *The Sensor*. The financial assistance that our Society has received over the past year from various segments of the medical community has been most gratifying; it has come at a time of real need.

News of Events and Business in Our Society: I would like to break from the traditional format in this message and focus more on various activities currently going on in our Society. A change for ASATT's Region 4 will be taking place during May. Mr. Jim Underwood at Methodist Medical Center, Peoria,

continued on page 16..

Inside your Sensor:

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ASATT TELEPHONE

800-352-3575

(Voice or Fax)

1994-1995 OFFICERS:

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Chris Patterson
San Jose Medical Center
San Jose, CA
510-471-9327 (Home)
408-993-7051 (Fax)

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904-374-6051

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Treasurer

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Salem Hospital
Salem, OR
503-370-5200 p225

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Classified Ads: Individuals seeking employment, or employers seeking candidates in anesthesia technical support.

Rate: \$8/line, 5-line minimum
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[Times New Roman type, 12-pt, typeset by editors.]

For further information, contact:

The ASATT Sensor
Dianne Holley, Editor
3810-A Tonkawa Trail
Austin, TX 78756
(512) 451-7457

or

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The opinions expressed herein are those of individual authors, and do not necessarily reflect the views or opinions of the ASATT.

Editor: L. Dianne Holley, 3810-A Tonkawa Trail, Austin, TX 78756. 512-451-7457 (Home), 512-323-1104 (Fax)

Associate Editor: David G. Mastalski, VA Medical Center, Portland, OR. 503-642-1537(Home), 503-721-7859 (Fax)

All submissions pertinent to the objectives of the ASATT will be considered for publication. Preferred format: 3 1/2" micro floppy diskette, IBM format. Photographs, preferably black-&-white are also welcome and will be returned.

Deadline for the next issue is May 15, 1995

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EMORY UNIVERSITY HOSPITAL ATLANTA, GEORGIA

by Alfred Yin, GASATT President



Emory Hospital is a component of the Emory University System of Health Care, which is also comprised of Crawford Long Hospital of Emory University and the Emory Clinic and a number of affiliates. The Robert W. Woodruff Health Sciences Center of Emory University unites all university divisions in the field of health and consists of six divisions: Emory Hospital; the schools of medicine, nursing, and public health; Crawford Long Hospital; and the Yerkes Regional Primate Research Center.

Emory University Hospital is a university-owned, not-for-profit hospital dedicated to the care of the acutely ill adult. The hospital has 604 beds. Seventy-nine beds or 13% of the total number of beds are dedicated to intensive care. The hospital has 20 operating rooms and schedules more than 10,000 operations a year. The hospital remains one of the nation's largest centers for heart surgery and angioplasty, and has become a referral center of choice for the most difficult cardiac cases. In transplantation, Emory has grown to be one of only a handful of medical centers in the U.S. to have a multiple organ and tissue transplantation program. Emory is also one of the nation's leaders in the neurosciences, especially in the surgical treatment of aneurysms, brain tumors, and movement disorders, such as Parkinson's disease.

At Emory University Hospital, we have two major classifications of anesthesia technologists. The first group has been in existence since the early 1960's. Technicians in this group are called "Anesthesia Technical Assistants" (ATA's) and perform such tasks as cleaning equipment and restocking drugs and supply carts. ATA's have been very well accepted and integrated into the anesthesia care team at Emory because of the vital role they play in operating room preparation, maintaining critical drugs and supplies, and ready assistance to anesthesia staff during surgical procedures. ATA's are also responsible for equipment such as blood warmers, bronchoscopes, and crash carts and code boxes. Anesthesiologists can concentrate on delivery of anesthesia more efficiently when they are free of the time-consuming tasks performed by Anesthesia Technical Assistants.

A high school diploma or GED is required for employment as an ATA. In-house training on infection control and sterile techniques are conducted annually. Specialized training on anesthesia machines, ventilators, and other anesthesia equipment are offered both in-house, and at vendor-sponsored seminars.

The second classification of anesthesia support personnel at Emory is the "Anesthesia Instrumentation and Monitor

Specialist" (AIMS). Technologists in this group are recruited by the Medical Director, Dr. Wesley T. Frazier. AIMS personnel evolved in the early 1970's at Emory as a result of the need for technological support for anesthetic care in an increasingly busy academic/tertiary care environment. The main driving force in this development has been the rapid proliferation of methods for monitoring the anesthetized patient.

With four operating rooms dedicated to open heart surgery, two for major vascular procedures, one liver transplant room, and one neuro-surgery suite, it has become necessary to have a support staff that is efficient in monitoring equipment as well as in blood gas analysis. The development of AIMS personnel in the 1970's satisfied the need for bioengineering staff and laboratory technicians.

The job descriptions for AIMS are written for four levels, with the chief AIMS (AIMS-I) and the other two most senior personnel (AIMS-II) functioning as supervisors. AIMS-I and -II have management/administrative duties and handle on-call duties with assistance from experienced AIMS-III. AIMS-III is the BS entry level; one year of experience at this level is required before qualification to take night/weekend call. AIMS-IV is the associate degree level, with one year of experience necessary for promotion to AIMS-III. AIMS-I and -II positions have always been filled by promotion from within.

continued on page 17...

Anesthesia Devices and Monitors Supported by Anesthesia Instrumentation and Monitoring Specialists (AIMS)

- Anesthesia machine (including circle, CO₂ absorber, supply hoses)
- Anesthesia ventilators
- Oxygen analyzers
- Patient (anesthetic) suction system
- Disconnection/over-pressure alarm
- CO₂ analyzers
- Time-shared mass spectrometer (operation and calibration)
- Modular monitors and transducers for ECG, temperature, pressure, cardiac output, EEG, and phonocardiogram
- Anesthetic gas tanks, hoses, and connections
- Indirect blood pressure monitors (including oscillometric, Doppler)
- Air embolism detectors
- Neuromuscular stimulators
- Coagulation monitors
- Multichannel graphic recorders
- Laboratory analyzers (ABG's, electrolytes)
- Transport monitors
- Pacemakers
- Dedicated telephone system
- Vacuum tube transport system

JOB ANALYSIS PROJECT IS WELL UNDER WAY AND DOING VERY WELL

*Andrew J. Falcone, Ph.D.
Program Director, Research and Development,
Applied Measurement Professionals, Inc. (AMP)*

The ASATT job analysis of Anesthesia Technical Support Practitioners is proceeding on schedule. During the week of January 26, 1995, ASATT and Applied Measurement Professionals, Inc. (AMP) mailed out 716 job analysis surveys or "task inventories" throughout the United States. This survey will be used to determine the importance of job duties performed by Anesthesia Technical Support Practitioners as an initial step in the development of a certification program.

Many of you received and responded to ASATT's request for input by filling out and returning the survey to AMP. As of March 25, 1995 we have received 285 completed surveys, for a 40% return rate. Other occupational groups typically do not respond at such a high rate. The degree of participation from this survey mailing indicates a great deal of enthusiasm, professional commitment and dedication, as well as a great deal of

pride in what you do. You are also giving a clear message to ASATT that you are concerned about the future direction of your profession, and are willing to work to achieve the recognition that you deserve, by developing a certification program.

The next phase of the project will be the analysis of the data to determine which tasks should be included on the content outline for the examination. The content outline lists the information that the examinees must know well enough to pass the examination. The test questions will be written by your fellow practitioners based on this content outline, so that the questions will be directly tied to actual practice. The ASATT Job Analysis/Certification Advisory Committee and AMP will conduct a phone conference at the end of March or early April to review the results of the analysis and make decisions regarding the next phase of the development of the examination.



THE BOC GROUP

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for anesthesia equipment support personnel and end users

The Ohmeda Technical Training Center is a CEU User member of the International Association for Continuing Education and Training.

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Benefits

- Small class size allows for individualized instruction.
- Increase your effectiveness as a communication link between the clinician and the service provider.
- A reduction in service calls to the maintenance provider saves the clinician time and the institution money.
- The attendee should gain a comprehensive understanding of the anesthesia delivery system through theory and hands-on experience.
- Reduction in equipment downtime.

