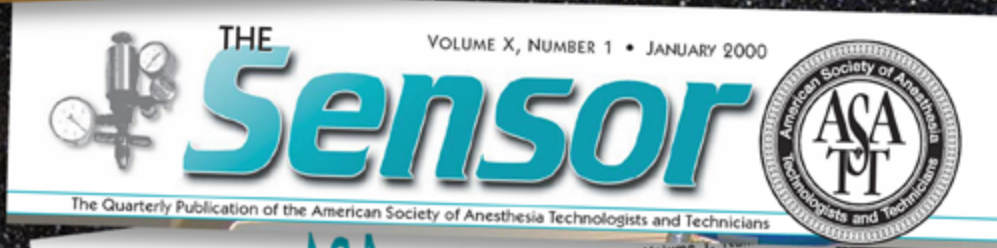
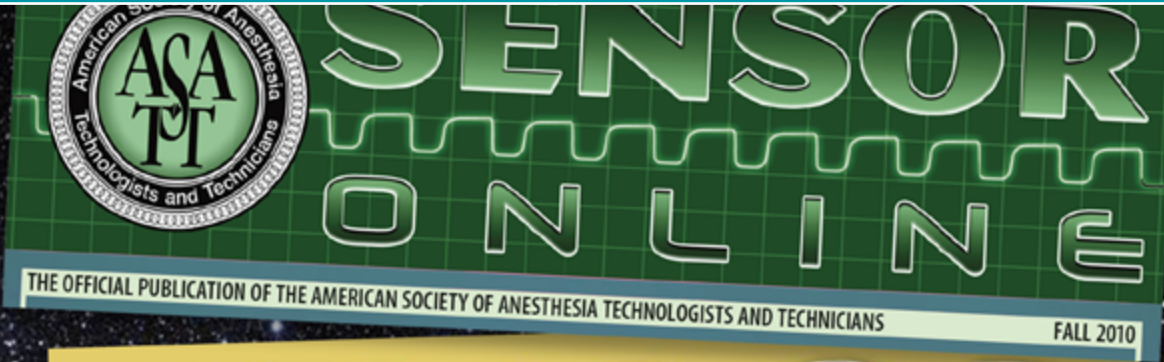


ISSUE #100 / SUMMER 2015

# sensor

THE OFFICIAL PUBLICATION OF THE AMERICAN SOCIETY OF ANESTHESIA TECHNOLOGISTS AND TECHNICIANS



# IT'S THE 100<sup>TH</sup> ISSUE OF *THE SENSOR*

...and there's a custom ASATT crossword puzzle on page 36!

# 26th Annual **ASATT** Educational Conference



*Flaming Gorge Reservoir*

*Where will you be August 27-30?*  
**ASATT will be at the  
Little America Hotel in Salt Lake City!**  
*Won't you join us?*



*Ashley National Forest*



*Liberty Park*



*Salt Lake Temple*

**S**OME POPULAR ATTRACTIONS that are within walking distance or a short light rail ride of the Little America Hotel are:

- Temple Square
- Mormon Temple
- Clark Planetarium
- The Green Pig Pub
- The Tabernacle Social Club
- Liberty Park
- Tracy Aviary
- Beehive House
- Hogle Zoo

Want to stretch your legs? The Wasatch National Forest is less than thirty minutes from the Little America Hotel. Just over Emigration Canyon on the east side of the city lies the Ashley National Forest. ■

# sensor

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Technologists and Technicians

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# PRESIDENT'S MESSAGE

*Jeremy Wyatt, Cer.A.T.T.*



**G**REETINGS ALL,  
We are now in a very pivotal month, not only for our nation but for our chosen profession. I would like you to reflect back to the Fourth of July and what this means. For the USA it marks a pivotal day as the USA entered Independence and our ability to advance forward. For ASATT, it marks our next step forward, retiring the anesthesia technician exam and work experience to sit for certification. Like in 1776, it took a group of people standing united for the greater good. Also, it will take all of our members to stand united and help our profession through this positive transformational time.

I would like to give a big thank you to HQ. Alex and his team have been putting in very long hours to help assist those who have come forward to join our profession, get certificated, or advance their certification prior to July 15th. To give a little perspective, last year around this time, HQ would process, on average, about 40 applications a month. In the first half of 2015, they've processed 2,069 applications, and our membership increased by 927 individuals! As you can see, HQ has been very busy. While we started this communication over five years ago, we had high hopes that more would not wait till the last few months to get certified. With that we could not anticipate such a massive rush as we have been experiencing. I'm asking everyone for your patience as we work diligently through this.

*...last year around this time, HQ would process, on average, about 40 applications a month. In the first half of 2015, they've processed 2,069 applications, and our membership increased by 927 individuals!*

Our national education conference is next month. If you haven't already registered, please do so. We will be in beautiful Salt Lake City, August 27–30 with the AANA. We opened up a \$100 registration for those members who would like to save money, earn extra CE hours, advance their personal education, build their résumé and help educate our members by presenting during our conference. We will do our best to make spots available for those who would like to take advantage of this opportunity, and I cannot stress enough how much

I would like to see more members give a presentation. Call or email me today ... I am happy to help you through this process.

This issue marks the 100th edition of *The Sensor*. This is a notable event for many reasons. It shows that we are in a profession that is sustainable. It signifies clinical advancement, growth of our chosen profession, and that we have members willing to dedicate the personal time and energy to do the research, write an article and then have a professional article published. Yes I said published! I truly hope you understand what it means to have something you wrote be published. As a manager, when I see an applicant who has been published, they go right to the top of the list to be interviewed. Just keep that in mind.

Many certified technicians have questions and concerns around their ability to still sit for the Technologist exam after July 15th. We have already

put in place the option to do so. You will find lots of information coming out around refresher, advancement and provisional recertification. Please keep your eyes out for emails from ASATT and visit our website weekly for updated information. I always

welcome phone calls and emails if you have questions, but lots of information along with new forms will be coming out over the next few months.

I'd like to wrap this up by saying I really hope to see each and every one of you at our national conference August 27-30 in Salt Lake City. I challenge everyone to raise your own level of

professionalism. Help hold each other accountable. Take an active role to lead your chosen profession to the next level, ensuring the highest level of care and safety for each and every one of your patients.

*Jeremy Wyatt, Cer.A.T.T.  
ASATT President*

## CERTIFICATION NEWS

**A**RE YOU UNABLE to attend ASATT regional meeting in your area? Are you looking for continuing education close to home? The state associations of the AANA host annual meetings that may hold opportunities for you. Many of these state associations have reduced rates for anesthesia technicians. Contact the state association in your area for more information.

Note: The AANA and their state societies are not affiliated with ASATT. ASATT does not guarantee credit for Continuing Education hours from these meetings towards recertification unless prior approval is requested by the meeting coordinator and granted by ASATT. Some of the topics presented at these meetings will be relevant for anesthesia technician/technologist certification renewal; however, not all of them are acceptable.

The AANA has made a change to their certificates of completion. The expiration date of a program that has received prior approval by the AANA means that the program provider cannot offer credits beyond that date. Please check your certificates of completion and be sure that the date of completion is either before or on the expiration date. A later date results in the CEs being voided and cannot be used towards recertification.

**I**F YOU ARE USING Grand Rounds certificates for continuing education credits, please understand that not all topics qualify for ASATT continuing education credits. Secondly, institutions and/or programs seeking approval of AMA PRA Category 1 Credits™ must meet this accreditation organization's requirements when issuing credit to non-physicians.

### Who can get CME credit (AMA PRA Category 1 Credit™)?

Only MDs and DOs can claim AMA PRA Category 1 Credit™. **Others are eligible for other types of credit, but all must be pre-arranged by planners and individual organizations.** If others who are not eligible for credit need a record of the CME credit designation for an activity (i.e. Certified Anesthesia Technologists and/or Technicians), **they can receive a Certificate of Participation only.**

According to the AMA's booklet, "The Physician's Recognition Award and Credit System," 2010 revision, page 8:

### Credit certificates, transcripts or other documentation available to the non-physician participant:

Providers may choose to issue non-physician health professionals a certificate of attendance that references AMA PRA Category 1 Credit™, to help them document their attendance at certified educational activities. Attendance certificates for non-physician participants can read:

*The [name of accredited provider] certifies that [name of participant] has participated in the educational activity titled [title of activity] at [location, when applicable] on [date]. This activity was designated for [number of credits] AMA PRA Category 1 Credit(s)™."*

## DID YOU KNOW?

**Correct designation for a Certified Anesthesia Technician . . . . . Cer.A.T.**

**Correct designation for a Certified Anesthesia Technologist . . . .Cer.A.T.T.**

**All of these are incorrect:**

- |           |             |       |        |
|-----------|-------------|-------|--------|
| CAT       | CATT        | CerAT | CerATT |
| Cer. A.T. | Cer. A.T.T. | CERAT | CERATT |
| Cert.A.T. | Cert.A.T.T. | CerAT | CerATT |

### Clarification for all recently certified Anesthesia Technologists & Technicians

**W**E APOLOGIZE for any miscommunication or misunderstanding of when you may begin to acquire Continuing Education credits to apply toward your recertification. As the congratulatory letter that is accompanied with your certificate states: You will need to earn 20 (technician level) or 30 (technologist level) CEs beginning January 1, 2016 and ending December 31, 2017.

# POSITION DESCRIPTIONS FOR ASATT Board of Directors

**H**AVE YOU EVER WONDERED exactly what the responsibilities are of the individual Board members? Here is a simple overview of the “position descriptions” of the Board of Directors.

## Regional Directors — Two-year term

- Responsible for organizing at least one yearly meeting and in some situations, two. This includes obtaining speakers, selecting locations and obtaining sponsors. The Regional Director is financially accountable for operating within the budgeted funds for the regional meeting. They are also responsible for providing an outline of the meeting to ASATT for distribution and sending ASATT a final list of attendees to facilitate awarding of CEs.
- Responsible for promoting the Annual Educational Meeting within the Region with both vendors and members.
- Responsible for attending the Annual Educational Meeting.
- Assisting with registration, sales, etc., during the Annual Meeting.
- Assist with the ASA booth, if needed.
- Responsible for participating in all Board activities, to include:
  - Attending all Board meetings.
  - Participating in all Board conference calls.
  - Responding to all emails when questions/opinions are solicited.
  - Submitting monthly, quarterly and yearly reports for your Region and/or committees to the President.
  - Submitting *SENSOR* and Website updates by the date requested.
  - Participate in the yearly budget process for the region's activities.

## President-Elect — Three-year term

- Communicating directly with the President of ASATT.
- Assuming the responsibilities of the President when necessary.
- Being familiar with the Bylaws, Policy and Procedure manual and the working of all committees.
- Succeeding the President at the end of his/her term.
- Co-chairing the Annual Educational Meeting, to include taking care of the ASA booth (setup, staffing and breakdown).
- Chairing the Communications Committee.

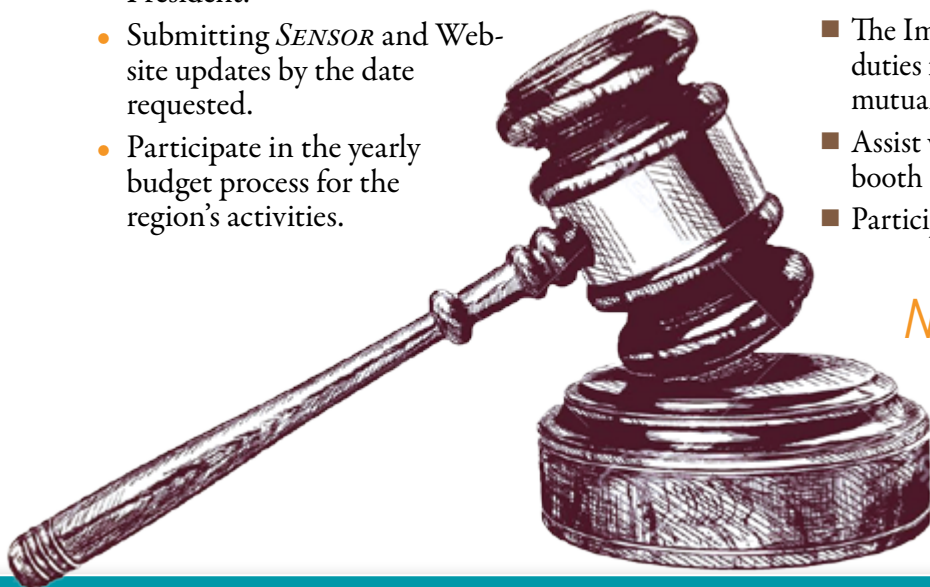
## President

- Handles daily Society business as required.
- Presides at all Society membership, Board of Directors and Executive Committee meetings.
- Responsible for co-signing all negotiated contracts on behalf of the Society.
- Fiscally responsible for operating the Society's business within the approved budget.
- Prepares agendas for Board business.
- Co-Chairs the Annual Educational Meeting, to include taking care of the ASA booth (set-up, staffing and breakdown).
- Responsible for set-up, staffing and break down of ASATT booth at the AANA National Meeting.

## Immediate Past-President

- The Immediate Past-President shall serve as a member of the Board and Chairperson of the Nominations Committee.
- The Immediate Past-President shall fulfill various other duties for the Society at the pleasure of the President by mutual agreement of both parties.
- Assist with set-up, staffing and breakdown of ASATT booth at the AANA National Meeting.
- Participates in conference calls and Board meetings.

*No Board members or Officers  
of ASATT are paid for their  
time . . . they are voluntary!*



# Application of Cell Saver in Orthopedic Surgery

Jenny Deng, Anesthesia Associate II, Cer.A.T.T.

University Hospital, SUNY Upstate Medical University, Syracuse, NY



## Summary

Intraoperative autotransfusion is frequently applied in orthopedic surgery. The quality of salvaged blood can be assured with combination of Cell Saver autologous blood recovery system and LipiGuard reinfusion filter. Carefully collecting shed blood, thoroughly washing red cells and manually controlling the device are recommended and the specific considerations for each step are discussed in this article based on our experiences.

Blood transfusion was first introduced into use in patients almost two centuries ago with an inconsistent success, dependent upon the skill of the treating physician and the availability of a donor. However, since the discovery of ABO blood types and Rh system this medical process has been standardized and proved to be safe and effective in saving lives. It is applied in many major surgeries that involve blood loss. Although allogenic blood transfusion, in which a patient receives blood donated by another person, is widely used, autologous transfusion, in which a patient receives his or her own blood, is also a well-established option. Replacement of lost blood with patient's own blood eliminates the risk of transfusion-transmitted disease and allergic reactions. In terms of blood-borne diseases the HIV epidemic during the early to mid 1980s particularly prompted needs for further exploring the use of

autologous transfusion, or autotransfusion. Psychologically, patients often feel more secure knowing the blood they receive is their own, and sometimes autotransfusion is the only acceptable procedure on religious grounds as in the case of Jehovah's witnesses even though the consent still needs be obtained on individual basis. The use of autologous



Figure 1. Patients often feel more secure, knowing the blood they receive is their own.

blood also reduces the demand on blood bank inventory as well as the clerical errors that may occur when processing or transfusing donated blood. Autotransfusion is therefore considered to be the safest and most effective way to replace blood loss.