1995 Class Schedule

March 14-16, 1995 – Birmingham, AL
March 21-23, 1995 – Jackson, MS
March 28-30, 1995 – New Orleans, LA
April 4-6, 1995 – New Orleans, LA
April 18-20, 1995 – Houston, TX
April 25-27, 1995 – Houston, TX
May 2-4, 1995 – San Antonio, TX
May 16-18, 1995 – Dallas, TX
May 23-25, 1995 – Dallas, TX
June 6-8, 1995 – Albuquerque, NM
June 13-15, 1995 – Tucson, AZ
June 20-22, 1995 – San Bernardino, CA
June 27-29, 1995 – San Francisco, CA
July 11-13, 1995 – San Francisco, CA
July 18-20, 1995 – Sacramento, CA
July 25-27, 1995 – Portland, OR
August 1-3, 1995 – Seattle, WA
August 8-10, 1995 – Boise, ID
August 15-17, 1995 – Salt Lake City, UT
August 22-24, 1995 – Cheyenne, WY
September 12-14, 1995 – Des Moines, IA
September 19-21, 1995 – Minneapolis, MN
September 26-28, 1995 – Chicago, IL
October 3-5, 1995 – Chicago, IL

If you have questions or need additional course information please call Tessa Gillham, Ohmeda Inc., Technical Training Center at 1-800-345-2700.

OPEN FORUM...

by David G. Mastalski

Chief Anesthesia Technician, VA Medical Center
Portland, Oregon

Dear OPEN FORUM:

Some of the Anesthesiologists at our facility have asked what it would take to set up a "Stat Laboratory" in the O.R. Can you help.

Redding, CA

Having a Stat Laboratory in the O.R. can be a time consuming, yet challenging, endeavor which could improve your value as an Anesthesia Technician and, ultimately, improve patient care. By providing stat laboratory values such as Ph, blood gases, electrolytes, hematocrit, glucose, and clotting times, you will enable anesthetists and caregivers to make timely diagnoses in critical situations. This is commonly known as Point of Care Testing (POCT), i.e., the testing instruments are located in a proximal area to the patients, and results are calculated and returned to the provider within minutes.

POCT is a fairly new method of providing laboratory values to clinicians. In the past, all lab work (stat or not) usually had a minimum one-hour turnaround time. With the latest POCT instruments and procedures, turnaround times have been cut to minutes. This can save lives. The patient values which are measured or calculated by these various instruments must be accurate. Hence, the various regulating agencies. The College of American Pathologists (CAP) is the main regulator and certification body for laboratories in the U.S. The Clinical Laboratory Improvement Amendment (CLIA) consists of guidelines and regulations which also must be followed and adhered to.

POCT can be as simple as a fingerstick glucose check, or include complex whole blood analysis. There are many instruments on the market, some manufactured in the last couple of years, specifically geared to POCT. Some of these instruments can provide multiple patient analysis parameters and are fairly easy to operate and maintain. First, I recommend asking your Anesthesiologists exactly what results they want. Next, I would contact the hospital Laboratory Director or Chief Pathologist and let them know what you, and more importantly, the Anesthesiologists, propose. It is very essential to have the appropriate Laboratory staff involvement and recommendations.

After a thorough review with the Laboratory Director or Chief Pathologist, in conjunction with the Anesthesiology Chief, you should have a better overview of how to proceed with establishing your Stat Lab. Decide which area of your hospital will be responsible for its implementation and maintenance. In some cases, this responsibility will remain with the Laboratory Department. If, however, this responsibility is delegated to the Anesthesia Department, you will need to work very closely with Laboratory staff to develop the proper policies and procedures for your Stat Lab. The Laboratory staff will need to assist you with equipment/instrument recommendations, and in setting up linearity with the main lab instruments. All POCT locations are overseen by the hospital Laboratory Director, and a continued joint effort is critical to its success. The success of

the Stat Lab will ensure improvement to patient care, and is the primary reason to pursue its implementation.

For further information contact:

College of American Pathologists
325 Waukegan Rd.
Northfield, Illinois 60093-2750
(708) 446-8800

Dear OPEN FORUM:

Can you please advise me on Pulse Oximeter probes? Disposable? Non-disposable?

Dallas, TX

Pulse oximeters, in just the last ten years, have become a standard of care for patients in the Operating Room, and provide a noninvasive estimate of arterial hemoglobin saturation, a variable which is directly related to the oxygen content of arterial blood. These measurements are obtained through a probe, usually placed on the fingertip or other vascular tissue source (earlobe, nose, toe). Spectrophotometry combined with digital microprocessing produces a value.

Recent technology has enabled the various manufacturers of pulse oximeters to effectively produce and market disposable probes. These probes are considered as accurate as non-disposable, permanent probes. However, they have proven to be expensive, especially in these days of cost-conscious care. Depending on the brand, disposable probes can cost \$10-22 each. Non-disposable pulse oximeter probes cost around \$200 each. When properly taken care of, non-disposable probes can last for up to five years. A few years ago, our Medical Center switched from disposable probes to non-disposable and saved a considerable amount of money in the first year. It takes a concentrated effort to keep (infection control, maintenance, etc.) non-disposable probes. One option may be to keep some disposable probes available in the O.R., as we do, for those difficult patients with peripheral vascular disease.

For further information, contact your pulse oximeter representative.

All questions and pertinent comments or letters may be addressed to:

ASATT SENSOR OPEN FORUM
9805 NE 116th Street
Kirkland, WA 98034-4248
FAX (503) 721-7859

Those chosen for publication in this column will receive a free ASATT T-shirt.

ANESTHESIA VENTILATORS

Marc A. Dickens
 Supervisor, Anesthesia Supply Technicians
 Department of Anesthesiology, Emory University Hospital, Atlanta, Georgia

Wesley T. Frazier, M.D.
 Associate Professor of Anesthesiology
 Department of Anesthesiology, Emory University Hospital, Atlanta, Georgia

An anesthesia ventilator (AV) is an automatic device that is connected to the anesthesia machine/circuit and can provide for automatic ventilation of the anesthetized patient.

The function of the anesthesia ventilator (AV) is to **replace** the clinician's hand in "squeezing" the bag to breathe for the patient whose breathing is depressed by drugs and/or prevented by muscle relaxants. The AV does this by enclosing a bag/bellows in a clear plastic cylinder and then supplying the "squeeze" by feeding compressed O₂ into the space around the bag/bellows in a variable and controlled amount. This in turn depresses the bellows the desired amount (the set tidal volume) to give the patient an appropriately sized breath. (See Figure 1.)

To make this type of system work, there must be a **switching mechanism** to disconnect the usual "bag" and to substitute in its place the AV hose. (See Figure 2.) Over the years, this switching has been done in three main ways:

1. **Oldest/Most Direct:** Remove the bag from its mount and connect the ventilator hose in its place; when this is done, the APL/pop-off valve must be manually closed completely, allowing the AV pop-off to function in its place.
2. **Intermediate Generation:** In some anesthesia machines, the bag mount contains a switching valve such that the bag and the hose remain connected at all times and the clinician manually switches from one to the other; this configuration requires that the APL/PO valve be manually closed after going "on the ventilator." This arrangement has a bad history of accidents when the operator does not completely turn the switch all the way to either "bag" or "ventilator" (leading to poor ventilation of the patient).
3. **Newest Arrangement—Switch Valve Integrated into the Absorber:** This type of system places the bag/AV switch inside the top "head" of the absorber. The bag always

FIGURE 1 — GENERAL ANESTHESIA VENTILATOR SCHEMATIC

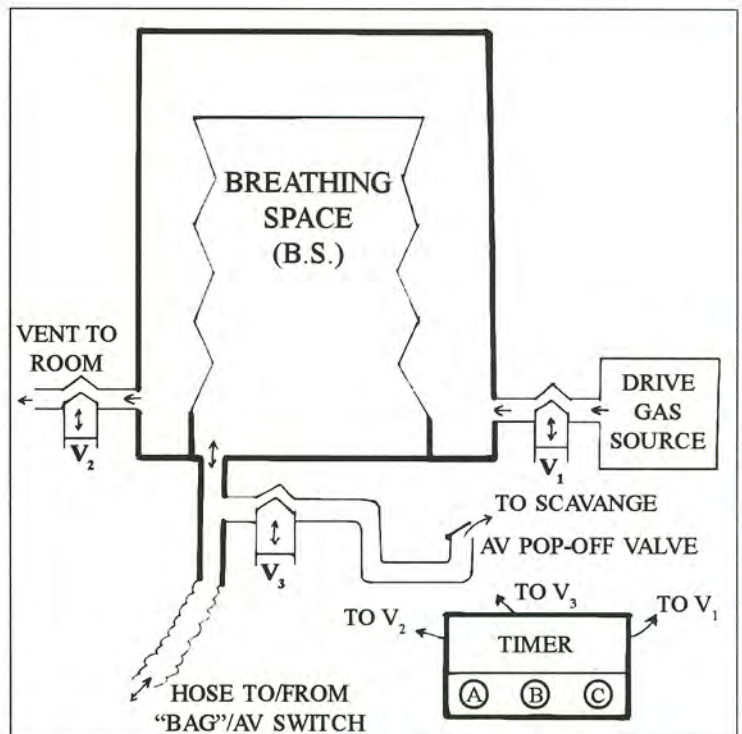
V₁: Valve which opens to allow drive gas (usually O₂) to pressurize the "squeeze space" (SS), thus pushing the bellows down to give the patient a breath. **How often** it opens determines breathing rate, **how fast** it meters the drive gas into the SS determines the rate of inflation of the lungs (inhalation flow rate), and **how long** it stays open determines the size of the breath (the tidal volume).