Autologous blood can be obtained from preoperative donation, preoperative hemodilution, intraoperative salvage, or postoperative salvage. For blood salvage autotransfusion, the first device was developed by Arnold Griswald in 1943, into which blood was collected through a suction line and saved in a

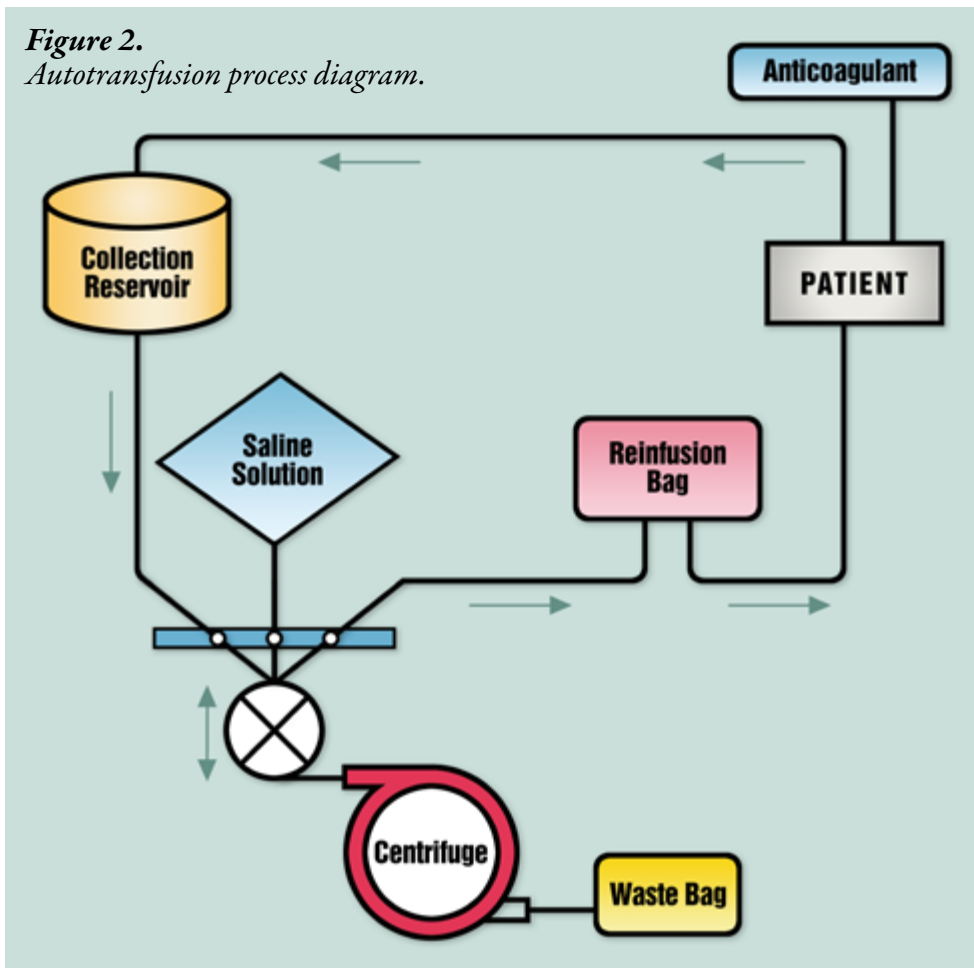
bottle; the salvaged blood was then strained through a cheese cloth before being re-infused. Subsequently similar devices were designed and modified for improvements, but the basic principles were the same. The first "modern" Haemonetics Cell Saver autologous blood recovery system was released in 1975. Since then, this system and its similar devices have been used extensively worldwide in the blood bank and surgical industries. Specifically for intraoperative salvage, blood is aspirated from the surgical site and collected in a reservoir. The blood processing procedure of autotransfusion devices is based on the principle of centrifugation, in which denser particles (i.e., red blood cells) are separated from the lighter blood components and fluids, such as buffy coat or plasma. During centrifugation, the red blood cells are further washed with saline to obtain washed packed red blood cells. These salvaged red blood cells are immediately available for rapid reinfusion and have higher concentrations of the molecule that release oxygen.

## Complications of autotransfusion in orthopedic surgeries

Intraoperative autotransfusion can be used for various procedures from cardiac valve reconstruction to organ transplantation and orthopedic operations including spinal surgeries, total joint replacements and operations involving repair of major fractures. However, there

**ACKNOWLEDGMENT:** The author thanks Joyce Freeman, Cer.A.T.T., for the continued support and encouragement, and Reza Gorji, MD, for the helpful discussion during this manuscript preparation.

**Figure 2.**  
Autotransfusion process diagram.



**continued from page 6**

are potential complications associated with this process. A general concern is air embolism if the patient's infusion line is directly receiving the salvaged blood from the primary reinfusion bag of the system. A simple method to prevent this complication is to transfer the blood into a secondary reinfusion bag ("transfer pack") that is connected to the patient's vascular access. Coagulopathy is another complication often seen when intraoperative autotransfusion is at a large volume. This is because only red blood cells are recovered and re-suspended in normal saline without the coagulation factors and platelets. It is recommended that onsite laboratory testing be performed to monitor patient's blood coagulation status; the tests include pro-thrombin time, fibrinogen, and platelet count. For orthopedic surgeries, the blood collected often contains some contaminants such as bone chips/bone grafting materials and

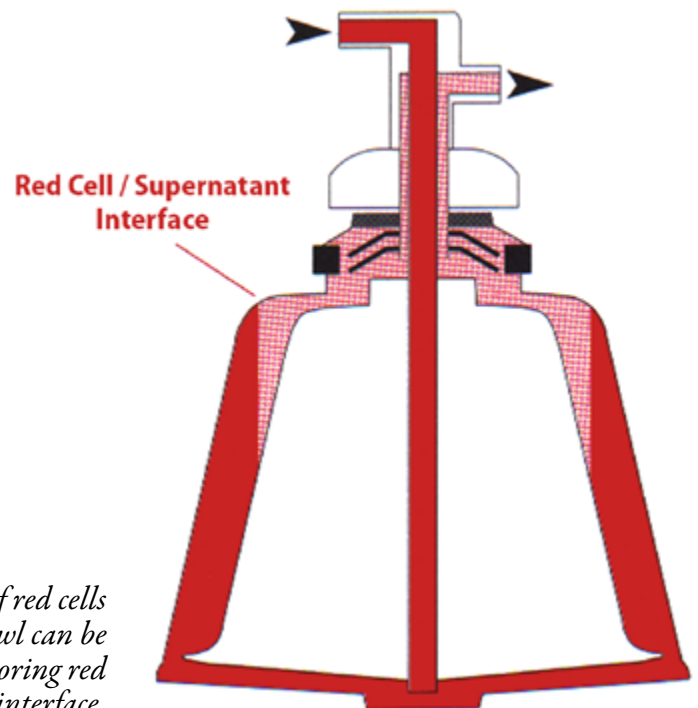
fat derived from bone marrow. These contaminants may cause clogging of the system. More importantly, the layers of bone marrow-derived fat on salvaged autologous blood are nonemulsified. If nonemulsified fat enters the circulation, it may initiate a fat embolism syndrome, which is seen mostly in orthopedic surgery and characterized mainly by pulmonary dysfunction, and possibly result in postoperative neurological deficit as well. Therefore, the reinfusion of nonemulsified fat is not desirable and should be avoided when possible.

**Figure 3.** The level of red cells accumulated in the bowl can be determined by monitoring red cell/supernatant interface.

**Indications of autotransfusion in orthopedic surgeries**

While the decision to use autotransfusion is the responsibility of the surgeon in charge, the efficacy of use of intraoperative washed autologous shed blood for transfusion in certain bone surgeries was demonstrated previously in literature. Compared with allogenic blood transfusion, autotransfusion has been shown to be associated with decreased incidence of postoperative infections. In fact, this technique has frequently been used in our hospital. The examples of common orthopedic cases include complex spinal instrumentation and fusion, discectomy, laminectomy, total shoulder replacement, total hip and knee replacement and repair of long bones such as femur fractures. In general, blood replacement with autotransfusion is recommended for orthopedic operative procedures in which blood loss is expected to be greater than 900 milliliters. It is important to remember that only properly processed salvaged blood can be used.

A controversial indication is spine tumor surgery. Most spine tumors are the consequence of metastases of sys-



temic malignant neoplasia. Metastatic spine tumor surgeries are associated with substantial blood loss and require significant amount of blood replenishment. The current mainstay of this replenishment is relying on allogenic blood, which imposes an enormous burden on blood bank resources. The use of intraoperative autotransfusion has previously been considered to be contraindicated in these cases due to the theoretical risk of tumor dissemination. However, evidence is emerging from diverse surgical specialties that support the combinational application of cell salvage and leucocyte-depletion filtration in oncological operations including spine tumor surgery.

### Process considerations

Figure 2 (previous page) is a diagram illustrating intraoperative autotransfusion process. Shed blood is collected through a special double lumen suction tubing from the operative field. Suctioning may produce sheer stresses to cause red cell lysis (hemolysis). This condition is one of definite contraindications to autotransfusion and should be avoided by any means. In order to prevent this from happening, the pressure in the suction device should be minimized. We usually maintain suction vacuum levels lower than 200 mmHg. The suction tip should be kept below the level of the air-blood interface to avoid bubbles and air sharing force. Some suction devices can automatically adjust suction pressures in response to the amount of air being aspirated and have been demonstrated to be an effective way to prevent hemolysis. In addition to suction pressure, other conditions causing hemolysis include some liquids such as hydrogen peroxide, ethanol and hypotonic solutions. It should be avoided to suction any of those into a collection reservoir.

If cement is used during a surgery, it should not be introduced into the autotransfusion system when it is still in the liquid or soft state. Bone chips may clog the system and flushing suction

line occasionally with normal saline can keep it clear. Collected blood is then mixed with an anticoagulant solution containing either 30,000 units of heparin in a 1,000 liter bag of normal saline or premixed citrate if there is a contraindication to the use of heparin. The salvaged blood is filtered to remove large clots and debris before entering the reservoir. The collection reservoir should be primed with 100-200 ml of anticoagulant and the anticoagulant drip rate is usually regulated to approximately one drop per second, but many orthopedic procedures may require a faster drip rate.

Blood and anticoagulant mixture is drawn from the reservoir into the centrifuge. Depending on the amount of blood loss from an adult patient, either 125-ml or 225-ml centrifuge bowl is used. The fill rate is 300 ml/min for 125-ml bowl and 350 ml/min for 225-ml bowl, which is slower than a normal rate (500 ml/min). We usually select MANUAL mode to process the collected blood from orthopedic surgeries. Under AUTOMATIC mode, a bowl optics sensor situated below the support arm, advances the machine from the FILL to the WASH mode



**Figure 4.** PALL LipiGuard® SB reinfusion filter is used for removal of micro-aggregates, residual fat particles, white blood cells, and tumor cells; for up to one unit of salvaged blood and single use only.

when RBCs reach a predetermined level within the bowl. However, the blood salvaged from orthopedic surgery is usually of high-debris and or hemolysis; under this condition the bowl optics sensor may misinterpret the blood separation layers and pre-trip the machine into the WASH mode before the bowl is filled adequately with red cells. Under MANUAL mode, we can more accurately monitor the level of the red cells accumulated in the bowl and start washing phase in a better timing, which increases the efficiency of blood salvage, allowing more red cells to be washed and packed.

The wash volume is 1250 ml for 125-ml bowl and 1500 ml for 225-ml bowl, which is larger than a normal volume (1000 ml). If the amount of the collected red cells is only enough for a partial bowl and no more blood is available from the reservoir, a double wash is needed to adequately dilute and wash out the larger volume of supernatant. If the reservoir still contains blood, the FILL button can be pressed again to pump more blood to achieve a full bowl. Since the machine is under Manual mode, the color of effluent line should be monitored. Wash should continue until the effluent line is clear and colorless. Use of inadequately washed blood could result in serious medical consequences, such as renal failure and disseminated intravascular coagulation (DIC).

When the effluent line becomes clear and colorless, WASH phase is terminated by pressing the STOP button. After the centrifuge comes to a complete stop, start EMPTY phase to pump the contents of the bowl to the reinfusion bag. To avoid the potential of air embolism, the reinfusion bag that is attached to the autotransfusion wash set should not be used for high pressure infusion back to the patient; another way to prevent air embolism is to transfer the appropriately processed blood into a secondary reinfusion bag before reinfusion. At the end of an



operation, if there are not enough red blood cells to fill the bowl, a double wash procedure as mentioned above can be used. Alternatively, the CONC mode can be selected to pump red cells in the reinfusion bag back to the bowl to make up a full bowl.

**Use of reinfusion filter**

Some physical debris from the surgical field may not be washed out because they have the same density as the red cells. It is therefore recommended that a micro-aggregate filter be used when transfusing the washed blood to the patient. For this purpose, we routinely use a PALL LipiGuard SB reinfusion filter, which is specifically designed for removal of both micro-aggregates and residual fat particles remaining in the processed blood. Additionally, the filter can also remove white blood cells

(leucocytes) and tumor cells. Leukocyte depletion filtration improves cell salvage safety and reduces the side-effects whereas eliminating tumor cells from salvaged blood is an important measure to ensure autotransfusion to be successfully applied in spine tumor surgery when allogenic blood is not available. ■

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Haemonetics Corporation. Cell Saver-5 autologous blood recovery system: operator’s manual.

# Intraoperative Procedures That Benefit from the Use of Autotransfusion

<b>Cardiac</b>	<ul style="list-style-type: none"> <li>• CABG</li> <li>• OPCAB</li> <li>• Valve surgery</li> </ul>	<b>Vascular</b>	<ul style="list-style-type: none"> <li>• Aortic aneurysms</li> <li>• Aorta-femoral aneurysms</li> <li>• Femoral popliteal aneurysms</li> </ul>
<b>Orthopedic</b>	<ul style="list-style-type: none"> <li>• Spinal procedure</li> <li>• Total joint replacement (hips and knees)</li> <li>• Major fractures</li> </ul>	<b>Neurological</b>	<ul style="list-style-type: none"> <li>• Arteriovenous malformation</li> <li>• Basilar artery aneurysm</li> <li>• Intracranial neurosurgery</li> </ul>
<b>Trauma/General</b>	<ul style="list-style-type: none"> <li>• Cranial fracture</li> <li>• Hepatic resections</li> <li>• Splenectomy</li> </ul>	<b>Oncology</b>	<ul style="list-style-type: none"> <li>• Hepatic resection</li> <li>• Radical cystectomy</li> <li>• Radical prostatectomy</li> </ul>
<b>Gynecological</b>	<ul style="list-style-type: none"> <li>• Ruptured Ectopic pregnancies</li> <li>• High-risk caesarean sections</li> </ul>	<b>Plastic/Reconstructive</b>	<ul style="list-style-type: none"> <li>• Removal of vascular malformation</li> </ul>
<b>Transplants</b>	<ul style="list-style-type: none"> <li>• Heart transplant</li> <li>• Liver transplants</li> <li>• Heart/lung transplants</li> <li>• Renal transplants</li> </ul>	<b>Pediatrics</b>	<ul style="list-style-type: none"> <li>• Cardiac surgery</li> <li>• Orthopedics</li> <li>• Scoliosis</li> </ul>
<b>Jehovah's Witnesses</b>	<ul style="list-style-type: none"> <li>• (Continuous circuit)</li> </ul>	<b>Postoperative</b>	<ul style="list-style-type: none"> <li>• Mediastinal/chest drainage</li> <li>• Wound drainage</li> </ul>

## *Autotransfusion and Blood Conservation in the Perioperative Setting*

# GLOSSARY

- Allogeneic blood transfusion:** Blood cells are donated by a genetically non-identical member of the same species.
- Allograft:** Cells or tissue are donated by a genetically non-identical member of the same species.
- Alloimmunization:** Development of antibodies in response to foreign substances such as antigens, i.e. transfusion reaction.
- Antibodies:** Gamma globulin proteins that are found in blood or other bodily fluids, that are used by the immune system to identify and neutralize foreign objects, such as bacteria and viruses.
- Antigen:** A substance that prompts the generation of antibodies and can cause an immune response. The word originated from the notion that they can stimulate antibody generation.
- Apheresis:** Blood of a donor or patient is passed through an apparatus that separates out one particular constituent (such as platelets) for storage and later transfusion, and returns the remainder to the circulation.
- Autologous blood transfusion:** The collection and re-infusion of the patient's own blood or blood components.
- Autotransfusion:** The collection and re-infusion of the patient's own blood or blood components.
- Colloid solutions:** IV fluids composed of water mixed with very small particles of proteins or other materials. These small particles do not dissolve in water. Colloids are used to maintain blood protein levels that stabilize fluid balance and circulation volume in the body. Colloids include dextran, hetastarch, and albumin.
- Crystalloid:** Clear IV fluids such as Normal Saline, Lactated Ringers or Isolyte.
- FFP:** "Fresh frozen plasma" is prepared from a single unit of blood or by apheresis, drawn from a single person. It is frozen ( $-40^{\circ}\text{F}$ ) after collection and can be stored for ten years from date of collection. FFP contains all of the coagulation factors and proteins present in the original unit of blood.
- Hematocrit:** The proportion by volume of the blood that consists of red blood cells. Hematocrit (hct) is expressed as a percentage. Normal range is: Adult Males 42–54%; Adult Females 38–46%.
- Hemodilution:** Blood is removed from a patient immediately before surgery and replaced with a non-blood volume expander. This reduces the loss of red blood cells during surgery. After surgery the collected blood is returned to the patient.
- Hemoglobin:** The iron-containing oxygen-transport protein in the red blood cells.
- Homologous Blood:** Blood or blood products obtained from a donor other than the patient.
- Microaggregate:** A microscopic collection of particles, such as platelets, leukocytes or fibrin, that occurs in stored blood.
- Micron:** The average size of the openings between pieces of filter media are represented in microns. (A measurement equal to 0.000039 inches.) The larger the number, the larger the opening — the openings in a 160 micron filter are larger than those in a 40 micron filter.
- Normovolemia:** Normal blood volume.
- Platelet:** Small cells circulating in the blood. The platelets play an important role in stopping bleeding and beginning the repair of injured blood vessels.
- Plasma:** The liquid component of blood, in which the blood cells are suspended. It makes up about 55% of total blood volume.
- Platelet and Plasma Sequestration:** Platelets and plasma are taken from the patient and stored before they are damaged during surgery these 'undamaged' sequestered platelets are re-infused postoperatively. ■

# 26th Annual ASATT Educational Conference

Little America Hotel • Salt Lake City, UT • August 27–30, 2015

## SCHEDULE OF EVENTS\*

### Thursday, August 27

- 1600–2000.....Registration and Reception  
1700–1800.....Hands-on Troubleshooting Anesthesia  
Machines, 2–3 different brands

### Friday, August 28

- 0700 – 0815 .....Registration Breakfast and Vendors  
0815 – 0830 ..... Welcome and Announcements  
0830 – 0930 ..... *Ventilation Modes* — Dan Halstead  
0930 – 1030 ..... *Critical Events in Anesthesia: How Trigger  
Films Can Be Used as an Educational Tool*  
— Jeremy Heiner, Ed.D., CRNA  
1030 – 1100 .....Break / Vendors  
1100 – 1200 .....*Monitoring the Anesthetized Patient*  
— Shannon Sayers-Rana, Cer.A.T.T.  
1200 – 1300 .....Lunch / Vendors  
1300 – 1400 ..... *Troubleshooting the Anesthesia  
Machine* — Draeger  
1400 – 1500 ..... *Intraoperative MRI Procedures*  
— Adam Horne, Cer.A.T.T.  
1500 – 1530 .....Break / Vendors  
1530 – 1630 ..... *Charcoal Filters and MH* — Joe Orr, MD  
1630 – 1730 ..... *Cell Saving Revolution* — John Rivera

### Saturday, August 29

- 0700 – 0815 .....Registration Breakfast and Vendors  
0815 – 0830 ..... Welcome and Announcements  
0830 – 0930 ..... *Blood and Blood Products/Transfusion*  
— Rebecca Desso, MD  
0930 – 1030 ..... *Regional Anesthesia* — Rick Runyan, MD  
and Smitha Warriar, MD  
1030 – 1100 .....Break / Vendors  
1100 – 1200 ..... *Trauma Anesthesia* — Mark Harris, MD  
1200 – 1300 .....Lunch / Annual Business Meeting  
1300 – 1400 ..... *Airway Intubation* — Jay Buys, MD  
1400 – 1500 ..... *Transplant Anesthesia* — Scott Allen, MD  
1500 – 1530 .....Break  
1530 – 1630 ..... *TEE/Ultrasound* — Jessica Farrar, MD  
1630 – 1730 .....Regional Meetings

### Sunday, August 30

- 0815 – 0830 .....Registration Breakfast  
0830 – 0930 ..... Welcome and Announcements  
Room 1 Idaho —  
0830 – 0930 ..... *Limited Resources* — Mark Harris, MD  
0930 – 1030 ..... *SCIP/SCOPE for Surgery* — Nick Ence, MD  
Room 2 Wyoming —  
0830 – 0930 ..... *Neuro Anesthesia* — Clint Christensen, MD  
0930 – 1030 ..... *Radiation Safety* — Matthew Schwarz, MD

\*Tentative program, subject to change — actual CE count could range from 11 to 16 CEs

**16 CEs awarded for full participation.  
To receive full credit for CEs, you must turn in  
your own Evaluation Sheets each day before leaving.**





# 26TH ANNUAL EDUCATIONAL CONFERENCE

**August 27-30, 2015**

**Little America Hotel**

500 South Main Street, Salt Lake City, UT 84101

Central Reservations: 800/431-5288

Room rate: \$149 plus tax for Single/Double Room  
Ask for the ASATT Annual Meeting Group

Prices guaranteed until July 25, 2015,  
or based on availability.

## REGISTRATION FORM

Registration Type	<del>Early Bird thru April 30</del>	<del>May 1 thru June 15</del>	<del>June 16 thru July 14</del>	July 15 thru Aug 14	ON-SITE after Aug 14	DAILY (check one) <input type="checkbox"/> Thurs <input type="checkbox"/> Fri <input type="checkbox"/> Sat	Amount
Member* Mem. # or User ID: _____	<del>\$250</del>	<del>\$300</del>	<del>\$350</del>	\$400	\$500	\$250	
Non-Member*	<del>\$450</del>	<del>\$500</del>	<del>\$550</del>	\$600	\$700	\$350	
Spouse/Guest**	<del>\$200</del>	<del>\$250</del>	<del>\$250</del>	\$250	\$250		
<b>TOTAL</b>							

This is my 1st time attending an ASATT Conference . . . . .  Yes  No

Special physical or dietary needs?  No  Yes Describe: \_\_\_\_\_

Registration fee includes conference materials, opening reception, Friday and Saturday breakfast, Friday and Saturday luncheon, and designated CEs.

\*No registration will be processed without payment. Any registrations that do not have the correct payment attached will be held until full payment is received. No exceptions will be made.

\*\*Spouse/Guest rate includes Welcome Reception, meals, and exhibits only.

## PARTICIPANT INFORMATION

Please type or carefully print the information requested exactly as it should appear on the roster and participant's name badge.

Full Name \_\_\_\_\_ Nickname for name badge (if different) \_\_\_\_\_

Employer/Affiliate of \_\_\_\_\_

Home Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

Work Phone \_\_\_\_\_ Work Fax \_\_\_\_\_ Email \_\_\_\_\_

## PAYMENT INFORMATION

Check  Visa  MasterCard  American Express  Discover

Card Number \_\_\_\_\_ Exp. Date \_\_\_\_\_ CVV \_\_\_\_\_

Cardholder's Signature \_\_\_\_\_

Full Name (as it appears on card) \_\_\_\_\_

Address (if different than above) \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

Work Phone \_\_\_\_\_ Work Fax \_\_\_\_\_ Email \_\_\_\_\_

## REFUND POLICY

Cancellations made by July 1, 2015, will receive full refund. Cancellations made July 2 through Aug. 1, 2015, will be penalized 50% of the registration fee. Cancellations made on or after Aug. 2, 2015, will receive no refund.

Print this form, attach payment (if paying by check), and submit to:  
**American Society of Anesthesia Technologists and Technicians**  
7044 South 13th Street • Oak Creek, WI 63154  
414/908-4942, ext. 450 • Fax: 414/768-8001

[www.ASATT.org](http://www.ASATT.org)

Please note that membership dues are not included in the Conference registration fee and are invoiced separately.



REMEMBER OCTOBER 1990? Soviet president Mikhail Gorbachev was awarded the Nobel Peace Prize. Symphony conductor Leonard Bernstein and band leader Xaver Cugat both passed away in October 1990.

It was a month of firsts! Somebody came up with the idea of the “World Wide Web” for the first time in October 1990. The first Walmart was opened in the northeast part of the U.S., and the first Pizza Hut and the first McDonald’s were opened in mainland China.

AND, in October 1990, the very first quarterly newsletter from the newly founded American Society of Anesthesia Technologists and Technicians was published! It began with these words:

**“As the practice of anesthesia becomes more equipment-intensive, while safety and cost-effectiveness remain essential in patient care, it becomes increasingly important to have technical support personnel in anesthesia who are well-trained and who remain current with the theory and application of the technology that they manage...**

**“This first edition of the quarterly ASATT newsletter is an effort to meet our goal of communication within our ranks.”**

The **SENSOR** that you’re reading now is the 100th issue of ASATT’s newsletter! We could never have reached issue #100 without the generous help of members like you. Continued thanks for your contributions, your feedback, and for being an important part of this proud Society!

On the next 4 pages: ***A look back at all 100 issues!***





OCT 1990



JAN 1991



APR 1991



JUL 1991



OCT 1991



JAN 1992



APR 1992



JUL 1992



OCT 1992



JAN 1993



APR 1993



JUL 1993



OCT 1993



JAN 1994



APR 1994



JUL 1994



OCT 1994



JAN 1995



APR 1995



JUL 1995



OCT 1995



JAN 1996



APR 1996



JUL 1996



OCT 1996



JAN 1997



APR 1997



JUL 1997



OCT 1997



JAN 1998



APR 1998



JUL 1998



OCT 1998



JAN 1999



APR 1999



JUL 1999



OCT 1999



JAN 2000



SPRING 2000



SUMMER 2000



FALL 2000



WINTER 2001



SPRING 2001



SUMMER 2001



FALL 2001



WINTER 2002



SPRING 2002



SUMMER 2002



FALL 2002



WINTER 2003



**SPRING 2003**



**SUMMER 2003**



**FALL 2003**



**WINTER 2004**



**SPRING 2004**



**SUMMER 2004**



**FALL 2004**



**WINTER 2005**



**SPRING 2005**



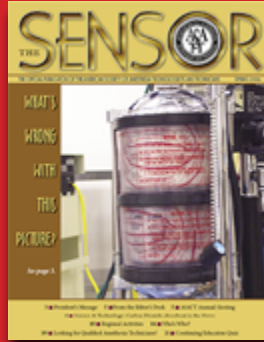
**SUMMER 2005**



**FALL 2005**



**WINTER 2006**



**SPRING 2006**



**SUMMER 2006**



**FALL 2006**



**WINTER 2007**



**SPRING 2007**



**SUMMER 2007**



**FALL 2007**



**WINTER 2008**



**SPRING 2008**



**SUMMER 2008**



**FALL 2008**

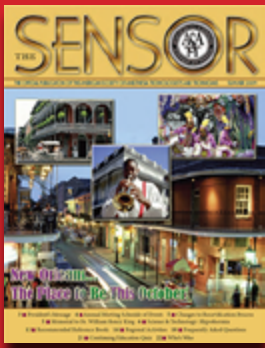


**WINTER 2009**



**SPRING 2009**





**SUMMER 2009**



**FALL 2009**



**WINTER 2010**



**SPRING 2010**



**SUMMER 2010**



**FALL 2010**



**WINTER 2011**



**SPRING 2011**



**SUMMER 2011**



**FALL 2011**



**WINTER 2012**



**SPRING 2012**



**SUMMER 2012**



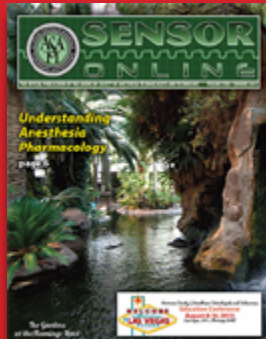
**FALL 2012**



**WINTER 2013**



**SPRING 2013**



**SUMMER 2013**



**FALL 2013**



**WINTER 2014**



**SPRING 2014**



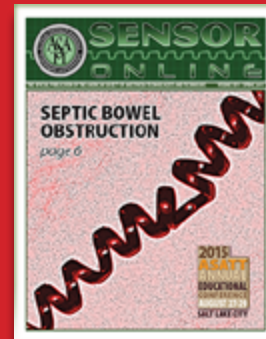
**SUMMER 2014**



**FALL 2014**



**WINTER 2015**



**SPRING 2015**



**SUMMER 2015**

# THE PRESIDENTS



Dennis McMahon



George Mann



Lee Amorin



E. Chris Patterson



Jerry Guttery



Ruth Ochoa



Sheila White



Gail Walker



Vicki Carse



Joyce Freeman



Sharon Baskette



Jerry Trejo



Jonnalee Bill



Sue Christian



Maretta Grandona



Shannon Sayers-Rana



Mary McGavock



Vicki Reyes



Delbert Macanas, Sr.



Joey Herrera



Jeremy Wyatt

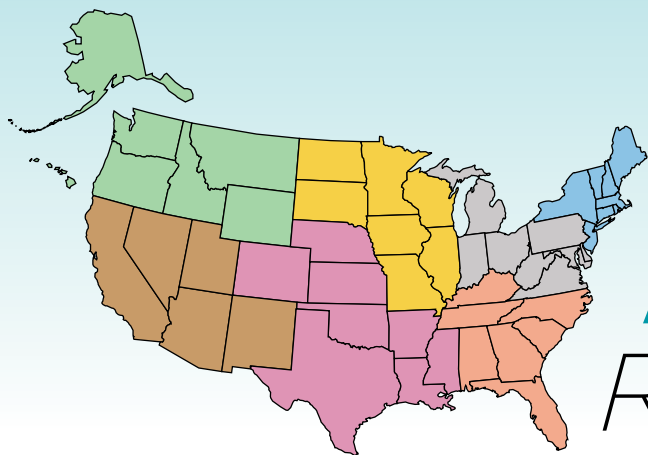
1990-92	DENNIS MCMAHON	LYNNWOOD, WA
1993	GEORGE MANN	SYRACUSE, NY
1994	LEE AMORIN	SEATTLE, WA
1995	E. CHRIS PATTERSON	SAN JOSE, CA
1996	JERRY GUTTERY	GAINSVILLE, FL
1997	RUTH OCHOA, Cer.A.T.	SALEM, OR
1998	SHEILA WHITE, Cer.A.T.	DUBUQUE, IA
1999	E. CHRIS PATTERSON, Cer.A.T.	REDWOOD CITY, CA
2000	GAIL WALKER, Cer.A.T.	CHAPEL HILL, NC
2001	VICKI CARSE, Cer.A.T.	PITTSBURGH, PA
2002	JOYCE FREEMAN, Cer.A.T.	SYRACUSE, NY
2003	SHARON BASKETTE, Cer.A.T.	NASHVILLE, TN
2004	JERRY TREJO, Cer.A.T.T.	HOUSTON, TX
2005	JONNALEE BILL, Cer.A.T.	ENFIELD, NH
2006	SUE CHRISTIAN, Cer.A.T.T.	NASHVILLE, TN
2007	MARETTA GRANDONA, Cer.A.T.T.	GRAND JUNCTION, CO
2008	SHANNON SAYERS-RANA, Cer.A.T.	PORTLAND, OR
2009	SUE CHRISTIAN, Cer.A.T.T.	NASHVILLE, TN
2010	MARY MCGAVOCK, LPN, Cer.A.T.	NEW BERLIN, WI
2011	VICKI REYES, Cer.A.T.	PASADENA, CA
2012	DELBERT MACANAS, SR., Cer.A.T.	HONOLULU, HI
2013	JOEY HERRERA, Cer.A.T.T.	HOUSTON, TX
2013*	VICKI CARSE, Cer.A.T.	PITTSBURGH, PA
2014	VICKI REYES, Cer.A.T.T.	PASADENA, CA
2015	JEREMY WYATT, Cer.A.T.T.	SEATTLE, WA