V₂: Valve to vent drive gas to room (to allow bellows to rise as patient exhales).

V₃: Valve which closes and opens path to "pop-off" valve; closes just before inhalation starts and opens as pressure in B.S. rises during exhalation pause.

Timer: Controls all valves: (a) when to open and close (for V₂ and V₃—which are either open or closed); (b) **when** and **how much** V₁ closes (all the way) or opens (a variable amount) to determine how fast drive gas enters SS and thus pushes the bellows down; **how long** V₁ stays open determines tidal volume.

Sequence: V₂ and V₃ close a fraction of a second before V₁ opens (a variable amount). V₁ stays open to give a breath (to a tidal volume determined by how long and how much it is open); V₁ then closes and V₂ opens, allowing the patient to exhale; after exhalation is complete and pressure in B.S. begins to rise, V₃ opens to vent excess breathing gases to the scavenging system; then after a pause, a new cycle starts as V₂ and V₃ close and V₁ opens again to "squeeze" the bellows. Knobs A, B, and C on the "timer" control the rate, tidal volume, and inhalation flow rate.



remains on the bag mount. The AV hose always stays on the AV connector (on the rear of the absorber head) and the "AV-switch" is bi-stable—that is, it is spring loaded in such a way that it only has two possible positions, either for "hand/bag" or "on the ventilator," (the switch will not stay in an in-between position). In this arrangement, changing the mode of the switch bypasses the absorber pop-off valve and therefore it does not have to be manually closed.

In all of the three AV arrangements, there is an APL/pop-off (PO) valve built into the AV. A switch in the AV (under control of the timer) automatically closes this built-in PO valve a fraction of a second before another valve opens to cause pressurization of the space around the AV bag/bellows. When inhalation is finished (as

controlled by the timer), and once exhalation has refilled the bellows, the PO valve opens, and vents the patient to complete the exhalation by the elastic recoil of the chest wall, diaphragm, and lungs.

Anesthesia ventilators can be either:

- A. **All Mechanical** (few in use in this current age).
- B. **Mixed**—partly mechanical and partly electrical (most current models).

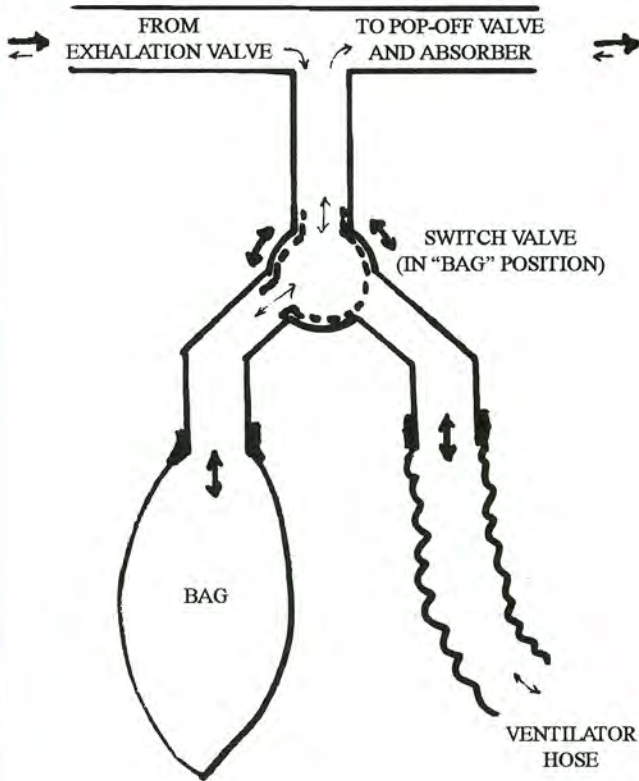
In older AV's, the timer was mechanical/pneumatic. In most current models, an electrical timer controls the action of the solenoid valves which open and close the pop-off valve and open and close the drive gas valve which compresses the bellows. Also, the electrical timer sets the duration of inhalation and the breathing rate and in some instances controls the rate at which a breath is given (e.g. inhalation flow rate).

Ventilators should be reliable and convenient to operate and the controls should be clinically accurate. Although some ventilators are specialized for small/pediatric patients, many are designed to ventilate both children and adults. By proper adjustment of the ventilating parameters, most AV's will allow intermittent positive pressure ventilation (IPPV)—i.e. the patient can take a "voluntary breath" also.

In terms of maintenance:

1. Cleaning the AV is usually accomplished by removing the bellows assembly, then detaching the bellows and removing it from its mount. The bellows chamber and the base are then cleaned with a mild soap, rinsed, and dried. The actual bellows should be sterilized by the appropriate method (e.g. ethylene oxide or steam sterilization) and appropriately aerated before a whole new cylinder and bellows assembly is put back together.
2. When all or part of the anesthesia ventilator is changed (either on a routine basis or because it is not functioning properly), it is always appropriate to do a leak test of the total system to which it is attached. It may also be desirable to connect and test the whole system together (e.g. a bag simulating the patient's lungs); the system is turned on for a few minutes to make sure that the whole system functions appropriately before approving it for the clinician to use.

FIGURE 2 — "BAG"/VENTILATOR SWITCH



Either located on the "bag mount" (operator must close pop-off valve) or in the head of the absorber assembly (automatically bypasses the external pop-off valve when in the "ventilator" position). Note that the "net" flow (large arrows) is from the exhalation valve to (through) the absorber. However, there is a "transient" flow (with pressure from the ventilator or bag "squeeze"): (a) to "seat" the exhalation valve; or (b) to assist filling the "bag" or ventilator bellows from the fresh-gas flowing backwards from the absorber space during the exhalation phase (and then out of either the manual or ventilator pop-off valve).

RELATED TERMINOLOGY...

Absorber: The component of a rebreathing system designed to remove CO₂ from patient gas.

Alveoli: Microscopic air sacs located at the very end of the bronchial tree, where the actual exchange of gases with the blood takes place.

APL (Pop Off) Valve: Adjustable Pressure-Limiting Valve; pressure limiting valve which releases gas over an adjustable range of pressures.

continued on page 18...

TECHNICALLY SPEAKING

by Wes Simpson II
San Diego, CA

This edition covers a broad spectrum of topics. Basic science articles challenge us to rethink what we always thought was true, but never proved one way or the other. New twists on solutions for old problems are also presented. It is only by being educated and informed that we will grow as individuals and professionals.

Howell SJ, Blodd CE, Ashby MW: A modified sensor for pulse oximetry in children. *Anaesthesia* 48:1083-1085, 1993.
The authors have modified a Nellcor "Oxyband" pulse oximeter probe by mounting it on a shortened 5cc syringe barrel.

Moss E: Medical gas contamination: an unrecognized patient danger. *APSF Newsletter* 9:20-22, 1994.
This article provides a good basis for understanding the how and why of medical gas misconnections and contamination, and how to correct or prevent problems.

Goodie DB, Philip JH: An analysis of the effect of venous resistance on the performance of gravity-fed infusion systems. *J Clin Monit* 10:222-228, 1994.
This is a good basic science article that utilizes a different approach from most studies. Rather than rely on a purely laboratory model, the researchers have attempted to address the question of how the widely ranging values encountered in the venous system will effect the clinical performance of infusion systems commonly used in the operating room. The tables include data on when greater flows can be achieved with two smaller bore catheters versus a single large bore catheter.

Goodie DB, Calang ID, Philip JH: Effective viscosity of commonly used infusible substances. *J Clin Monit* 10:283-284, 1994.
A comparison of the relative viscosities of common intravenous infusion fluids was performed. The published table can be helpful in determining differing flow rates in a gravity-fed system.

Hall JR: Blood contamination of anesthesia equipment and monitoring equipment. *Anesth Analg* 78:1136-1139, 1994.
This study raises the question of whether or not commonly accepted cleaning methods are truly effective. Nineteen surfaces were sampled in each of 22 operating rooms at 2 different hospitals. Visual inspection for blood was not found to be reliable. Thirty-three percent of surfaces declared "clean" after inspection were found to be contaminated with occult blood.