\*interim



## TITLES & AUTHORS OF ALL SCIENCE & TECHNOLOGY ARTICLES FROM THE FIRST 100 ISSUES OF *THE SENSOR*

October 1990	<i>Standard Connectors for Physiological Monitors</i>	Dwight Shields, AT	Spring 2003	<i>Latex Allergy</i>	Sue Christian, Cer.A.T.
January 1991	<i>Types and Uses of Monitors in Anesthesia</i>	Alberto Gonzales, AT	Summer 2003	<i>Life-Saving Technology: The Cell Saver</i>	Thomas Bathrick, Cer.A.T.
April 1991	<i>Advances in Pain Management</i>	J. Lowell Haro, M.D. & L. Dianne Holley, AT	Fall 2003	<i>Creating a Latex-safe Environment</i>	Maretta Grandona, Cer.A.T.
July 1991	<i>Malignant Hyperthermia</i>	Alberto Gonzales, AT	Winter 2004	<i>Sterile Operative Arena</i>	Shannon Sayers-Rana, Cer.A.T.
October 1991	<i>Integrated Monitoring Systems</i>	L. Diane Holley, AT & Kenneth J. Jones, M.D., Ph.D.	Spring 2004	<i>Surgical Fire Safety</i>	Sue Christian, Cer.A.T.
January 1992	no article	n/a	Summer 2004	<i>Anesthesia and Asepsis</i>	Oscar Arrue, Cer.A.T.
April 1992	no article	n/a	Fall 2004	<i>Stress Management</i>	Maretta Grandona, Cer.A.T.
July 1992	no article	n/a	Winter 2005	<i>Anesthesia Technicians: What is Our Role?</i>	Joyce Freeman, Cer.A.T.
October 1992	no article	n/a	Spring 2005	<i>Severe Acute Respiratory Syndrome (SARS)</i>	Sue Christian, Cer.A.T.
January 1993	<i>The Ohmeda Tec 6™ Vaporizer and Suprane®</i>	Eve Jelstrom, CRNA	Summer 2005	<i>Malignant Hyperthermia: What is it? What is My Role?</i>	Vicki Carse, Cer.A.T.
April 1993	<i>The Laryngeal Mask Airway: A New Device for Airway Management</i>	Lee Amorin, AT	Fall 2005	<i>Look-Alike/Sound-Alike Drugs</i>	Shannon Sayers-Rana, Cer.A.T.
July 1993	<i>Hanging Your Equipment By a Thread</i>	Doug Draper	Winter 2006	<i>Monitors: Use &amp; Troubleshooting</i>	Victoria Reyes, Cer.A.T.
October 1993	<i>Pharmacology for the Anesthesia Technician</i>	Julia Pollock, M.D.	Spring 2006	<i>Carbon Dioxide Absorbent in the News</i>	Maretta Grandona, Cer.A.T.
January 1994	<i>Pulmonary Artery Catheterization</i>	Diane Holley, AT	Summer 2006	<i>Anesthesia Ventilator Modes</i>	Shannon Sayers-Rana, Cer.A.T.
April 1994	<i>Pressure Transducers</i>	Maretta Paton Grandona, AT	Fall 2006	<i>Infection Control &amp; Sterilization Techniques Part I</i>	Sue Christian, Cer.A.T.
July 1994	<i>Cell Saving: Collection and Processing</i>	John Haire	Winter 2007	<i>Infection Control &amp; Sterilization Techniques Part II</i>	Sue Christian, Cer.A.T.T.
October 1994	<i>Ohmeda RGM Respiratory Gas Monitor</i>	Wayne Griffith, AT	Spring 2007	<i>Cricoid Pressure</i>	Shannon Sayers-Rana, Cer.A.T.
January 1995	<i>Anesthetic Procedure: Epidural and Spinal Block</i>	Maretta Paton Grandona, AT	Summer 2007	<i>Fiber-Optic Confirmation of Double-Lumen Endotracheal Tube Placement</i>	Chris Dunn, R.R.T., Cer.A.T.
April 1995	<i>Anesthesia Ventilators</i>	Marc Dickens & Wesley Frazier, M.D.	Fall 2007	<i>Infection Control: Traffic Patterns and OR Attire</i>	Shannon Sayers-Rana, Cer.A.T.
July 1995	<i>Anatomy for Anesthesia: The Circulatory System</i>	Wayne Griffith, AT	Winter 2008	<i>Patient Positioning in the Operating Room</i>	Maretta Grandona, Cer.A.T.T.
October 1995	<i>An Overview of the Paediatric Airway and Related Equipment</i>	Jim Tibbals, CRRT	Spring 2008	<i>Peripheral Nerve Blocks: The Cadillac of Postoperative Control</i>	Carla Humphreys, Cer.A.T.
January 1996	<i>Acquired Subglottic Stenosis: Past, Present and Future</i>	Jennifer Fuller, AT	Summer 2008	<i>Autotransfusion and Blood Conservation in the Perioperative Setting</i>	Sue Christian, Cer.A.T.T.
April 1996	<i>Blood and Blood Components</i>	Diane Holley, AT	Fall 2008	<i>The Basics of Blood</i>	Sue Christian, Cer.A.T.T.
July 1996	<i>Research: An Overview of the Role of the Anesthesia Technician</i>	Wayne Griffith, AT	Winter 2009	<i>MRI Safety</i>	Shaleha Khalique, Cer.A.T.
October 1996	<i>Xomed Jet Ventilator &amp; Hunsaker Mon-Jet Ventilation Tube</i>	Wayne Griffith, AT	Spring 2009	<i>Point of Care Testing in the Perioperative Arena</i>	Shannon Sayers-Rana, Cer.A.T.
January 1997	<i>Arterial Blood Gases</i>	Gail Walker, Cer.A.T.	Summer 2009	<i>Hypothermia</i>	Mary Obergonner, Cer.A.T.
April 1997	<i>Providing Anesthesia in Remote Areas</i>	Wayne Griffith, Cer.A.T.	Fall 2009	<i>Ultrasound: The Hows, Wheres and Whys</i>	Shannon Sayers-Rana, Cer.A.T.
July 1997	<i>Technological Advances in Difficult Airway Management</i>	Diane Holley, Cer.A.T.	Winter 2010	<i>Psychiatric Medication: Implications in Anesthesia</i>	Victoria Reyes, Cer.A.T.
October 1997	<i>Latex Allergy</i>	Linda Bewley, Cer.A.T.	Spring 2010	<i>Regulatory Agencies: The Joint Commission and The FDA</i>	Sue Christian, Cer.A.T.T.
January 1998	<i>Extracorporeal Life Support</i>	Sally E. Garner, FIOT	Summer 2010	<i>Aortic Stenosis</i>	Jenise Oertel, Cer.A.T.
April 1998	<i>Monitoring the Heart</i>	Diane Holley, Cer.A.T.	Fall 2010	<i>Human Resources Management</i>	Sue Christian, Cer.A.T.T.
July 1998	<i>Anaesthesia Machine</i>	Murray Welte, Cer.A.T.	Winter 2011	<i>Waste Anesthetic Gas Scavenging Systems and Disposal</i>	Sue Christian, Cer.A.T.T.
October 1998	<i>ACLS — Is It For You?</i>	Tammy Sue Graffen, Cer.A.T.	Spring 2011	<i>Creutzfeldt-Jakob Disease</i>	Sue Christian, Cer.A.T.T.
January 1999	<i>One-Lung Anesthesia</i>	Maretta Grandona, Cer.A.T.	Summer 2011	<i>Ischemic Heart Disease</i>	Matthew Chandler, Cer.A.T.T.
April 1999	<i>Managing Malignant Hyperthermia</i>	Tammy Sue Graffen, Cer.A.T.	Fall 2011	<i>Hyperthermic Intraperitoneal Chemotherapy (HIPEC)</i>	Kraig Tayer, Cer.A.T.T.
July 1999	<i>Arterial Blood Gases</i>	Gail Walker, Cer.A.T.	Winter 2012	<i>Infection Control and Sterilization Techniques</i>	Sue Christian, Cer.A.T.T.
October 1999	<i>The Thrombelastograph</i>	Lisa Fornicoia, Cer.A.T.	Spring 2012	<i>Patient Positioning in the Operating Room</i>	Maretta Grandona, Cer.A.T.T.
January 2000	<i>The Cardiovascular System</i>	Maretta Grandona, Cer.A.T.	Summer 2012	<i>Understanding Massive Transfusion Protocol</i>	Charlene Koch, Cer.A.T.
Spring 2000	<i>The Fetal Circulation</i>	Maretta Grandona, Cer.A.T.	Fall 2012	<i>The Move to Electronic Healthcare Records: Is Your Hospital Ready?</i>	Sue Christian, Cer.A.T.T.
Summer 2000	<i>Chronic Renal Failure</i>	Christopher A. Fleming	Winter 2013	<i>Inhaled Nitrous Oxide in Oxygen for Labor: Utilizing a Blender Device</i>	Sarah A. Starr, M.D. & Curtis Baysinger, M.D.
Fall 2000	<i>Neuromuscular Blockade</i>	Richard Smith, Pharm. D.	Spring 2013	<i>Basic Concepts of Cardiac Surgery Technology</i>	Otoniel Castillo, Cer.A.T.T.
Winter 2001	<i>Reversal Agents</i>	Richard Smith, Pharm. D.	Summer 2013	<i>Understanding Anesthesia Pharmacology</i>	Vicki Reyes, Cer.A.T.T.
Spring 2001	<i>Regional Anesthesia</i>	Sue Christian, Cer.A.T.	Fall 2013	<i>Sterile Operative Arena</i>	Shannon Sayers-Rana, Cer.A.T.
Summer 2001	<i>The Nervous System, Part 1</i>	Maretta Grandona, Cer.A.T.	Winter 2014	<i>Preventing and Controlling Fires in the OR</i>	Sue Christian, Cer.A.T.T.
Fall 2001	<i>The Nervous System, Part 2</i>	Maretta Grandona, Cer.A.T.	Spring 2014	<i>Malignant Hyperthermia: Expanded &amp; Updated</i>	V. Carse, Cer.A.T. & S.Christian, Cer.A.T.T.
Winter 2002	<i>The Pulmonary Artery Catheter</i>	Denise Zee, Cer.A.T.	Summer 2014	<i>The Basics of Peripheral IV Cannulation</i>	Sue Christian, Cer.A.T.T.
Spring 2002	<i>Peripheral Nerve Blocks</i>	Sue Christian, Cer.A.T.	Fall 2014	<i>Airway Management: Part I</i>	Jim Tibbals, Diane Holley & Sue Christian, Cer.A.T.T.
Summer 2002	<i>Compressed Gas Safety</i>	Maretta Grandona, Cer.A.T.	Winter 2015	<i>Airway Management: Part II</i>	Sue Christian, Cer.A.T.T.
Fall 2002	<i>Nosocomial Infections: How Safe is Your Anesthesia Gas Machine?</i>	Thomas Bathrick, Cer.A.T.	Spring 2015	<i>Septic Bowel Obstruction</i>	Andres Trevino & Damian Marquez
Winter 2003	<i>Medication Errors: Will It Happen to You?</i>	Jonnalee Bill, Cer.A.T.	Summer 2015	<i>Application of Cell Saver in Orthopedic Surgery</i>	Jenny Deng, Cer.A.T.T.



# ASATT

## Regional Activities



### REGION 1 CT-ME-MA-NH-NJ-NY-RI-VT

**Director:** Joyce Freeman, B.S., Cer.A.T.  
**Work:** 315/464-2825  
**Email:** [region1director@asatt.org](mailto:region1director@asatt.org)

Hello Everyone!

Not sure what the weather is like in your part of the country, but we are getting more rain than usual. I would like to say thank all of you that attended the Region 1 meetings over the past few months. We have no any additional meetings set up for Region 1 before the national meeting in Salt Lake City. I hope you have planned to sign up and attend. If you're not sure, I would love to see you there, especially if we have never met. This is such a wonderful time for all technicians across the country to come together. Please stay tuned because I hope to hear our the NovaMed/PGA meeting for this year in December. Our Syracuse meeting was a great time by all. Each of you enjoyed the lectures and also the new meeting room. It was much warmer!!! If you would like copies of the lectures please contact me. If you did send me an e-mail, please send me another. I will get it to you. Not all presenters provided a paper copy. I hope everyone that wanted to sign up for the national certification exam for technician or technologist has done so. The dead line was June 30th. Please remember if you are already certified, please keep your certification CEs current. If you have any questions, please contact me. As previously mentioned, the national meeting will be held August 27-30 in conjunction with the AANA Annual Congress. This is a wonderful opportunity to network and find out what your colleagues are doing in their hospitals. Salt Lake City is a beautiful city with lots to do. I hope to see you there!



### REGION 2 DE-IN-MD-MI-OH-PA-VA-WV

**Director:** Randy L. Harris, Cer.A.T.  
**Work:** 443/492-8928  
**Email:** [region2director@asatt.org](mailto:region2director@asatt.org)

What a perfect time to celebrate, as this is the 100th issue of *The Sensor* newsletter and our profession will be

moving towards a degree profession. Congratulations to the technicians and technologist who were successful in their exam. Thank you Board members for having the vision to set us up for the future.

Our national meeting is fast approaching. There is still time to register for the meeting. It will be August 27-30, in Salt Lake City. Also, please don't forget about our Regional meeting in Hershey, PA, October 10-11. For those of you that will still need CE's, you are welcome to attend our regional meeting as well which you can earn up to 11 CE's if you attend. Hope to see you there.



### REGION 3 AL-FL-GA-KY-NC-SC-TN

**Director:** Gail Walker, Cer.A.T.  
**Work:** n/a  
**Email:** [region3director@asatt.org](mailto:region3director@asatt.org)

As I write this report, it dawns on me that nobody took pictures at our Region 3 meeting which was held May 30th in Chapel Hill. The venue was incredibly comfortable and easy to find despite my horrible directions to those who attended. The speakers, according to the evaluation forms, were outstanding and there was much discussion at break and lunchtime about the changes happening with ASATT. Many of you had concerns and questions that you wanted answered. Not all of them could be answered but it was wonderful to have so many talented and seasoned technicians gathered together for the day. We had about 30 attendees and had six states represented. Because of the approaching July 15th deadline we have many new certified technicians and technologists. I have gotten quite a few emails these last couple of months concerning CEs and recertification. Please know that I will bring these issues to the table when the board meets during our annual meeting in Salt Lake City this year. Please continue to send me your comments and questions so I can make sure your voice is heard. ASATT is here to serve its members and advance our profession so we all need to be active participants. If you are still looking for educational opportunities this year, the North Carolina Society of Anesthesia Technicians (NCSAT) will be

holding their annual meeting Saturday, September 26th at the Grove Park Inn in Asheville, NC. Remember that *The Sensor* has a quiz in every issue that can be taken and mailed in for CEs. Also, [www.anesthesiatechpearls.com](http://www.anesthesiatechpearls.com) is an ASATT-approved provider of CEs. Even though recertification is not submitted until the end of the year, it's funny how it can creep up and leave you scrambling for credits. If you are interested in hosting a meeting, please let me know and we'll get the ball rolling.



## REGION 4

**IL-IA-MN-MO-ND-SD-WI**

**Director:** Jeffery Blakney, Cer.A.T.

**Work:** 708/202-8387 ext. 29126

**Email:** [region4director@asatt.org](mailto:region4director@asatt.org)

Hello Everyone,

First and foremost I want to send out congratulations to *The Sensor* on your 100th edition! Happy Anniversary! What you have shared with the Anesthesia Tech society has reflected what I already know to be the excellence and quality of your teaching, as well as your care for the development of Anesthesia Techs and medical personnel as a whole. Many thanks to you for your continuing efforts and congratulations for sharing 100 excellent editions! Here's to the next 100!

Registration is now open for the ASATT 2015 Annual Educational Conference, taking place August 27–30 in Salt Lake City. Each one should reach one and bring them; if we do this we may very well have the largest turnout at the conference.

Hopefully everyone taking the certification exam (Technician or Technologist) had the opportunity to fill out the examination application completely with all the necessary supporting documentation and send it with payment to ASATT Headquarters prior to June 30th! ASATT is moving toward enhanced credentialing and will be offering only the Technologist exam. As of July 15th, you will be eligible for the technologist-level exam after successful completion of an ASATT approved/accredited program. I'm very passionate in the growth and development process as to maintain ourselves on the cutting edge of clinical and technical anesthesia support. I would like to see Region 4 conferences held in every state in the collective. It is the responsibility of each and every technician to get into the game to support personal growth and development in conjunction with organizational development of ASATT.

Hey Region 4, is there anyone out there who always wanted to write a *Science & Technology* article? Did you know that ASATT gives an annual award for the best article chosen for *Sensor* publication? If your article is chosen, you could win up to \$1,500. The authors of the technical articles must be either an anesthesia technician or technologist. Please refer to the ASATT website for more details.

See you in Utah!

## REGION 5

**AR-CO-KS-LA-MS-NE-OK-TX**

I hope everyone in Region 5 is doing well. Be sure to acknowledge Greg Farmer for organizing the Region 5 educational conference. He did a great job pulling all the speakers together and securing the location.

The ASATT National Educational Conference is in Salt Lake City, August 27–30. Be sure to get the time off and join everyone during this jam-packed meeting.

Voting is open until August 14th. Region 5 has two candidates, so be sure to get on and vote for who you would like to represent your Region.



## REGION 6

**AZ-CA-NM-NV-UT**

**Director:** Diane Alejandro-Harper, Cer.A.T.

**Work:** 650/283-2558

**Email:** [region6director@asatt.org](mailto:region6director@asatt.org)

Greetings Region 6!

We have reached the 100th edition of *The Sensor*! This is a great accomplishment for ASATT as this demonstrates the resilience of its members and the Society. *The Sensor* allows ASATT members to get up-to-date information on current anesthesia technology news, showcase Science & Technology articles written by our very own ASATT members, and get the opportunity to obtain continuing education credit.

This summer marks the beginning of a new milestone. Streamlining certification will provide a baseline of knowledge expected for those entering the profession. With technological advancements occurring every day, we have already begun to see this in the workplace, and it is important to make positive changes to continue to advance our profession.

This year our national conference is being held in our Region. I am hopeful many of you can attend this educational conference in Salt Lake City. This can give you the opportunity to meet other anesthesia technologists from across the country, and visit a wonderful city!

Best regards—



## REGION 7

**AK-HI-ID-MT-OR-WA-WY**

**Director:** Delbert Macanas, Cer.A.T.

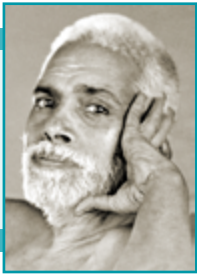
**Work:** 808/547-9872 (0930–1830 pt M–F)

**Email:** [region7director@asatt.org](mailto:region7director@asatt.org)

Howzit Region 7!!!

Can you believe it??? This is the 100th edition of *The Sensor*! It is a testament to all Editors (past and present) of *The Sensor*. Thank you for your dedication to our profession. Without all your thankless hours of work it would not

be possible. Did you know??? As an ASATT member you have access to all past issues of *The Sensor* in the Archives!



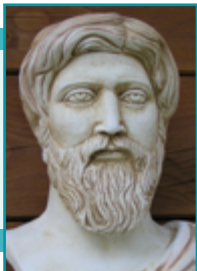
“No one succeeds without effort. Those who succeed owe their success through perseverance.”

*Sri Rahmana Maharshi*

As we head into summer, there are many things to smile about ... remember a time when you had three months off to play and have a good time? Memories....

If you took the certification exams, I hope you were successful.

The Annual Meeting is right around the corner. Are you planning to attend or made plans to attend. It is being held August 27–30 at the Little America Hotel in Salt Lake City. This is our second time to have our meeting with the AANA and the first one was a huge success. Also, it is ASATT’s first visit to Salt Lake City. It is summer and Utah is full of so many outdoors venues. Plan to take a few extra days to go and visit this beautiful state. An hour away is majestic Bryce Canyon, so if you are an outdoors person, it’s a beautiful place to go hiking. Our Annual Meeting is very unique — where else will you find over two hundred of our peers in the same place at the same time? There is no other meeting like ours. Think about it....



“The mind is not a vessel to be filled, but a fire to be kindled.”

*Plutarch*

Make sure to check the website for updates on all of the Regional and local meetings available for you to attend and get CEs for recertification.

Region 7 will still have three meetings in 2015. We already had one hugely successful meeting in April, compliments of John Gonzalez at Overlake Hospital. I hope the next two meetings are just as successful.

I will be coordinating the Hawaii meeting that will be held on Sunday, October 4th, at the Pacific Beach Hotel. Our Portland meeting will be held at Oregon Health Sciences University Hospital on Saturday, November 21st, and is being coordinated by Mario Saldano and his team. Start thinking about hosting and coordinating a meeting in 2016.

Remember if you attend an ASATT-sponsored meeting,

“Without passion, a job is just what it is: a job.”

*Constance Chuks Friday*



ASATT members don’t need to track these CEs, and they will go straight to the CE database. This simplifies the recertification process. Please do not wait until the last minute to get your required CEs. Every year ASATT Headquarters will get calls from frantic people looking for ways to get CEs. *Poor planning on your part does not constitute an emergency on ASATT’s part.*

Also, at all of our meetings we need to thank our vendors. They are also taking time out of their busy schedules to sponsor these events. But, more important, they are presenting our attendees with the latest news and technology. These vendors are vital to everyone and they are doing their best to ensure we are helping provide our patients with quality care.

As we move forward ... our profession is as an Anesthesia Technician or Technologist. Take pride in yourself and profession; hold your head up high. At one of our Regional meetings, every physician that lectured started their presentation thanking the Anesthesia Technical staff; emphasizing how we make their lives much easier. We must continue to stand united moving forward.

Aloha! ■

## Membership Renewal

**M**EMBERSHIP FEES will be due again *soon!* You should have received an email from ASATT HQ that included a copy of your dues invoice. *Annual membership is \$85.* Benefits of ASATT membership include:

- Quarterly issues of *The Sensor*, including online access.
- Quarterly issues of the publication of the Anesthesia Patient Safety Foundation.
- Reduced pricing for attending ASATT regional and national meetings.
- Reduced pricing for applying for the technologist exam.
- Reduced pricing for renewing technician/technologist certification.
- Access to ASATT’s official website, [www.ASATT.org](http://www.ASATT.org).
- Free posting of résumés to the official ASATT Job Board.
- Database for tracking your CEs from any ASATT regional or national meeting along with *Sensor* quizzes.

Also, as we continue to move forward with changes to the profession, it is imperative that you keep your contact information up to date, especially your email address! ASATT HQ sends out blast emails from time to time notifying you of important changes and deadlines. Don’t miss out! Log into the member site, go to your profile page, and make sure your contact information is correct.

# INDIVIDUALS PASSING THEIR EXAMS

## APRIL 2015 TECHNICIANS

Cheryl Austin, Cer.A.T. .... Region 3  
 Arlene Balfour-Grimes, Cer.A.T. .... Region 5  
 Guy Barcena, Cer.A.T. .... Region 3  
 Nadine Beausil, Cer.A.T. .... Region 1  
 Latrice Benson, Cer.A.T. .... Region 6  
 Anita Brady, Cer.A.T. .... Region 3  
 Douglas Buczynski, Cer.A.T. .... Region 4  
 David Burcheci, Cer.A.T. .... Region 7  
 Brittany Campbell, Cer.A.T. .... Region 3  
 George Cannon, Cer.A.T. .... Region 3  
 Herman Caraballo, Cer.A.T. .... Region 2  
 Lisa Castro, Cer.A.T. .... Region 1  
 Kathryn Chadwick, Cer.A.T. .... Region 3  
 Brian Clark, Cer.A.T. .... Region 7  
 Sharod Clay, Cer.A.T. .... Region 4  
 Taylor Compton, Cer.A.T. .... Region 1  
 Ginger Cotter, Cer.A.T. .... Region 3  
 Roxane Crawford, Cer.A.T. .... Region 2  
 Michelle Dean, Cer.A.T. .... Region 1  
 Diana Dobsa, Cer.A.T. .... Region 7  
 Jessica Dooley, Cer.A.T. .... Region 5  
 Emily Ellison, Cer.A.T. .... Region 3  
 Anita Fisher, Cer.A.T. .... Region 4  
 Melissa Flood, Cer.A.T. .... Region 5  
 Christopher Fortner, Cer.A.T. .... Region 3  
 John Furst, Cer.A.T. .... Region 2  
 Guadalupe Garcia, Cer.A.T. .... Region 6  
 Brienna Garrity, Cer.A.T. .... Region 2  
 Daisy Godfrey, Cer.A.T. .... Region 3  
 Eddie Gonzales, Cer.A.T. .... Region 5  
 Sheri Lee Gossett, Cer.A.T. .... Region 6  
 Matthew Grass, Cer.A.T. .... Region 5  
 Arnette Green, Cer.A.T. .... Region 3  
 Theodore Gross, Cer.A.T. .... Region 2  
 Norma Guerrero Plascencia, Cer.A.T. .... Region 6  
 Kyla Hale, Cer.A.T. .... Region 5  
 Lawry Harper, Cer.A.T. .... Region 2  
 Christopher Harrison, Cer.A.T. .... Region 2  
 Margaret Harvey, Cer.A.T. .... Region 2  
 Veronica Henriquez, Cer.A.T. .... Region 1  
 Elizabeth Hoffman, Cer.A.T. .... Region 6  
 Alaina Hollock, Cer.A.T. .... Region 6  
 Srinji Jayaprakasam, Cer.A.T. .... Manama, Bahrain  
 April Johnson, Cer.A.T. .... Region 2  
 Arvindsinh Kathwadia, Cer.A.T. .... Region 1  
 Robert Kennedy, Cer.A.T. .... Region 6  
 Christianne Kirkwood, Cer.A.T. .... Region 2  
 Jennifer Klesh, Cer.A.T. .... Region 2  
 Holly LaFontaine, Cer.A.T. .... Region 2  
 James Lam, Cer.A.T. .... Region 1  
 Blanca Lawler, Cer.A.T. .... Region 6  
 Amie Lorsch, Cer.A.T. .... Region 7  
 Berkys Masache, Cer.A.T. .... Region 1  
 Ezra Maxwell, Cer.A.T. .... Region 6  
 David McMillan, Cer.A.T. .... Region 5  
 Norelis Mendoza, Cer.A.T. .... Region 1  
 Jesse Montalvo, Cer.A.T. .... Region 4  
 Catherine Newsome, Cer.A.T. .... Region 3  
 Hieu Nguyen, Cer.A.T. .... Region 1  
 Gina Nicholson, Cer.A.T. .... Region 3  
 Robert Ochoa, Cer.A.T. .... Region 6

Deborah Oest, Cer.A.T. .... Region 2  
 Pamela Olivan, Cer.A.T. .... Region 6  
 Mark Opulencia, Cer.A.T. .... Region 6  
 Adam Page, Cer.A.T. .... Region 6  
 Richard Panzak, Cer.A.T. .... Region 2  
 Naomi Pasion, Cer.A.T. .... Region 7  
 Luis Pesantes, Cer.A.T. .... Region 6  
 Marie Princivil, Cer.A.T. .... Region 1  
 Paula Quinones, Cer.A.T. .... Region 3  
 Tibet Rangel, Cer.A.T. .... Region 5  
 Chandra Raynes, Cer.A.T. .... Region 5  
 Kirsten Reinhard, Cer.A.T. .... Region 4  
 Valerie Romito, Cer.A.T. .... Region 3  
 Jonathan Salas, Cer.A.T. .... Region 6  
 Garcon Savio, Cer.A.T. .... Region 3  
 Sonja Scott, Cer.A.T. .... Region 5  
 Kurt Shaffer, Cer.A.T. .... Region 2  
 Rafena Signh, Cer.A.T. .... Region 1  
 Erica Smith, Cer.A.T. .... Region 5  
 Antonio Soares, Cer.A.T. .... Region 1  
 Andre D Sowell, Cer.A.T. .... Region 5  
 Kerry Steiner, Cer.A.T. .... Region 7  
 Maggie Stengel, Cer.A.T. .... Region 2  
 Kenneth Stine, Cer.A.T. .... Region 1  
 Robert Strungis, Cer.A.T. .... Region 2  
 Adam Tawney, Cer.A.T. .... Region 4  
 Jonathan Tetaracik, Cer.A.T. .... Region 6  
 Georganne Thompson, Cer.A.T. .... Region 6  
 Daniel Tillman, Cer.A.T. .... Region 2  
 Lydia Tousant, Cer.A.T. .... Region 5  
 Paul Turner, Cer.A.T. .... Region 2  
 Sarah Van Geest, Cer.A.T. .... Region 4  
 Sorin Vaughn, Cer.A.T. .... Region 5  
 Albert Walden, Cer.A.T. .... Region 3  
 Danielle Wein, Cer.A.T. .... Region 1  
 Sherman Wilder, Cer.A.T. .... Region 7  
 Rhiannon Williams, Cer.A.T. .... Region 2  
 Junior Wispi Mota, Cer.A.T. .... Region 2  
 Leonie Wynter, Cer.A.T. .... Region 3  
 Jill Zolofra, Cer.A.T. .... Region 1

## APRIL 2015 TECHNOLOGISTS

Lance Arnold, Cer.A.T.T. .... Region 7  
 Mary Criddin, Cer.A.T.T. .... Region 3  
 Jianling Deng, Cer.A.T.T. .... Region 1  
 Mihail Mosailov, Cer.A.T.T. .... Region 7  
 Anthony Pagel, Cer.A.T.T. .... Region 6

## MAY 2015 TECHNICIANS

Nizamuddeen Abdulkadar, Cer.A.T. .... Kerala, India  
 Brian Allen, Cer.A.T. .... Region 3  
 Renae Amaya, Cer.A.T. .... Region 2  
 Ana Amezcua, Cer.A.T. .... Region 5  
 Shahrzad Arain, Cer.A.T. .... Region 4  
 Sallah Attia, Cer.A.T. .... Region 1  
 Bradley Bailie, Cer.A.T. .... Region 6  
 Belinda Baker, Cer.A.T. .... Region 6  
 Stephen Barat, Jr., Cer.A.T. .... Region 1  
 David Barton, Cer.A.T. .... Region 4  
 Michael Beach, Cer.A.T. .... Region 5  
 Jacqueline Bessette, Cer.A.T. .... Region 6  
 Alana Blanchard, Cer.A.T. .... Region 6  
 David Boehringer, Cer.A.T. .... Region 6