Rolly G, Versichelen LF, Mortier E: Methane accumulation during closed-circuit anesthesia. *Anesth Analg* 79:545-547, 1994.
This article reports the potential for accumulation of methane gas when using an oxygen/air mixture during closed-circuit anesthesia. Presence of the gas was detected by an infrared gas monitor operating in the 3.3 μ wavelength band. The methane was interpreted by the analyzer as halothane.

Johnston RV, Andrews JJ, Deyo DJ, Trajan LA, Savrick MD, Grady JJ, Prough DS: The effects of carrier gas composition on the performance of the TEC 6 desflurane vaporizer. *Anesth Analg* 79:548-552, 1994.
This study utilized a wide variety of carrier gas compositions and flow rates to test the actual output versus vaporizer dial setting. Results are in graphic and summary form.

Tessler MJ, Ruiz-Neto PP, Finlayson R, Chartrand D: Can anesthesia ventilators provide high-frequency ventilation? *Anesth Analg* 79:563-566, 1994.
Tidal volumes delivered by a Narkomed 2B and an Ohmeda 7800 ventilator were measured with a test lung. Frequencies of 60 and 99-100 breaths/min and two different conditions of compliance and resistance were used. Although the Narkomed 2B was able to deliver slightly larger tidal volumes at each setting, both ventilators were judged to be adequate under most circumstances.

Darling JR, Keohane M, Murray JM: A split laryngeal mask as an aid to training in fiberoptic intubation. *Anaesthesia* 48:1079-1082, 1993.
The authors modified a size 3 LMA by splitting the mask longitudinally and resealing the cuff. This allowed use of the LMA for endotracheal tubes larger than 6.0mm.

ANESTHESIA TECHNICIAN

Immediate full-time position for a trained Anesthesia Technician available. Experience in maintenance and troubleshooting monitors and anesthesia machines, aseptic technique, and invasive monitoring required. Manufacturer training in maintenance and repair a definite plus.

For more information please contact the Human Resources Department at 1-800-955-6511 or send resume to: **MIAMI CHILDREN'S HOSPITAL, 3100 S.W. 62nd Avenue, Miami, FL 33155.** Equal Opportunity Employer.

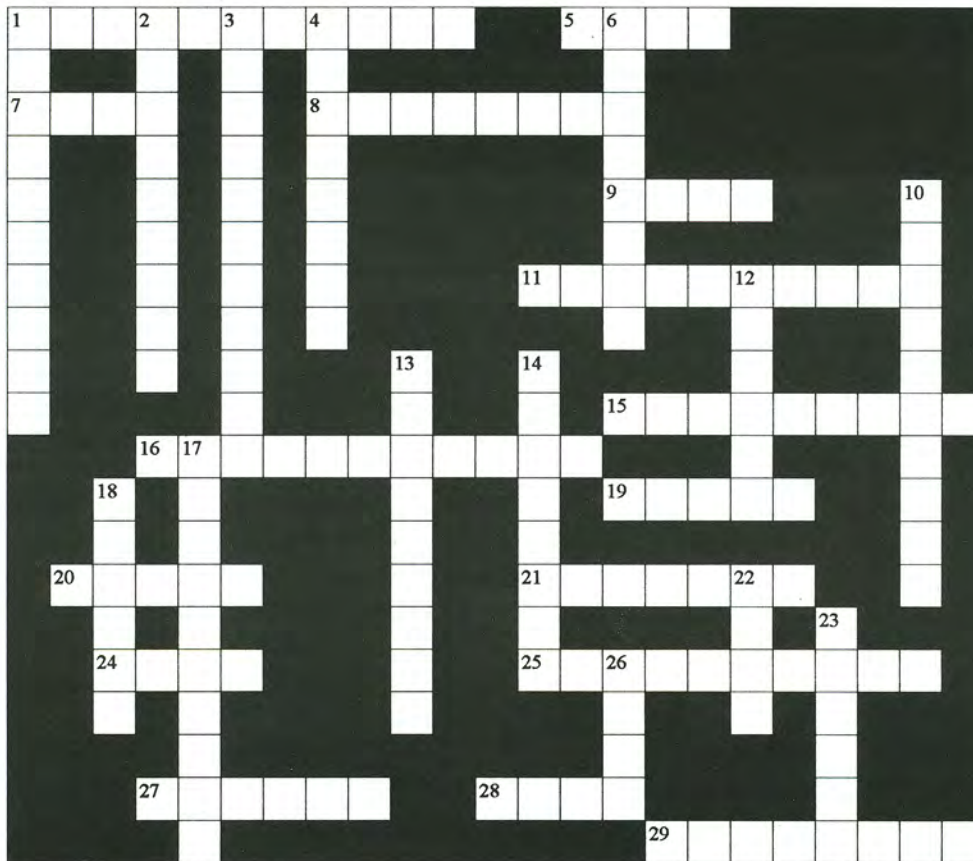


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THE MARY ANN KNIGHT INTERNATIONAL INSTITUTE OF PEDIATRICS
FOUNDED AS VARIETY CHILDREN'S HOSPITAL

TECHNICIAN

POSSIBLE



TECHNOLOGY POST-TEST: Anesthesia Ventilators and Related Terminology

Use this crossword puzzle to test your knowledge on the "Technology..." article and "Related Terminology" from pages 6 and 7. Puzzle answers are on page 15 of *this issue*.

Across

- 1 The act of drawing gas into the lungs.
- 5 The function of the ventilator is to replace the clinician's ___ in ventilating the patient.
- 7 Older ventilators required that the bag be manually replaced by the ventilator ___.
- 8 The drive gas ___ the bellows, causing inhalation.
- 9 How often the drive gas valve opens determines the breathing ___.
- 11 One-way flow valve.
- 15 With intermittent positive pressure ventilation (IPPV), the patient can take a ___ breath.
- 16 Movement of gas into and out of the lungs.
- 19 A ___ determines how long and how much each AV valve stays open or closed.
- 20 ___ volume is the amount breathed in or out during one breath.
- 21 Microscopic air sacs in lungs.
- 24 Sustains continuous air pressure in lungs to aid oxygenation.
- 25 The act of expelling gas from the lungs.
- 27 Excess breathing gas is vented through the APL or ___ valve.
- 28 The AV assembly should be cleaned with mild ___.
- 29 Pressurized O₂ which compresses AV bellows.

Down

- 1 The drive gas compresses the bellows during ___.
- 2 Older ventilators used mechanical/ ___ timers.
- 3 The process of gas exchange within the body.
- 4 The anesthesia bag can be used as a ___ to check an AV for proper function.
- 6 Removes CO₂ from patient gas.
- 10 Modern AV's use a combination of pneumatic and ___ power.
- 12 How long the drive gas compresses the ventilator bellows determines the ___ of each breath.
- 13 Main respiratory muscle.
- 14 Determines how fast the drive gas compresses the bellows.
- 17 The bellows fills during ___.
- 18 The bag/AV ___ allows one to select the ventilation method.
- 22 After cleaning a ventilator bellows assembly, a ___ test should be performed.
- 23 ___ volume is determined by how much gas is inhaled in 60 seconds.
- 26 Elevated pressure sustained in the lungs after exhalation.

REGIONAL SOCIETY ACTIVITIES...

Let us announce what's happening in your area. Send a brief report of recent or future activities for the next issue by May 15, 1995 to your ASATT Regional Director or to Dianne Holley. Send newsletters, if available, or give your info on the answering machine at (512) 451-7457, if no one answers. Photos (captioned) are also welcome, and will be returned.

ASATT Region 1:

A meeting is tentatively scheduled for **ASATT Region 1** in the Fall of 1995. It will be sponsored and organized by the Educational Department of the New York State University at Buffalo. Come enjoy camaraderie, education, and.....Niagara Falls! For further information: Jacqueline Polak at (718) 283-7188 [work] or (718) 979-8644 [home].

New York

A 3-day anesthesia tech seminar was held at the Suny Health Science Center in Syracuse on March 24-26. For information on future events: George Mann at (315) 464-4640.

ASATT Region 2:

For information on future events: Wilma Frisco at (216) 541-5710.

Maryland/DC

For information on future events: Robert Bowling at (410) 225-8176.

Michigan

For information on future events: Louise Martin at (313) 593-7696, or Jim McEvoy at (313) 343-4766.