Samuel Bowers, Cer.A.T. .... Region 5  
 Jesse Cabrera, Cer.A.T. .... Region 6  
 Stacey Camargo, Cer.A.T. .... Region 5  
 Stephen Cameron, Cer.A.T. .... Region 1  
 Gerald Campbell, Cer.A.T. .... Region 3  
 Areli Canales, Cer.A.T. .... Region 6  
 Bustos Carlos, Cer.A.T. .... Region 5  
 Jason Carmichael, Cer.A.T. .... Region 2  
 Rufino Carpio, Cer.A.T. .... Region 6  
 Nicholas Carrabbia, Cer.A.T. .... Region 2  
 Agostinho Carreiro, Cer.A.T. .... Region 1  
 Marsha Chambers, Cer.A.T. .... Region 2  
 Eve Clardy, Cer.A.T. .... Region 5  
 Gaylan Cole, Cer.A.T. .... Region 6  
 Marcus Colston, Cer.A.T. .... Region 5  
 Juan Cortes Velez, Cer.A.T. .... Region 2  
 Douglas Creasman, Cer.A.T. .... Region 3  
 Hubert Cross, Cer.A.T. .... Region 3  
 Russell Curtis, Cer.A.T. .... Region 2  
 Andre Cuyugan, Cer.A.T. .... Region 1  
 Jasmine Dalziel, Cer.A.T. .... Region 7  
 Cristina Donato, Cer.A.T. .... Region 6  
 Jonathan Dreiling, Cer.A.T. .... Region 3  
 Kristy Dugae, Cer.A.T. .... Region 6  
 Mae Therese Ebbers, Cer.A.T. .... Region 3  
 Raul Esquivel, Cer.A.T. .... Region 5  
 David Evans, Cer.A.T. .... Region 3  
 Rachael Farmer, Cer.A.T. .... Region 2  
 Tammy Fichter, Cer.A.T. .... Region 2  
 Robert Fitzgerald, Cer.A.T. .... Region 1  
 Zach Franklin, Cer.A.T. .... Region 3  
 Bryan Fulton, Cer.A.T. .... Region 6  
 Loren Fung, Cer.A.T. .... Region 6  
 Nicole Garcia, Cer.A.T. .... Region 6  
 Vicki Gibson, Cer.A.T. .... Region 1  
 Sarah Gingrich, Cer.A.T. .... Region 2  
 Mathew Gliddon, Cer.A.T. .... Region 3  
 Benjamin Goldsmith, Cer.A.T. .... Region 6  
 Christina Gomez, Cer.A.T. .... Region 5  
 Julio Gonzales, Cer.A.T. .... Region 1  
 Stephanie Gonzalez, Cer.A.T. .... Region 5  
 William Gordon, Cer.A.T. .... Region 6  
 Luana Graber, Cer.A.T. .... Region 2  
 Jeff Gronefeld, Cer.A.T. .... Region 3  
 Shannon Guyton, Cer.A.T. .... Region 6  
 Alexis Hanjorgiris, Cer.A.T. .... Region 2  
 Michael Hart, Cer.A.T. .... Region 6  
 Patrick Hegge, Cer.A.T. .... Region 7  
 Charlee Hilbert, Cer.A.T. .... Region 1  
 Caryn Hivner, Cer.A.T. .... Region 2  
 Patrick Iizuka, Cer.A.T. .... Region 7  
 Melisa Ingalls, Cer.A.T. .... Region 5  
 Marlene Ives, Cer.A.T. .... Region 3  
 Idrees Jabri, Cer.A.T. .... Doha, Qatar  
 Shaun Jasso, Cer.A.T. .... Region 6  
 Becky Johnson, Cer.A.T. .... Region 7  
 Daniel Johnson, Cer.A.T. .... Region 4  
 Steffl Joshua, Cer.A.T. .... Region 7  
 Alexander Kashirets, Cer.A.T. .... Region 6  
 Daniel Keeler, Cer.A.T. .... Region 6

Gabriel Kline, Cer.A.T. ....	Region 2	William Edwards, Cer.A.T.T. ....	Region 6	Marion Conner, Cer.A.T. ....	Region 4
Tom Jung Ko, Cer.A.T. ....	Region 7	Kathy Goltz, Cer.A.T.T. ....	Region 3	Michelle Conway, Cer.A.T. ....	Region 7
Tanner Koppert, Cer.A.T. ....	Region 2	Craig Hartford, Cer.A.T.T. ....	Region 6	Marjorie Copper-Stimmel, Cer.A.T. ....	Region 4
Kirk Krattiger, Cer.A.T. ....	Region 5	Sylvester Jones, Cer.A.T.T. ....	Region 6	Brad Covington, Cer.A.T. ....	Region 7
Jason Leist, Cer.A.T. ....	Region 6	Daniel Medina, Cer.A.T.T. ....	Region 6	Teleyea Cox, Cer.A.T. ....	Region 2
Linda Lim, Cer.A.T. ....	Region 6	Ann Pidel, Cer.A.T.T. ....	Region 1	Angela Cozad, Cer.A.T. ....	Region 7
Michelle Lucero, Cer.A.T. ....	Region 6	Marion Saldana, Cer.A.T.T. ....	Region 7	Frank Crew, Cer.A.T. ....	Region 2
Nickolas MacDougall, Cer.A.T. ....	Region 6	Nickolas Smythe, Cer.A.T.T. ....	Region 3	Dominick Crosby, Cer.A.T. ....	Region 5
Shanttia Maackall, Cer.A.T. ....	Region 2	Albert Tagle, Cer.A.T.T. ....	Region 6	Jenny Croyle, Cer.A.T. ....	Region 5
Blair Mailloux, Cer.A.T. ....	Region 1	John Walker, Cer.A.T.T. ....	Region 6	Antoinette Cuspad, Cer.A.T. ....	Region 6
Damian Marquez, Cer.A.T. ....	Region 6			Timothy Dalrymple, Cer.A.T. ....	Region 6
Barbara Martin, Cer.A.T. ....	Region 2			Ryamon Davis, Cer.A.T. ....	Region 3
Victor Martin, Cer.A.T. ....	Region 3			Tyler Davis, Cer.A.T. ....	Region 6
Whitney Mattingly, Cer.A.T. ....	Region 2			Michelle Delgado, Cer.A.T. ....	Region 6
Lauren McDade, Cer.A.T. ....	Region 2			Charles Divine, Cer.A.T. ....	Region 7
Sean McGee, Cer.A.T. ....	Region 2			Heather Donovan, Cer.A.T. ....	Region 2
Daniel McGuirk, Cer.A.T. ....	Region 6			Andrea Downing, Cer.A.T. ....	Region 4
William McPherson II, Cer.A.T. ....	Region 3			Amanda Doxtater, Cer.A.T. ....	Region 1
Rhonda Mitchell, Cer.A.T. ....	Region 5			Cecil Dubots, Cer.A.T. ....	Region 2
Lyn Montgomery, Cer.A.T. ....	Region 6			Kevin Dunphy, Cer.A.T. ....	Region 1
Jorge Moreira, Cer.A.T. ....	Region 3			Marny Egan, Cer.A.T. ....	Region 6
Yanet Moreno, Cer.A.T. ....	Region 4			Nada El-Achi, Cer.A.T. ....	Region 2
Yazmin Morin, Cer.A.T. ....	Region 4			Ruth Engblom, Cer.A.T. ....	Region 3
Shaid Nadeem, Cer.A.T. ....	Riyadh, Saudi Arabia			Reginald Enierga, Cer.A.T. ....	Region 3
Kathryn Newman, Cer.A.T. ....	Region 2			Courtney Evans, Cer.A.T. ....	Region 1
Heng Ochkeo, Cer.A.T. ....	Region 5			Kindra Farr, Cer.A.T. ....	Region 6
Michael Owen, Cer.A.T. ....	Region 2			Kristen Ferguson, Cer.A.T. ....	Region 1
Joshua Patterson, Cer.A.T. ....	Region 1			Priscilla Ferrer, Cer.A.T. ....	Region 3
Michael Phillips, Cer.A.T. ....	Region 3			Theresa Flairty, Cer.A.T. ....	Region 3
Jimmy Pimentel, Cer.A.T. ....	Region 1			Barbara Frank, Cer.A.T. ....	Region 6
Christian Pino, Cer.A.T. ....	Region 3			Joanne Frost, Cer.A.T. ....	Region 5
Timothy Porter, Cer.A.T. ....	Region 7			Charlie Funderburk, Cer.A.T. ....	Region 3
Sandhya Ramcharitar, Cer.A.T. ....	Region 1			Ingie Gabra, Cer.A.T. ....	Region 6
James Randolph, Cer.A.T. ....	Region 3			Sergio Galindo, Cer.A.T. ....	Region 3
Raul Rico, Cer.A.T. ....	Region 3			Timothy Gallagher, Cer.A.T. ....	Region 5
Michael Ritchie, Cer.A.T. ....	Region 6			Benjamin Gao, Cer.A.T. ....	Region 6
Rony Rivera, Cer.A.T. ....	Region 3			Yirien Garcia, Cer.A.T. ....	Region 3
Bruce Robinson, Cer.A.T. ....	Region 3			Hasmik Gasparyan, Cer.A.T. ....	Region 6
Stephan Rodriguez, Cer.A.T. ....	Region 6			Tedros Gerbrekristos, Cer.A.T. ....	Region 5
Richard Romero, Cer.A.T. ....	Region 6			Ivan Gonzalez, Cer.A.T. ....	Region 3
Daniel Ruby, Cer.A.T. ....	Region 7			Virginia Gragg, Cer.A.T. ....	Region 3
Jessica Scholle, Cer.A.T. ....	Region 2			Kestutis Griska, Cer.A.T. ....	Region 5
Roy Segawa, Cer.A.T. ....	Region 7			Smantha Groshek, Cer.A.T. ....	Region 4
Jacob Serrano, Cer.A.T. ....	Region 6			Rosen Gueorguiev, Cer.A.T. ....	Region 7
Gustavo Solis, Cer.A.T. ....	Region 3			Gina Gutierrez, Cer.A.T. ....	Region 6
Jorge Suarez, Cer.A.T. ....	Region 3			Katerin Guzman, Cer.A.T. ....	Region 1
John Telles, Cer.A.T. ....	Region 6			Rene Hache, Cer.A.T. ....	Region 1
Emily Thomas, Cer.A.T. ....	Region 7			Jacob Harper, Cer.A.T. ....	Region 3
Tracey Thomas, Cer.A.T. ....	Region 2			Samuel Harrell, Cer.A.T. ....	Region 4
Shannon Thornton, Cer.A.T. ....	Region 5			Teresa Harrell, Cer.A.T. ....	Region 2
Robertson Tran, Cer.A.T. ....	Region 6			Lisa Harwood, Cer.A.T. ....	Region 3
Andres Trevino Rodriguez, Cer.A.T. ....	Region 6			Susan Hayes, Cer.A.T. ....	Region 1
Otilia Ureno, Cer.A.T. ....	Region 6			Anthony Haywood, Cer.A.T. ....	Region 3
Arnoldo Varela-Guillen, Cer.A.T. ....	Region 5			William Heade, Cer.A.T. ....	Region 1
Juan Vargas, Cer.A.T. ....	Region 1			Christopher Henderon, Cer.A.T. ....	Region 6
Julio Veloz-Perez, Cer.A.T. ....	Region 1			Keish Hill, Cer.A.T. ....	Region 1
Sergiu Vieru, Cer.A.T. ....	Region 1			Michael Hollingshead, Cer.A.T. ....	Region 3
Amy Wilkes, Cer.A.T. ....	Region 7			Robin Holmes, Cer.A.T. ....	Region 2
Santhakumar Yesupatham, Cer.A.T. ....	Region 1			Michelle Houdek, Cer.A.T. ....	Region 4
Vona Young, Cer.A.T. ....	Region 5			Kristin Houser, Cer.A.T. ....	Region 7
Karina Zhuravel, Cer.A.T. ....	Region 7			Donora Howell, Cer.A.T. ....	Region 7
				Michelle Hukill, Cer.A.T. ....	Region 6
				Alan Ibarra, Cer.A.T. ....	Region 5

### JUNE 2015 TECHNICIANS

Rebecca Adams, Cer.A.T. ....	Region 1
Brian Adkins, Cer.A.T. ....	Region 2
Chris Anderson, Cer.A.T. ....	Region 4
Michelle Anderson, Cer.A.T. ....	Region 6
David Andrade, Cer.A.T. ....	Region 5
Ryan Arnett, Cer.A.T. ....	Region 3
Elisa Barrett, Cer.A.T. ....	Region 6
Chad Barto, Cer.A.T. ....	Region 2
Raul Barzola, Cer.A.T. ....	Region 3
Melissa Battaglia, Cer.A.T. ....	Region 1
Eric Battani, Cer.A.T. ....	Region 3
Jill Beasley, Cer.A.T. ....	Region 6
Marie Beuplan, Cer.A.T. ....	Region 1
Michael Begay, Cer.A.T. ....	Region 6
Patrick Behrendt, Cer.A.T. ....	Region 4
Dnamarie Belpulsi, Cer.A.T. ....	Region 1
Heidi Bengston, Cer.A.T. ....	Region 4
Jacqueline Berg, Cer.A.T. ....	Region 6
Renee Bettencourt, Cer.A.T. ....	Region 6
Karen Beyl, Cer.A.T. ....	Region 7
Christine Blanco, Cer.A.T. ....	Region 5
Matthew Bowers, Cer.A.T. ....	Region 2
Dawn Bowersox, Cer.A.T. ....	Region 2
James Bowman, Cer.A.T. ....	Region 2
Joann Boyd, Cer.A.T. ....	Region 2
Lisa Bradley, Cer.A.T. ....	Region 3
Erin Brandow, Cer.A.T. ....	Region 6
Jonathon Brashears, Cer.A.T. ....	Region 3
Armand Bright, Cer.A.T. ....	Region 6
Brenda Bright, Cer.A.T. ....	Region 6
Kimberly Brown, Cer.A.T. ....	Region 3
Megan Brown, Cer.A.T. ....	Region 3
Ashley Bubbs, Cer.A.T. ....	Region 2
Derrick Buddle, Cer.A.T. ....	Region 4
Jeffery Burgett, Cer.A.T. ....	Region 4
Kate Bush, Cer.A.T. ....	Region 7
Kenris Butler, Cer.A.T. ....	Region 3
Lisa Butler, Cer.A.T. ....	Region 1
Lisa Cable, Cer.A.T. ....	Region 3
Charlotte Cajigal, Cer.A.T. ....	Region 1
Natasha Campbell, Cer.A.T. ....	Region 3
Brenda Candelaria, Cer.A.T. ....	Region 2
Jose Carino, Cer.A.T. ....	Region 5
Kimberly Carlisle, Cer.A.T. ....	Region 2
Erica Carter, Cer.A.T. ....	Region 3
Joseph Catricala, Cer.A.T. ....	Region 1
Monica Ceballos, Cer.A.T. ....	Region 6
Rebecca Ceoffe, Cer.A.T. ....	Region 2
Bradley Chamberlin, Cer.A.T. ....	Region 3
Rebecca Charles, Cer.A.T. ....	Region 4
Jessica Chestnut, Cer.A.T. ....	Region 2
Erin Christian, Cer.A.T. ....	Region 3
Stacey Christiansen, Cer.A.T. ....	Region 7

### MAY 2015 TECHNOLOGISTS

George Cahill, Cer.A.T.T. ....	Region 6
Matthew Davis, Cer.A.T.T. ....	Region 7



Roland Ikilo, Cer.A.T. ....	Region 6	Seyed Ehsan Moosavi, Cer.A.T. ....	Region 6	Stephen Terhune, Cer.A.T. ....	Region 1
Cheryl Irwin, Cer.A.T. ....	Region 6	Julie Mull, Cer.A.T. ....	Region 4	Heidi Thieman, Cer.A.T. ....	Region 7
Michelle Jacks, Cer.A.T. ....	Region 4	Ernesto Navarro, Cer.A.T. ....	Region 1	Daniel Toner, Cer.A.T. ....	Region 5
Simone Jackson, Cer.A.T. ....	Region 2	Alison Nee, Cer.A.T. ....	Region 2	Angel Torres, Cer.A.T. ....	Region 4
Saju Jacob, Cer.A.T. ....	Ernakulam Kerala, India	Priscilla Negrete, Cer.A.T. ....	Region 2	Rowena Torres, Cer.A.T. ....	Region 6
Curtis James, Cer.A.T. ....	Region 5	Matther Nix, Cer.A.T. ....	Region 3	Eisa Ulrich, Cer.A.T. ....	Region 2
Shelley Janowski, Cer.A.T. ....	Region 7	Nicole Novielle, Cer.A.T. ....	Region 6	Jessenia Urrea, Cer.A.T. ....	Region 1
Jeremy Jaskolski, Cer.A.T. ....	Region 4	Glenroy Oconnor, Cer.A.T. ....	Region 1	Joseph VanWambeke, Cer.A.T. ....	Region 5
Travis John, Cer.A.T. ....	Region 5	Mark Olalia, Cer.A.T. ....	Region 6	Robert Vasquez, Cer.A.T. ....	Region 7
Jessica Johnson, Cer.A.T. ....	Region 1	Eric Olson, Cer.A.T. ....	Region 4	Kathleen Vigliotti, Cer.A.T. ....	Region 1
Misty Johnson, Cer.A.T. ....	Region 5	Shawne Olson, Cer.A.T. ....	Region 7	Ivory Walker, Cer.A.T. ....	Region 3
Theresa Johnson, Cer.A.T. ....	Region 6	Machael Oneal, Cer.A.T. ....	Region 6	Alison Whalen, Cer.A.T. ....	Region 2
Janie Juarez, Cer.A.T. ....	Region 5	Linda Ortutay, Cer.A.T. ....	Region 1	Jonathan Whalen, Cer.A.T. ....	Region 7
Melissa Jurick, Cer.A.T. ....	Region 1	Tatiana Palanchuk Rotari, Cer.A.T. ....	Region 7	Kiv Wheeler, Cer.A.T. ....	Region 5
Antony Kamau, Cer.A.T. ....	Region 3	Brock Parker, Cer.A.T. ....	Region 7	James White, Cer.A.T. ....	Region 4
Alexandria Kang-Parker, Cer.A.T. ....	Region 6	Juanita Parker, Cer.A.T. ....	Region 7	Kathleen Wiess, Cer.A.T. ....	Region 7
Kathryn Klein, Cer.A.T. ....	Region 1	Julia Parker, Cer.A.T. ....	Region 3	Quiana Williams-Frazier, Cer.A.T. ....	Region 1
Patricia Koehn, Cer.A.T. ....	Region 4	Travis Parker, Cer.A.T. ....	Region 3	Mariann Willis, Cer.A.T. ....	Region 1
Ignat Kogan, Cer.A.T. ....	Region 4	Shevon Parks, Cer.A.T. ....	Region 1	Lynn Winterling, Cer.A.T. ....	Region 2
Angela Kolf, Cer.A.T. ....	Region 4	Aleshia Pasi, Cer.A.T. ....	Region 7	Mary Wood, Cer.A.T. ....	Region 3
Crystal Krauss, Cer.A.T. ....	Region 2	Dipalben Patel, Cer.A.T. ....	Region 1	Rhiannon Yednak, Cer.A.T. ....	Region 2
Tom Kuennen, Cer.A.T. ....	Region 4	Denise Pedraza, Cer.A.T. ....	Region 6	Jose Yengle, Cer.A.T. ....	Region 3
Sarah Labiaux, Cer.A.T. ....	Region 2	Dominick Pellegrino, Cer.A.T. ....	Region 3	Roger Yost, Cer.A.T. ....	Region 3
Kirpaul Lalchand, Cer.A.T. ....	Region 1	Antonio Perez, Jr., Cer.A.T. ....	Region 6	Amara Young, Cer.A.T. ....	Region 5
Frank Lamotta, Cer.A.T. ....	Region 2	Thomas Phelan, Jr., Cer.A.T. ....	Region 2	Betsy Young, Cer.A.T. ....	Region 4
Erica Land, Cer.A.T. ....	Region 3	Lee Phillips, Cer.A.T. ....	Region 2		
Shawanda Leavelle, Cer.A.T. ....	Region 2	Samueal Plascencia, Jr., Cer.A.T. ....	Region 6		
Darrin Legg, Cer.A.T. ....	Region 6	Madhusoodhana Prasa,			
Pastor Liciano, Cer.A.T. ....	Region 1	Cer.A.T. ....	Udupi Manipl, India		
Andrea Lindell, Cer.A.T. ....	Region 1	Jacki Proffott, Cer.A.T. ....	Region 7	Neil Allen, Cer.A.T.T. ....	Region 7
Rose Long, Cer.A.T. ....	Region 7	James Rajczyk, Cer.A.T. ....	Region 1	Christopher Aquilino, Cer.A.T.T. ....	Region 3
John Lopez, Cer.A.T. ....	Region 3	Nina Rambo, Cer.A.T. ....	Region 2	Fritz Braun, Cer.A.T. T. ....	Region 3
Malcom Lowe, Cer.A.T. ....	Region 2	Irma Ramirez, Cer.A.T. ....	Region 6	Faye Britt, Cer.A.T.T. ....	Region 3
Christopher Lucas, Cer.A.T. ....	Region 6	Charisse Ramos, Cer.A.T. ....	Region 4	Carolynette Brown, Cer.A.T. ....	Region 5
Catherine Ludorf, Cer.A.T. ....	Region 2	Gustavo Ramos, Cer.A.T. ....	Region 4	Kathi Conner, Cer.A.T. ....	Region 5
Veronica Luevano, Cer.A.T. ....	Region 5	Ruben Reed, Cer.A.T. ....	Region 4	Francisco Contreras, Cer.A.T. ....	Region 6
Caitlin Magnacca, Cer.A.T. ....	Region 2	Corey Reeves, Cer.A.T. ....	Region 6	Corey Franklin, Cer.A.T. ....	Region 5
Thomas Malboeuf, Cer.A.T. ....	Region 1	Patricia Reyes, Cer.A.T. ....	Region 6	Jane Fry, Cer.A.T. ....	Region 6
Hanan Malek, Cer.A.T. ....	Region 1	Ryan Roberson, Cer.A.T. ....	Region 5	Morris Gatlin, Cer.A.T. ....	Region 2
Jenna Maligro, Cer.A.T. ....	Region 7	Lawrence Robinson, Cer.A.T. ....	Region 3	John Gonzalez, Cer.A.T.T. ....	Region 7
Abdulhakk Mando, Cer.A.T. ...	Kalha, Sharjah, UAE	Edward Rogers, Cer.A.T. ....	Region 3	Lauren Grzanke, Cer.A.T. ....	Region 6
Wesley Manning, Cer.A.T. ....	Region 4	Ravelle Rolle, Cer.A.T. ....	Nassau, Bahamas	Megan Hall, Cer.A.T.T. ....	Region 6
Catherine Mariduena, Cer.A.T. ....	Region 1	Jose Romano, Cer.A.T. ....	Region 6	Matthew Hunt, Cer.A.T.T. ....	Region 7
Sheryl Marqueses, Cer.A.T. ....	Region 6	Kellen Rosten, Cer.A.T. ....	Region 7	Kelly Jett, Cer.A.T.T. ....	Region 3
Jose Marquez, Cer.A.T. ....	Region 7	Eva Ruelas, Cer.A.T. ....	Region 6	Nathan Lenoir, Cer.A.T.T. ....	Region 7
Abby Martin, Cer.A.T. ....	Region 1	Bobby Jo Salm, ....	Region 4	Julie Luong, Cer.A.T.T. ....	Region 6
Austin Martin, Cer.A.T. ....	Region 5	Amanda Sammons, Cer.A.T. ....	Region 6	Patrick Madden, Cer.A.T.T. ....	Region 3
Suzanna Martinez-Miller, Cer.A.T. ....	Region 5	David Samuelson, Cer.A.T. ....	Region 5	Judith Maita, Cer.A.T.T. ....	Region 3
ChristineMaudlin, Cer.A.T. ....	Region 2	Geronimo Sanchez, Cer.A.T. ....	Region 6	Ericka Marshall, Cer.A.T.T. ....	Region 4
Kelly McAskin-Tipuisan, Cer.A.T. ....	Region 2	Analyn Schmidt, Cer.A.T. ....	Region 2	Noreen Nakagawa, Cer.A.T.T. ....	Region 6
Christy McIntyre, Cer.A.T. ....	Region 5	Frank Segarra, Cer.A.T. ....	Region 6	Craig Netherly, Cer.A.T.T. ....	Region 6
Sherrie McKee, Cer.A.T. ....	Region 2	Scott Sieling, Cer.A.T. ....	Region 6	Rex Raglin, Cer.A.T.T. ....	Region 5
Kristen McRoy, Cer.A.T. ....	Region 4	Jillian Simpson, Cer.A.T. ....	Region 6	Andy Rampersad, Cer.A.T.T. ....	Region 1
Heather Melone, Cer.A.T. ....	Region 5	Galen Smith, Cer.A.T. ....	Region 3	James Randolph, Cer.A.T.T. ....	Region 3
Renee Melzer, Cer.A.T. ....	Region 2	Nanette Smith, Cer.A.T. ....	Region 6	Elliot Shields, Cer.A.T.T. ....	Region 6
Patricia Menchey, Cer.A.T. ....	Region 2	Tonya Smith, Cer.A.T. ....	Region 3	Alton Smith, Cer.A.T.T. ....	Region 5
Pablo Merced, Cer.A.T. ....	Region 3	Michael Splain, Cer.A.T. ....	Region 2	Kevin Snowden, Cer.A.T.T. ....	Region 3
Abderrahim Mghizou, Cer.A.T. ....	Region 1	Chantale Stark, Cer.A.T. ....	Region 3	Adam Solook, Cer.A.T.T. ....	Region 6
Kevin Mines, Cer.A.T. ....	Region 4	Stephanie Stephens, Cer.A.T. ....	Region 3	Joseph Stroud, Cer.A.T.T. ....	Region 5
Jefferey Minnick, Cer.A.T. ....	Region 3	Susan Suring, Cer.A.T. ....	Region 4	Crystal Thomas, Cer.A.T.T. ....	Region 6
Michael Mitchell, Cer.A.T. ....	Region 3	Kyla Swartz, Cer.A.T. ....	Region 2	Kenneth Wilbert, Cer.A.T.T. ....	Region 3
Aftab Mohiuddin, Cer.A.T. ....	Rawalpindi, Pakistan	Garner Tare, Cer.A.T. ....	Region 6	Jeremy Wyatt, Cer.A.T.T. ....	Region 7
Jorge Moncada, Cer.A.T. ....	Region 6	Michelle Tayler, Cer.A.T. ....	Region 4	Roger Yost, Cer.A.T.T. ....	Region 3
Misty Montano, Cer.A.T. ....	Region 6			Donna Zawierski, Cer.A.T.T. ....	Region 4

#### JUNE 2015 TECHNOLOGISTS

**T**HANKS TO THE DEDICATION AND PERSEVERANCE of ASATT's Board of Directors and all of our Society's proud members, **ANESTHESIA TECHNOLOGY** is now recognized by the medical community as an Allied Health Profession. We've steadfastly endured our "growing pains" in order to secure our strong position as members of the Anesthesia Care Team!

ASATT has addressed the concerns of the membership during these transitions with a variety of documents containing important, useful information about education and certification. Three of those documents are reprinted in the following pages: (a) ASATT's "Standards for Provider-Directed Independent Study" [pg 26–27]; (b) "Standards and Guidelines for Accreditation of Educational Programs in Anesthesia Technology" from the Commission on Accreditation of Allied Health Education Programs (CAAHEP) [pg 28–31]; and (c) "ASATT Refresher/Advancement/Provisional Recertification Program Standards [pg 32–35].

## **Standards for Provider-Directed Independent Study**

### **American Society of Anesthesia Technologists & Technicians**

7044 South 13th Street, Oak Creek, WI 53154 ■ Phone: (414) 908-4942 ■ FAX: (414) 768-8001

Email: [continuingeducation@asatt.org](mailto:continuingeducation@asatt.org)

Provider-Directed Independent Study (PDIS) is a self-paced learning activity developed for individual use in which the participant receives program materials through the mail, computer, or website, and completes the required activity outside a formal, organized learning environment. The program must be able to meet the criteria in order to receive PDIS approval. Each activity submitted for Continuing Education (CE) approval is evaluated individually to determine the number of credits it will receive. The PDIS cannot be approved for use in conjunction with or as an adjunct to another program that has received prior approval.

This type of CE program requires that the participant receives the information by mail or computer. Each course must require at least 50–60 minutes (excluding testing time) to complete. The medium by which a CE program is presented does not alter the requirements established by the ASATT Continuing Education (CE) and Recertification Committees. Independent study offered on a website still requires submission of accurate, complete and substantive materials as part of the approval process.

Providers who submit programs that have the same content, but which will be offered in more than one medium, must send all materials for the program at the same time. The program will receive one inclusive approval number for the two-year approval period. Participants are required to complete the program prior to the expiration date.

The provider should refer to the content section of the ASATT Continuing Education Program located within the Education Tab to ensure that the proposed content is within the approval criteria. If there is any question about topics to be presented, the provider should contact the ASATT CE Committee for confirmation of acceptable content; otherwise, learning material may not be accepted for credit by the Recertification Committee.

A completed application that meets the following criteria is required for prior approval of independent study programs.

1. The overall design that is submitted for approval must include:
  - a. One (1) complete packet of the instructional materials as it would be sent to a participant. The materials must be in a packet that is professionally prepared.
  - b. Content for the proposed independent study.
    - Hard copy of any material the participant will see in its entirety, if the learning activity is transmitted by computer or is presented on a website.
    - The content must contain enough substantive information to provide the participant with all of the essential information, without additional research required.
    - Outlines and short abstracts are not sufficient, except as supplemental materials.
    - Each article must contain a bibliography.
  - c. A detailed statement that describes the program and the materials required for completion.
    - How to use the resources provided and complete the program
    - How the program reaches the participant
  - d. A statement that describes the testing mechanism and feedback for the participant.

- The description must show that the participant automatically receives feedback concerning correct answers.
  - The answers to the test questions are not included in the materials that the participant will see before completing the post test.
  - The feedback and answers will be provided to the participant when they receive their certificate of attendance.
- e. A statement that must include:
- The passing score is at least 80%.
    - Unless the program is computer interactive.
- f. A copy of the evaluation form which is to be completed by the participant at the end of the study program.
- g. A copy of the certificate of attendance upon completion of the program, which must include the amount of time spent by the participant, if taken on the computer.
2. A minimum of three (3) objectives and ten (10) test questions is required for each CE credit requested.
- a. The objectives must appear as part of the lesson regardless of the medium in which the course is conducted. Each lesson must start out with the objectives and conclude with the test questions.
- b. For PDIS programs that are computer interactive or administered on a website, the program provider may allow unlimited testing opportunities.
3. Programs that use learning materials such as CDs, or DVDs, must provide the participant with a hard copy of the learner objectives, test questions, and content outline, as well as identify the instructional staff.
4. Independent studies may use previously published material that is relevant to achieving the objectives.
- Such material must contain sufficient information to provide the participant with enough information, without reference to the original article. These materials may be listed as supplemental.
5. CE credit is awarded based on the requirement of a minimum of at least 50 – 60 minutes (excluding testing) to complete.
6. To receive CE credit, a participant must complete the independent study by the expiration date specified by the provider.
7. A certificate of attendance must be forwarded to the participant upon successful completion of the program. It must contain the following typed or computer generated information:
- Name of the CE activity
  - Name and address of the provider
  - Participants name
  - ASATT ID number
  - Date(s) of attendance
  - The signature of the provider who verifies participation in the program
  - Number of CE credits awarded
  - ASATT code number and expiration date
  - For online programs with multiple courses available a transcript or database will be maintained which includes:
    - the above items
    - the length of time required to complete each course taken
    - a cumulative certificate of attendance available to the participant



# Commission on Accreditation of Allied Health Education Programs

## Standards and Guidelines for the Accreditation of Educational Programs in Anesthesia Technology

Standards initially adopted in 2011; revised in 2015

Adopted by the:  
**American Society of Anesthesia Technologists and Technicians, Committee on Accreditation  
for Anesthesia Technology Education, and CAAHEP**

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredits programs upon the recommendation of the Committee on Accreditation for Anesthesia Technology Education (CoA-ATE).

These accreditation **Standards and Guidelines** are the minimum standards of quality used in accrediting programs that prepare individuals to enter the Anesthesia Technology profession. Standards are the minimum requirements to which a program is held accountable. Guidelines are descriptions, examples, or recommendations that elaborate on the Standards. Guidelines are not required, but can assist with interpretation of the Standards.

Standards are printed in regular typeface in outline form. *Guidelines* are printed in italic typeface in narrative form.

### Preamble

The Commission on Accreditation of Allied Health Education Programs (CAAHEP), the American Society of Anesthesia Technologists and Technicians (ASATT), and the Committee on Accreditation for Anesthesia Technology Education (CoA-ATE) cooperate to establish, maintain and promote appropriate standards of quality for educational programs in Anesthesia Technology and to provide recognition for educational programs that meet or exceed the minimum standards, outlined in these **Standards and Guidelines**. Lists of accredited programs are published for the information of students, employers, educational institutions and agencies, and the public.