Ohio

The **Ohio Society of Anesthesia Technologists and Technicians** will continue their monthly meetings by concentrating on *The Anesthesia Equipment Book*. They will discuss one chapter during each meeting, with the chapters being presented sequentially. A one-day seminar focusing on latex allergies will take place at the Children's Hospital in Akron. For further information: Wilma Frisco at (216) 541-5710.

Pennsylvania

Pittsburgh is the location of a state and regional all-day meeting of the **Pennsylvania Society of Anesthesia Technologists and Technicians** on May 20. For further information: Vicki Carse at (412) 232-5807.

Virginia

For information on future events: Linda Ferris at (703) 985-8351.

ASATT Region 3:

For information on future events: Marc Dickens at (404) 727-3580.

Florida

The **Florida Society of Anesthesia Technicians and Technologists** is planning educational meetings to prepare Florida techs for certification. The first meeting is scheduled for May 13-14 at the Travel Lodge at Disney World in Orlando. Other meetings are slated for August 26-27 in Fort Lauderdale, and December 2-3 in Gainesville Florida. See advertisement on page 18. For further information: Linda Cotton at (904) 351-7343 or (904) 347-8118.

Georgia

A 2-day seminar was recently held in Atlanta on March 25-26 by the **Georgia Society of Anesthesia Technologists and Technicians**. Educational topics included the LMA, pharmacology, and trouble-shooting seminars for Ohmeda and Drager anesthesia machines. For information on future events: Alfred Yin at (404) 248-4031. Marc Dickens at (404) 727-3580.

North Carolina

For information on future events: Kathline Leahan at (919) 681-5228.

Tennessee

For information on future events: Sharon Baskette at (615) 322-4000[W] or (615) 646-1599[H], or Tammie Carr at (615) 322-4000.

ASATT Region 4:

For information on future events: Sheila White at (319) 589-8665.

Illinois

For information on future events: Pat Zueck (217) 788-3780.

Iowa

The **Iowa Society of Anesthesia Technologists and Technicians** held an educational seminar March 31-April 2. On March 31 and April 1, anesthesia techs went to their choices of lectures sponsored by the nurse anesthetists and anesthesiologists whose state societies met concurrent with the ISATT. On April 2, the techs met for their own educational program. For information on future events: Sheila White at (319) 589-8665[work] or (319) 556-8234[home].

Wisconsin

For information on future events: Noreen Soeller at (715) 387-7179 [work] or (715) 387-4792 [home].

continued on page 11...

REGIONAL SOCIETY ACTIVITIES... continued from page 10

ASATT Region 5:

See Region 5 News on page 11.

For further information:

Ann Martin at (303) 270-8275 [work] or (303) 987-3907 [home].

Colorado

Colorado Springs will be the location of the next meeting of the **Colorado Society of Anesthesia Technologists and Technicians** in April. Topics will include the roles and responsibilities of the anesthesia tech in the OR, and the materials management aspect of anesthesia. **CSATT** also met in February to discuss plans for the CRASH '95 Seminar held in Vail, March 3.

For further information:

Teresa Chavez at (303) 320-2440.

Mississippi

The **Mississippi Society of Anesthesia Technologists and Technicians** held a one-day seminar in Vicksburg on April 1. ASATT Region 5 Director, Ann Martin of the University of Colorado Health Sciences Center Hospital was in attendance.

For information on future events:

Earl Coleman at (601) 984-5951, or

Nancy Marret at (601) 973-1656.

ASATT Region 6:

February 18 was the date of the Annual Region 6 Seminar which took place at Chandler Regional Hospital in Chandler, Arizona. Lectures included: "Difficult Intubation Algorithm," "Latex Allergy," "Malignant Hyperthermia," and "Recognition of Rhythm." Hands-on demonstrations allowed participants to practice their skills. The business portion of the meeting included a discussion about forming an Arizona state society.

For information on future events:

Dean Rux at (602) 821-3279[work] or (602) 497-9709 [home].

California

Big plans are in the works for the 11th Annual Meeting of the **California Society of Anesthesia Technologists and Technicians** to be held in Monterey on May 19, 20, and 21.

For further information:

Ron Turner at (510) 674-2241.

Texas

The **Texas Society of Anesthesia Technology** is planning a statewide meeting in early September in Dallas. Tentative location is Baylor University Medical Center. Baylor held a seminar entitled, "Complications During Anesthesia" on March 4. Anesthesia Techs as well as MD's and CRNA's were invited to attend. Educational meetings are regularly held in San Antonio [Raul Sanchez at (210) 675-1564], Dallas [Kyle Logsdon at (214) 820-2165], Austin [Dianne Holley], Houston [Freida Francis at (713) 397-0206], and El Paso [Estella Ramirez at (915) 544-0606].

For further information:

Dianne Holley at (512) 451-7457.

Utah

Salt Lake City is the proposed location of a spring or early summer meeting of the **Utah Society of Anesthesia Technologists and Technicians**.

For further information:

Jeff Mann at (801) 585-3619.

ASATT Region 7:

See "Region 7" on page 12.

For further information:

Ruth Ochoa at (503) 370-5200 pgr 225[work], or (503) 390-0736[home].

Oregon

A Factory-Sanctioned Cell Saver Certification Class is scheduled for May 20 at Salem Hospital. All active **Oregon Association of Anesthesia Technologists and Technicians** are invited to attend. **OAATT** also met on January 21 at the Portland VA Medical Center.

For further information:

Dave Mastalski at (503) 642-1537

Washington

The first quarter meeting of the **Northwest Society of Anesthesia Technology** was held March 25 at Valley Medical Center in Renton. Presentations were on capnography basics and on the drug, etomidate.

For information on future events:

Don Millbauer at (206) 228-3450.

ASATT T-SHIRTS & SWEATSHIRTS!



White or Navy with the ASATT Crest on the Front

Prices: Short-sleeve T-shirts----- \$15.50ea
Long-sleeve Sweatshirts--- \$22.50ea

Sizes: M, Lg, XLg, 2X, 3X

To order, send your name, address, shirt style, color, and size, plus a check in the total amount to ASATT, 9805 N.E. 116th St. #A183, Kirkland, WA 98034-4248. Allow 4-6 weeks for delivery.

REGIONAL ACTIVITIES...

ASATT REGION 7

3rd Annual Educational Seminar, Vancouver, Washington

by Guy Buckman

The 3rd Annual Educational Seminar for Region 7 was held in Vancouver, Washington. The seminar was expertly coordinated by Ruth Ochoa, Region 7 Director. Attending were the ASATT Board of Directors who held their meeting the day prior. The theme developed throughout the day was "Training, Training, and More Training."

The need to continuously train was brought home by Chris Patterson, ASATT President; Ruth Ochoa; and Dave Mastalski, Oregon Society President. It was generally accepted that with certification early next year, we can not afford to sit idly and expect to have a passing test score handed to us. The wide range of knowledge required for technicians and technologists dictates that an ongoing training program be developed in each hospital where we practice. The basic knowledge level, provided by ASATT, is the guideline for training. Train and document, you only have one year to prepare for the test.

Dr. Grace Chien of OSU, Portland gave a lecture on the role of the anesthesia tech and machine checkouts. Dr. Michael Jamond of OHSU spoke on fiberoptic bronchoscopy. Dennis Galvin, Perfusionist, lectured on the balloon pump, and Dr. John Ross, Salem Hospital, talked about PA catheters. These lectures were enthusiastically received and lively discussions were held.

54 people attended the seminar and 14 new ASATT members were signed up. A general acknowledgement was received from doctors and coworkers that we are on the cutting edge of a great career. We have the help and support of the anesthesiologists we work for and are earning respect from our coworkers.



Anesthesia techs pay close attention to a technical demonstration presented by Ruth Ochoa, Region 7 Director, at the 3rd Annual ASATT Region 7 Educational Seminar.

Region 5 News...

COLORADO HOSTS REGIONAL MEETING

The Annual ASATT Region 5 one-day seminar will be held on Saturday, May 20, 1995 at the University of Colorado Health Science Center Hospital. Topics will include "Technology of SvO₂/Continuing Cardiac Output," by Matthew Flaherty, M.D., Denver General Hospital, and "Rapid Infusion Equipment," by Robert Ackerman, M.D., UCHSC. The topic on "Universal Precautions" will be presented by Barb Hummel. She will be introduced by Ann Martin, ASATT Region 5 Director, UCHSC. In the afternoon, a demonstration will be given by Robert Phelps, M.D., Ph.D., UCHSC, on "Anesthesia Machine Dissection." For further information, contact Ann Martin at (303) 270-8275 [work] or (303) 987-3907 [home].

BAODA

50th Anniversary Conference

Eastbourne, England

May 3-5, 1995

DAY 1

Day Surgery Issues
The Law and the ODP
Safe Custody of Drugs
Pay and Conditions in NHS Trust Hospitals

DAY 2

Resuscitation and Trauma including demonstrations from the armed forces

DAY 3

Caring for the Carers
Joint NATN/BAODA open forum on theatre staffing
Chairman's Session-Registration and much much more!

THE EXHIBITION

Over 100 Trade stands exhibiting the latest equipment and supplies

For more information, contact ASATT Office at 800-352-3575 or Chris Patterson at 510-471-9327.

NETWORKING IN CALIFORNIA

A report on Jenny Walker's trip to the U.S.

(Editor's note: The following article is reprinted with permission from the Technic, newsletter of the Operating Department Assistants (ODA's) in Britain. Ms. Jenny Walker, an ODA from Hastings, England, won a trip to the ASATT Seminar in San Francisco last October from Intavent, Ltd. ODA's are the English equivalents of combined anaesthesia/surgical techs. The following is an account of Ms. Walker's visit to the US and the ASATT Seminar. If you are interested in attending the ODA Annual Conference in Eastbourne, England this May 3-5, see page 12.)

San Francisco provided the venue for the American Society of Anaesthesia Technologists and Technicians Annual Conference, in October 94.

Earlier in the year, *Technic* and Intavent LTD worked together on a competition run through the journal. The first prize of this competition, open to all ODA's who are members of the Association, was an expenses paid trip to the Conference. Jenny Walker, an ODA from Hastings, was the lucky winner.

After getting over the initial shock of realising she was off to California, Jenny received another bolt out of the blue when she was asked to address the Conference on the role of the ODA in England.

Jenny arrived at Heathrow airport with her daughter, who was travelling with her on the trip, early in the morning of the 14th of October, where they met Kevin Woods and Dave Wardell of Intavent. Following some photographs in the lobby, the two of them checked in with Virgin Airlines. The flight turned out to be an enlightening experience, Jenny commenting that flying over the vast snow-covered mountains of Greenland was one of the highlights. At the end of the 11 hour flight the beautiful sight of the Golden Gate Bridge stretching across the bay and Alcatraz in the distance provided the perfect backdrop for what was to be an extremely eventful three or four days.

The shuttle bus from the airport to the nearby hotel and conference center provided her with her first chance to meet another delegate, Robert from Albuquerque. He had heard there was an English delegation over and was very interested to begin conversations straight away.

In the hotel bar that evening, Jenny and her daughter met up with the other half of the English delegation of John Ballance, Vanessa Price and John Butterworth, all representing BAODA.

As the evening progressed, the English party met delegates from as far afield as New York, Seattle and the deep South. Jet lag played its usual tricks with the party, who were awake the following morning by 5:30am.

The delegation arrived at the conference centre early on Saturday 15th and met Chris Patterson, President-elect of the ASATT and other members of the ASATT Executive Council. The theme was set for the rest of the day with American delegates showing huge interest in the role of the ODA in England.

The lecture programme for the first day consisted of two parallel workshops which were lead by Ohmeda and North American Drager instructors. The second day covered a range of issues topical in anaesthesiology, including malignant hyperthermia and drug abuse in anaesthesia.



Jenny Walker, ODA from Hastings, England, addresses the ASATT membership in San Francisco.

The British delegation took the platform for an hour at the end of the second day. Jenny Walker spoke of the general role of the ODA with John Ballance and John Butterworth outlining the training process. No national certification process exists in the States, although they are attempting to introduce some form of examination as part of the familiar quest for recognition as a profession. Delegates were interested to discover that ODA's can work in all areas of the operating room, in the UK. The majority of the role of anaesthesiology technicians in the USA involves assisting the anaesthesiologist and maintaining equipment. Immediately

after the session and well on into the evening, delegates from all over the USA approached the British group with questions on aspects of the system in the NHS and offered many useful insights into the American setup.

The Convention ended on Monday 17th October, although the delegation will be staying in touch with many of the US delegates, in order to continue to exchange information. Jenny and her daughter were then left with two free days to explore San Francisco and the Bay Area.

Technic Editor's note: *The above is a much reduced account of Jenny Walker's visit to the USA. Jenny will be addressing a fringe meeting at the Annual Conference in Eastbourne next May with more details of the trip. Jenny would like to thank Kevin Woods and Intavent Ltd for their kind sponsorship of the visit.*

NEW MEMBERS...

ASATT would like to extend a warm welcome to the following new members who have joined ASATT:

Barbara Ames Yonkers, NY	Ann Clark Wenatchee, WA	Toni S. Hales Savannah, GA	Federico A. Marmolejo Elizabeth, NJ
Salvacion V. Amores Victorville, CA	William Clark Highland Heights, KY	James E. Hannaford Denver, CO	Kathrin L. Mathias Kansas City, MO
Michael A. Anderson Bethesda, MD	Catherine Cloutier Lowell, MA	Rebecca L. Harbst Ferndale, WA	G. Michael McGrath Carmel, NY
Anesthesia Equipment Supply Debbie A. Appleton LaPorte City, IA	Alethia D. Covington Chicago, IL	Frederick Anthony Harvey Liverpool, England	Jo-Anne McSorley Phoenix, AZ
Thomas H. Appleton Berkeley, CA	Wendell A. Coward, Sr. Boston, MA	Eunice Haugen Mukwonago, WI	Arnold Mercado New York, NY
Arkansas Children's Hospital Little Rock, AR	Sue Cox Maryville, TN	Virginia E. Helisek Manchester, MI	Diana Y. Mettelle West Allis, WI
Olafur M. Bachmann, III Los Alamitos, CA	Michael P. Davis Las Vegas, NV	Sara A. Hewlett Boise, ID	Lee Miller Portland, OR
Linda S. Baker Savannah, GA	Mark J. Dionne Rockville, CT	Flor D. Huaman Kissimmee, FL	Bernadette Mitchell Phoenix, AZ
David L. Bandy Lakestation, IN	Carol A. Doerfler Salem, OR	Hudson, RCI	N.Y. Hosp./Cornell Med. Cntr New York, NY
James E. Bennett Franklinville, NY	Mark B. Done Mesa, AZ	Robin K. Irwin Boise, ID	Jon "Erik" Nilsson Milwaukee, WI
Janice M. Besaw Southwick, MA	Shawn Donnelly Denver, CO	Donna J. Johnican Chicago, IL	Kent Nordlund Corvallis, OR
Michelle Lynn Beverly Phoenix, AZ	Eugene Donor Windsor, CT	William M. Johnson Portland, OR	George W. Offley Brockton, MA
Alena Blakeway Bellingham, WA	Michael J. Elias Phoenix, AZ	Tammie Ray Kendall-Hollis Jasper, IN	Ohmeda Medical Systems San Anselmo, CA
George H. Brook Philadelphia, PA	Hollman Esquivel Casselberry, FL	Cyretha B. King Chicago, IL	Michael T. Owens Denver, CO
Douglas K. Bulger Seattle, WA	Janice Follmer North Prairie, WI	Mable Kyles Portland, OR	Michael J. Pallitto Tucson, AZ
Burroughs Wellcome, Co.	Beth A. Gandolfo Dunwoody, GA	Darin H. Latimer Bountiful, UT	Sylvester S. Pawlak Manchester, CT
Clinton Campbell Milwaukee, WI	Dolly A. Garcia Phoenix, AZ	Mary Leahy Boulder, CO	Joe Peck Slatington, PA
Carlow College Pittsburgh, PA	Robert C. Gay Kansas City, MO	Linda D. Lechner Vallejo, CA	Barbara E. Person Savannah, GA
Luellen Carter, Jr. Greenville, MS	Mark E. Gong Pacifica, CA	Ding-Bong Lee San Francisco, CA	Stephen G. Pettit Germantown, MD
Tamara D. Carter Scottsdale, AZ	Ruben A. Gutierrez Palmdale, CA	Level 1 Technologies	Yves L. Pilotte Ypsilanti, MI
Robert J. Caso Milford, CT	Darla K. Haag Mason City, IA	Regina R. Littleton Chicago, IL	Carmine A. Pollastretti Quincy, MA
Children's Hospital of Pittsburgh Pittsburgh, PA	Amy Haevischer Tigard, OR	Cheryl Ann Main Mesa, AZ	Thomas E. Potrzuski Coral Springs, FL
		Raul M. Mallari Englewood, NJ	

continued on page 15...



American Society of Anesthesia Technologists and Technicians

Sixth Annual Meeting and Seminar

Atlanta, Georgia
Home of the
1996 Summer Olympics



October 21-23, 1995
Radisson Hotel
International & Courtland

*A touch of "class" ...
Southern style*

Fluid Warming
Transesophageal Echo
Basic Anesthesia
Waste Gas & Safety

Role of the Anesthesia Tech in the OR
Development of Ventilation
Monitoring Cardio-Thoracic Anesthesia

Infection Control
Certification Update
Machine Safety
NIBP/Oximetry

Registration includes admission to the ASA exhibit hall October 23-25.

**FURTHER DETAILS WILL BE
MAILED OUT THIS SUMMER!**

**DON'T LET CERTIFICATION
CATCH YOU UNPREPARED!**

NEW MEMBERS... continued from page 14

Charleton J. Provost
Huntington Beach, CA

Jesse L. Ramirez
Milpitas, CA

Timothy J. Rawlings
Boise, ID

Mary Roberson
Shreveport, LA

Evelyn L. Robertson
Texas City, TX

London A. Robinson
Blue Island, IL

Alar Saaremets
Fremont, CA

Julie M. Salter
Boise, ID

Eric B. Sausman
Boise, ID

Sham, Inc.

Zane A. Shelley
Chicago, IL

Shriners Burns Institute
Boston, MA

Sureshchandra Shukla
Mamaroneck, NY

Linda D. Smith
Painesville, OH

Charlene M. Smith
Ravenna, OH

Elizabeth R. Sprague
Lombard, IL

Randall L. Stocker
Blaine, WA

Roben M. Talvy
Portland, OR

Jenny L. Thada
Mason City, IA

Liz J. Triffet
Tucson, AZ

Richard C. Umpleby
Clinton, UT

Univ/Pittsburgh Medical Center
Pittsburgh, PA

Cheryl R. Uthe
Dubuque, IA

Gordon T. Veal
Vancouver, WA

Adriana H. Veiga
Okinowa, Japan

Dmitar M. Vidic
Toronto, Ontario
Canada

Limshin Wey
Hackensack, NJ

Sheila K. White
Dubuque, IA

Stephen Wikfors
Palisades Park, NJ

Samuel C. Wilson
New Windsor, NY

Michelle L. Woods
Ann Arbor, MI

Hanna G. Yacob
Lake Oswego, OR

Karen L. Yanus
Gaithersburg, MD

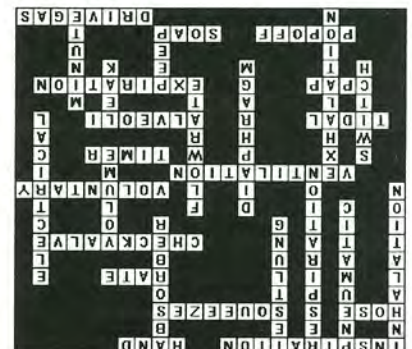
Makram M. Youssef
Scottsdale, AZ

Zeneca Pharmaceuticals

Barbara C. Zimmer
Mason City, IA

ANSWERS TO PUZZLE:

(From page 9)



Illinois, is leaving his position as Regional Director and will be replaced by Ms. Sheila K. White at Mercy Medical Center, Dubuque, Iowa. The position will be filled by Ms. White on an interim basis for the duration of Jim's tenure. In the past, Jim has donated countless hours of work and personal expense to our Society and we all thank Jim for his devotion to ASATT and for a JOB WELL DONE. We look forward to his ongoing support as a member of our Society. Sheila White was confirmed and appointed by the Board of Directors as Interim Region 4 Director. All of us welcome Sheila. She has great qualifications and receives full support from the Staff at Mercy Medical Center. Our thanks to Sheila for accepting the responsibilities of Region 4 and "filling the void" left by Jim's departure.

Mr. Dean Rux, ASATT Region 6 Director, held his 2nd Annual Educational Meeting for Region 6 on February 18th at Chandler Regional Hospital, Chandler, Arizona. Topics of education included "Malignant Hyperthermia," "LMA's," and "Difficult Intubation." As is customary with Dean, he did an outstanding job in presenting a fine program. Our appreciation is extended to the Staff at Chandler Regional Hospital for their hospitality and backing of Dean's program.

ASATT's Region 7 Director and Treasurer, Ms. Ruth Ochoa worked many long hours in order to present ASATT's Third Annual Educational Meeting and Seminar for Region 7. The program was held at the Red Lion Inn at the Quay in Vancouver, Washington, on March 4th. The Seminar was excellent and included topics in "Fiberoptic Bronchoscopy"; "PA Catheters - use and need in the OR"; and "Balloon Pumps." Mr. Dave Mastalski, Associate Editor of *The Sensor*, was on the educational staff and delivered an excellent lecture entitled "The Diverse Anesthesia Tech." We give our thanks to all participants and a special message of "Job Well Done!" to Ruth.

In connection with the Region 7 Seminar, ASATT's Board of Directors and I held our mid-year Board Meeting also in Vancouver on March 3rd. Principal items of business conducted at the meeting were: a review of costs and

Employment Opportunities...

Program Director, Anesthesia Technology: A fifteen month educational program will start its first class in September of 1995. An experienced educator is needed to serve as Director and core instructor. A Baccalaureate degree with education in the discipline is required. Interested candidates should contact Dean Wollett, Western School of Health and Business Careers, Pittsburgh, Pennsylvania, 1-800-333-6607.

progress of ASATT's certification program; the annual review of our Society's Bylaws; the business report and membership status from Accurate Management & Transcription Service (our home offices); and a study of the financial report from the Treasurer. Each Director also reported on the status and progress of education and business in their respective regions. It was a productive meeting and we will be reporting to you at our 6th Annual Seminar and Educational Meeting in Atlanta, Georgia to be held on October 21, 22, & 23 of this year (ASA/ASATT exhibits on October 23, 24, & 25, 1995). Your Vice President/President Elect, Mr. Jerry Guttery has been working hard to prepare a great program for us. It will be presented at the Radisson Hotel Atlanta, located at International and Courtland Boulevard, Atlanta, Georgia. "*A touch of 'class'... Southern style*" is the theme of this year's program. May I ask each of you to please start making arrangements now and let's all attend our Sixth Annual Seminar in force.

To the Presidents and Officers of all State Societies: ASATT's Board of Directors and I want to commend and congratulate you for your hard work and efforts. We were privileged to have attended several State Society Seminars over the past year. They were all excellent, well-coordinated educational programs. We at ASATT are

continued on page 17...

NEW ACADEMIC PROGRAM: ANESTHESIA TECHNOLOGIST

The Western School of Health and Business Careers in Pittsburgh, Pennsylvania will begin its first class in training Anesthesia Technologists in September, 1995.

The program is fifteen months in length and graduates will be awarded a diploma. The school will make application for approval to award the Associate in Specialized Technology Degree (AST) in January, 1996.

The program was designed by Western School in collaboration with two major hospital anesthesia departments located in the Pittsburgh area. The advent of the program will address the local need for properly trained entry-level technologists.

The curriculum is structured to offer the students 918 didactic and laboratory course hours, 440 integrated clinical education hours, and a 300 hour externship.

For additional information, please contact Mr. Ross Perilman at 1-800-333-6607.

dedicated to supporting our "grassroots" societies and we surely know the vital part you play in ensuring success for all of us in the anesthesia technical support field.

Ms. Jacqueline Polak, ASATT Region 1 Director, at Maimonides Medical Center, Brooklyn, New York, is in the process of putting together the Second Annual Educational Seminar for Region 1. It is tentatively set to be held in August at Buffalo, New York, but this is still in the preparation stage and subject to change. Jacqueline will report on her program later.

Ms. Wilma Frisco, Region 2 Director and Secretary for ASATT, has been working diligently on ideas and projects to publicize and promote our Society. Her hard work on various ASATT projects directly supports our national certification process and other goals of this Society. The results of some of her work will be noticeable in Atlanta at our 6th Annual Meeting and in Eastbourne, England at the 50th Golden Anniversary of the British NATN and BAODA (operating room assistants and technicians). Several colleagues and I will be making the trip to Eastbourne in response to an open invitation to all anesthesia technicians in the U.S. from J. H. W. Ballance, MD, President of the British Association of Operating Department Assistants.

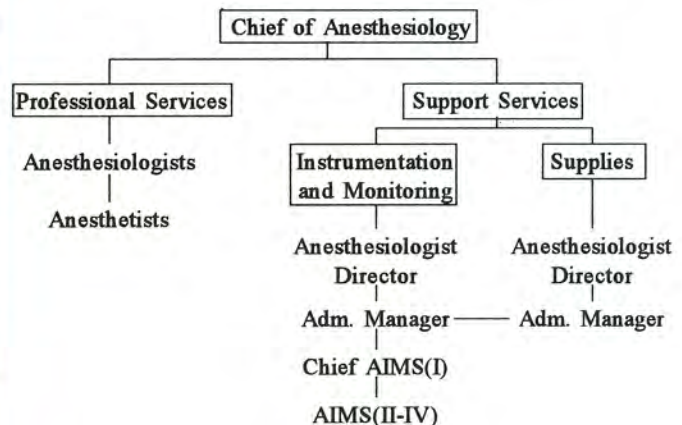
Dr. Ballance and his colleagues have issued a warm welcome for all of us to attend their 50-year celebration. This event was publicized in the January issue of our newsletter and you will find more information on the subject in this edition. Remember, we are all invited. Time is short since the conference runs from May 3 through May 5, 1995, so make your reservations as soon as possible.

We are looking forward to representing the ASATT to our British cousins. We will be sharing a display area with the BAODA in the main entryway of the exhibition hall in Eastbourne, and we will be offering ASATT T-shirts, sweatshirts, and other advertising and souvenir items for sale. The proceeds from all sales will be earmarked for deposit in our special fund for certification. We are all personally financing our own trips and hope that you may be able to afford to do likewise. If anyone needs help in making last-minute reservations, please contact me personally through our home offices, telephone number, 1-800-352-3575.

I am pleased to report that Mr. Marc A. Dickens, ASATT's Interim Region 3 Director, at Emory University Hospital, Atlanta, Georgia, will be serving as President of the Georgia State Society. Our congratulations to Marc; we know he will do an excellent job.

Ms. Ann Martin, ASATT Region 5 Director, at The University of Colorado Hospital, Denver, Colorado, recently took part in the "Crash '95 Anesthesia Tech

The major portion of the daily workload involves setting up invasive monitoring systems in the holding area, operating room, and recovery room. Bedside trouble-shooting of all monitoring systems is done with most problems being solved by AIMS without the need to call the Medical Engineering Department.



During the off-hours (evenings and weekends), AIMS perform minor repairs, calibration, and preventative maintenance on monitors and anesthesia machines. AIMS-III level and more senior AIMS are required to take a certification examination for CPFT to permit them to perform blood gas and electrolyte analysis without supervision, i.e. when on-call. This CPFT examination is offered annually by the National Board of Respiratory Care, Inc. Medical Technologist certification or equivalent is also acceptable.

The introduction of ATA's and AIMS into the anesthesia/operating room environment has made an important contribution to the efficiency and quality of patient care in the Emory practice setting. Although similar functions may be performed by other types of personnel and group organization, the experience at Emory during the last twenty years leads us to suggest that utilization of AIMS's and ATA's is likely to be one of the better solutions for improving the quality of anesthetic care—through better equipment maintenance and through more intensive monitoring of both patients and the anesthesia delivery systems that are very critical to safe outcomes.

Meeting and Ski Vacation" on March 3, 4, 5, & 6, 1995, at Vail, Colorado. Ms. Phyllis Tuller was the Course Coordinator and from all reports, those in attendance enjoyed an excellent Seminar and benefitted greatly.

In closing, I thank each and every member of our Society and the Board of Directors for your support. As I look enthusiastically to the future, I see tremendous growth for our Society and the attainment of many worthy goals in education, professionalism, and certification.

RELATED TERMINOLOGY... *continued from page 7*

Check Valve: A valve that allows flow in one direction only.

Continuous Positive Airway Pressure (CPAP): A method of delivering medical gas to a patient in order to hold open alveoli that would normally be closed at the end of expiration and thereby increase oxygenation and reduce the work of breathing. *See PEEP.*

Diaphragm: The main respiratory muscle separating the abdominal and thoracic cavities. By moving downward, the diaphragm creates suction (negative pressure) to draw in air and expand the lungs.

Drive Gas: Compressed O₂ used to pressurize the outside of the bellows and force the breathing gas inside the bellows to be delivered to the patient during inspiration.

Expiration: The act of breathing out or expelling gas from the lungs.

I:E: Ratio of inspiratory time to expiratory time.

Inspiration: The act of breathing in or drawing gas into the lungs.

Minute Volume: The volume of gas inhaled and exhaled in one minute. *See tidal volume.*

Positive End Expiratory Pressure (PEEP): Elevates the baseline pressure left in the lungs after exhalation. This keeps the alveoli open to exchange and prolong oxygenation. *See CPAP.*

Pneumatic: Relating to or using gas under pressure.

Respiration: The process of gas exchange within the body.

Scavenging System: An assembly of specific components that serves to collect excessive exhaled gases and exhaust them out of the operating room.

Selector (Bag to Ventilator) Valve: A valve that allows the anesthesiologist to switch between manual patient ventilation (breathing bag) and mechanical ventilator-controlled breathing.

Test Lung: A device such as an anesthesia bag that simulates the compliance and resistance in a patient's lung and is used for testing anesthesia and ventilator function during the pre-use checking procedures.

Tidal Volume: The amount of air that passes into or out of the lungs during each normal respiration. *See minute volume.*

Ventilation: Movement of gas into and out of the lungs.

The preceding definitions were found in the Ohmeda manual: The Anesthesia Machine: Essentials for Understanding by Bowie and Huffman, and the Drager manual: Operating Principles of Narkomed Anesthesia Systems by Cicman, Himmelwright, Skibo, and Yoder. Both books come highly recommended for further study of anesthesia breathing systems.

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THE SOUTH IS RISING AGAIN

Rising to meet the educational needs of Anesthesia Technicians, that is! The F.S.A.T.T. (Florida Society of Anesthesia Technicians and Technologists) has joined forces with Vilma Young to present to you a **TWO DAY WORKSHOP IN PREPARATION FOR ANESTHESIA CERTIFICATION.** Vilma is the latest recipient of the JAMI BLUE AWARD presented annually by the A.S.A.T.T. during the American Society of Anesthesia Technologists and Technicians national convention.

Currently the A.S.A.T.T. is in the process of working on testing procedures and requirements for anesthesia personnel. Vilma Young has designed an educational program especially for F.S.A.T.T. members in an effort to prepare them for testing. F.S.A.T.T. is taking an aggressive approach to becoming prepared. In doing so, we are offering this program to all Technicians (not just in Florida), Technologists, C.R.N.A.'s, Residents, LPN's, and anyone working in the anesthesia field.

DATES ARE: AUGUST 26 -27 , 1995 - Fort Lauderdale, FL
DECEMBER 2 - 3 , 1995 - Gainesville, FL

(The date for the third class to be held in North Florida will be announced.)

FOR MORE INFORMATION, CONTACT LINDA COTTON: President F.S.A.T.T., INC.
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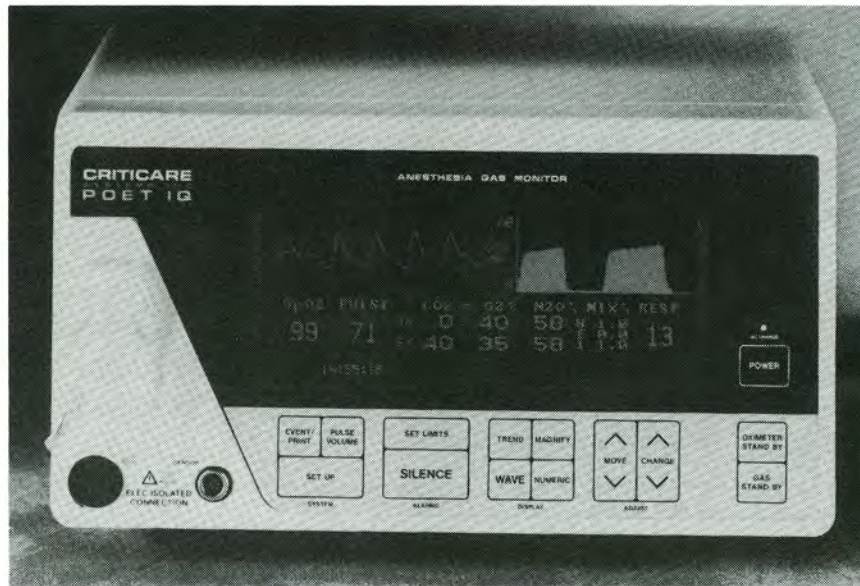
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