These **Standards and Guidelines** are to be used for the development, evaluation, and self analysis of Anesthesia Technology programs. On-site review teams assist in the evaluation of a program's relative compliance with the Approval Standards.

### Description of the Profession:

Anesthesia technology is an allied health profession specifically focused on fundamental and advanced clinical procedures which assist the anesthesia provider in the safe and efficient care of patient's under anesthesia. The Anesthesia Technologist works under the direction of an anesthesia provider as a vital member of the anesthesia care team. The Anesthesia Technologist is proficient in the acquisition, preparation, and application of various types of equipment required for the delivery of anesthesia care. Cognitive abilities involve knowledge of anatomy/physiology, pathophysiology, pharmacology, and principles of anesthesia technology. Independent judgment is required for rapid response to the quickly changing circumstances in the patient care environment. The Anesthesia Technologist exhibits professionalism in patient and staff interactions. Anesthesia technologists may work in a variety of clinical settings including: hospital operating rooms, interventional and diagnostic radiology, labor and delivery units, intensive care units, emergency rooms, outpatient procedure suites, and ambulatory surgery centers.

## I. Sponsorship

### A. Sponsoring Educational Institution

A sponsoring institution must be one of the following:

1. A post-secondary academic institution accredited by an institutional accrediting agency that is recognized by the U.S. Department of Education, and must be authorized under applicable law or other acceptable authority to provide a post-secondary program, which awards a minimum of an Associate Degree at the completion of the program.
2. A hospital or medical center accredited by a healthcare accrediting agency or equivalent that is recognized by the U.S. Department of Health and Human Services, and authorized under applicable law or other acceptable authority to provide healthcare, which awards a minimum of a certificate at the completion of the program.

The Sponsor must ensure that the graduates of the program have obtained or will obtain an Associate degree upon completion of the program.

### B. Consortium Sponsor

1. A consortium sponsor is an entity consisting of two or more members that exists for the purpose of operating an educational program. In such instances,

at least one of the members of the consortium must meet the requirements of a sponsoring educational institution as described in I.A.

2. The responsibilities of each member of the consortium must be clearly documented as a formal affiliation, agreement or memorandum of understanding, which includes governance and lines of authority.

### C. Responsibilities of Sponsor

1. The Sponsor must ensure that the provisions of these **Standards and Guidelines** are met.

## II. Program Goals

### A. Program Goals and Outcomes

There must be a written statement of the program's goals and learning domains consistent with and responsive to the demonstrated needs and expectations of the various communities of interest served by the educational program. The communities of interest that are served by the program must include, but are not limited to, students, graduates, faculty, sponsor administration, employers, physicians, and the public.

Program-specific statements of goals and learning domains provide the basis for program planning, implementation, and evaluation. Such goals and learning domains must be compatible with both the mission of the sponsoring institution(s), the expectations of the communities of interest, and nationally accepted standards of roles and functions. Goals and learning domains are based upon the substantiated needs of health care providers and employers, and the educational needs of the students served by the educational program.

### B. Appropriateness of Goals and Learning Domains

The program must regularly assess its goals and learning domains. Program personnel must identify and respond to changes in the needs and/or expectations of its communities of interest.

An advisory committee, which is representative of at least each of the communities of interest named in these **Standards**, must be designated and charged with the responsibility of meeting at least annually, to assist program and sponsor personnel in formulating and periodically revising appropriate goals and learning domains, monitoring needs and expectations, and ensuring program responsiveness to change.

*The meeting of the advisory committee does not necessarily have to be a face to face meeting. Meetings held as a synchronous conference call or by electronic means are acceptable.*

### C. Minimum Expectations

The program must have the following goal(s) defining minimum expectations:

"To prepare competent entry-level Anesthesia Technologists in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains."

Programs adopting educational goals beyond entry-level competence must clearly delineate this intent and provide evidence that all students have achieved the basic competencies prior to entry into the field.

*Nothing in this Standard restricts programs from formulating goals beyond entry-level competence.*

## III. Resources

### A. Type and Amount

Program resources must be sufficient to ensure the achievement of the program's goals and outcomes. Resources must include, but are not limited to: faculty; clerical and support staff; curriculum; finances; offices; classroom, laboratory, and ancillary student facilities; clinical affiliates; equipment; supplies; computer resources; instructional reference materials, and faculty/staff continuing education.

## B. Personnel

The sponsor must appoint sufficient faculty and staff with the necessary qualifications to perform the functions identified in documented job descriptions and to achieve the program's stated goals and outcomes

### 1. Program Director

#### a. Responsibilities

The Program Director must ensure achievement of the program's goals and outcomes, and is responsible for all aspects of the program, including the organization, administration, continuous review, planning, development and general effectiveness of the program. The Program Director must provide supervision, administration and coordination of the instructional staff in the academic and clinical phases of the educational program.

#### b. Qualifications

The Program Director must:

1. Possess a degree equal to the degree for which the students are being prepared.
2. Possess a minimum of five years full time or equivalent experience as an Anesthesia Technologist.

*The Program Director should pursue ongoing formal training designed to maintain and upgrade their professional, instructional and administrative capabilities.*

### 2. Medical Advisor

#### a. Responsibilities

The Medical Advisor of the program must provide the input necessary to ensure that the medical components of the curriculum, both didactic and supervised practice, meets current standards of medical practice.

#### b. Qualifications

The Medical Advisor must be a currently practicing, licensed physician, Board certified in anesthesiology.

### 3. Faculty and/or Instructional Staff

#### a. Responsibilities

In classrooms, laboratories, and all clinical facilities where a student is assigned, there must be (a) qualified individual(s) clearly designated as liaison(s) to the program to provide instruction, supervision, and timely assessments of the student's progress in meeting program requirements. All faculty members, regardless of the extent of their participation, must be familiar with the goals of the program and must be able to demonstrate the ability to develop a plan of instruction and evaluation.

*Preceptors should be familiar with the expectations of the program, advance personal skills, and facilitate a training experience for the students.*

#### b. Qualifications

Faculty and clinical preceptor liaisons must possess appropriate credentials and knowledge in subject matter by virtue of training and experience, in fulfilling their responsibilities.

*Important criteria of faculty should include: the ability to organize and present the subject. Faculty should include specialists trained in the Anesthesia discipline.*

## C. Curriculum

The curriculum must ensure the achievement of program goals and learning domains. Instruction must be an appropriate sequence of classroom, laboratory, and clinical activities. Instruction must be based on clearly written course syllabi that include course description, course objectives, methods of evaluation, topic outline, and competencies required for graduation.

The program must demonstrate that the content and competencies included in the program's curriculum meet or exceed those stated in the latest edition of the *National Standard Curriculum for College Associate Degree Programs in Anesthesia Technology* (Appendix B).

To accomplish the requisite integration of knowledge, theory and application of the clinical and technical aspect of the discipline, a variety of instructional methods should be employed, including instructor lead presentations and demonstrations, interactive experiences, structured laboratory experiences and supervised clinical experiences.

## D. Resource Assessment

The program must, at least annually, assess the appropriateness and effectiveness of the resources described in these **Standards**. The results of resource assessment must be the basis for ongoing planning and appropriate change. An action plan must be developed when deficiencies are identified in the program resources. Implementation of the action plan must be documented and results measured by ongoing resource assessment.

## IV. Student and Graduate Evaluation/Assessment

### A. Student Evaluation

#### 1. Frequency and Purpose

Evaluation of students must be conducted on a recurring basis with sufficient frequency to provide both the students and program faculty with valid and timely indications of the students' progress toward and achievement of the competencies and learning domains stated in the curriculum.

#### 2. Documentation

Records of student evaluations must be maintained in sufficient detail to document learning progress and achievements.

### B. Outcomes

#### 1. Outcomes Assessment

The program must periodically assess its effectiveness in achieving its stated goals and learning domains. The results of this evaluation must be reflected in the review and timely revision of the program.

Outcomes assessments include, but are not limited to: national credentialing technologist examination performance, programmatic retention/attrition, graduate satisfaction, employer satisfaction, job (positive) placement, and programmatic summative measures. The program must meet the outcomes assessment thresholds.

*"Positive placement" means that the graduate is employed full or part-time in a related field; and/or continuing his/her education; and/or serving in the military.*

#### 2. Outcomes Reporting

The program must periodically submit to the CoA-ATE its goal(s), learning domains, evaluation systems (including type, cut score, appropriateness), outcomes, its analysis of the outcomes and an appropriate action plan based on the analysis.

Programs not meeting the established thresholds must begin a dialogue with the Committee on Accreditation for Anesthesia Technology Education (CoA-ATE) to develop an appropriate plan of action to respond to the identified shortcomings.

## V. Fair Practices

### A. Publications and Disclosure

1. Announcements, catalogs, publications, and advertising must accurately reflect the program offered.
2. The following must be made known to all applicants and students: The sponsor's institutional and programmatic accreditation status, as well as the name, mailing address, web site address, and phone number of the accrediting agencies; admissions policies and practices, including technical standards (when used), policies on advanced placement, transfer of credits, and credits for experiential learning; number of credits required for completion of the program; tuition/fees and other costs required to complete the program; policies and processes for withdrawal and for refunds of tuition/fees
3. At least the following must be made known to all students: academic calendar; student grievance procedure; criteria for successful completion of each segment of the curriculum and graduation; and policies and processes by which students may perform clinical work while enrolled in the program.
4. The sponsor must maintain, and make available to the public, current and consistent summary information about student/graduate achievement that includes the results of one or more of the outcomes assessments required in these **Standards**.

*The sponsor should develop a suitable means of communicating to the communities of interest the achievement of students/graduates (e.g. through a website or electronic or printed documents).*

### B. Lawful and Non-discriminatory Practices

All activities associated with the program, including student and faculty recruitment, student admission, and faculty employment practices, must be non-discriminatory and in accord with federal and state statutes, rules, and regulations. There must be a faculty grievance procedure made known to all paid faculty.

### C. Safeguards

The health and safety of patients, students, and faculty associated with the educational activities of the students must be adequately safeguarded.

All activities required in the program must be educational and students must not be substituted for staff.

### D. Student Records

Satisfactory records must be maintained for student admission, advisement, counseling, and evaluation. Grades and credits for courses must be recorded on the student transcript and permanently maintained by the sponsor in a safe and accessible location.

## E. Substantive Change

The sponsor must report substantive change(s) as described in Appendix A to CAAHEP/CoA-ATE in a timely manner. Additional substantive changes to be reported to CoA-ATE within the time limits prescribed include:

1. Changes to the institution's mission or objectives, if these will affect the program.
2. The addition or deletion of courses that represent a change in content or in method of delivery.
3. The award level other than that of an associate degree.
4. Substantial increase or decrease in credit hours for successful completion of a program.

## F. Agreements

There must be a formal affiliation agreement or memorandum of understanding between the sponsor and all other entities that participate in the education of the students describing the relationship, role, and responsibilities between the sponsor and that entity.

## Appendix A

(This administrative appendix will be added by CAAHEP after final approval of the **Standards Guidelines** document.)

### Application, Maintenance and Administration of Accreditation

#### A. Program and Sponsor Responsibilities

##### 1. Applying for Initial Accreditation

- a. The chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form and returns it electronically or by mail to:

CAAHEP  
Attn: CoA-ATE  
1361 Park Street  
Clearwater, FL 33756

The "Request for Accreditation Services" form can be obtained from the CAAHEP website at [www.caahep.org/Content.aspx?ID=11](http://www.caahep.org/Content.aspx?ID=11).

**Note:** There is **no** CAAHEP fee when applying for accreditation services; however, individual committees on accreditation may have an application fee.

- b. The program undergoes a comprehensive review, which includes a written self-study report and an on-site review.

The self-study instructions and report form are available from the CoA-ATE. The on-site review will be scheduled in cooperation with the program and CoA-ATE once the self-study report has been completed, submitted, and accepted by the CoA-ATE.

##### 2. Applying for Continuing Accreditation

- a. Upon written notice from the CoA-ATE, the chief executive officer or an officially designated representative of the sponsor completes a "Request for Accreditation Services" form, and returns it electronically or by mail to:

CAAHEP  
Attn: CoA-ATE  
1361 Park Street  
Clearwater, FL 33756

The "Request for Accreditation Services" form can be obtained from the CAAHEP website at [www.caahep.org/Content.aspx?ID=11](http://www.caahep.org/Content.aspx?ID=11).

- b. The program may undergo a comprehensive review in accordance with the policies and procedures of the CoA-ATE.

If it is determined that there were significant concerns with the conduct of the on-site review, the sponsor may request a second site visit with a different team.

After the on-site review team submits a report of its findings, the sponsor is provided the opportunity to comment in writing and to correct factual errors prior to the CoA-ATE forwarding a recommendation to CAAHEP.

##### 3. Administrative Requirements for Maintaining Accreditation

- a. The program must inform the CoA-ATE and CAAHEP within a reasonable period of time (as defined by the committee on accreditation and CAAHEP

policies) of changes in chief executive officer, dean of health professions or equivalent position, and required program personnel (Refer to Standard III.B.).

- b. The sponsor must inform CAAHEP and the CoA-ATE of its intent to transfer program sponsorship. To begin the process for a Transfer of Sponsorship, the current sponsor must submit a letter (signed by the CEO or designated individual) to CAAHEP and the [committee on accreditation] that it is relinquishing its sponsorship of the program. Additionally, the new sponsor must submit a "Request for Transfer of Sponsorship Services" form. The CoA-ATE has the discretion of requesting a new self-study report with or without an on-site review. Applying for a transfer of sponsorship does not guarantee that the transfer of accreditation will be granted.
- c. The sponsor must promptly inform CAAHEP and the CoA-ATE of any adverse decision affecting its accreditation by recognized institutional accrediting agencies and/or state agencies (or their equivalent).
- d. Comprehensive reviews are scheduled by the CoA-ATE in accordance with its policies and procedures. The time between comprehensive reviews is determined by the CoA-ATE and based on the program's on-going compliance with the Standards, however, all programs must undergo a comprehensive review at least once every ten years.
- e. The program and the sponsor must pay CoA-ATE and CAAHEP fees within a reasonable period of time, as determined by the CoA-ATE and CAAHEP respectively.
- f. The sponsor must file all reports in a timely manner (self-study report, progress reports, probation reports, annual reports, etc.) in accordance with CoA-ATE policy.
- g. The sponsor must agree to a reasonable on-site review date that provides sufficient time for CAAHEP to act on a CoA-ATE accreditation recommendation prior to the "next comprehensive review" period, which was designated by CAAHEP at the time of its last accreditation action, or a reasonable date otherwise designated by the CoA-ATE.

Failure to meet any of the aforementioned administrative requirements may lead to administrative probation and ultimately to the withdrawal of accreditation. CAAHEP will immediately rescind administrative probation once all administrative deficiencies have been rectified.

#### 4. Voluntary Withdrawal of a CAAHEP-Accredited Program

Notification of voluntary withdrawal of accreditation from CAAHEP must be made by the Chief Executive Officer or an officially designated representative of the sponsor by writing to CAAHEP indicating: the desired effective date of the voluntary withdrawal, and the location where all records will be kept for students who have completed the program.

#### 5. Requesting Inactive Status of a CAAHEP-Accredited Program

Inactive status for any accredited program other than one holding Initial Accreditation may be requested from CAAHEP at any time by the Chief Executive Officer or an officially designated representative of the sponsor writing to CAAHEP indicating the desired date to become inactive. No students can be enrolled or matriculated in the program at any time during the time period in which the program is on inactive status. The maximum period for inactive status is two years. The sponsor must continue to pay all required fees to the CoA-ATE and CAAHEP to maintain its accreditation status.

To reactivate the program the Chief Executive Officer or an officially designated representative of the sponsor must provide notice of its intent to do so in writing to both CAAHEP and the CoA-ATE. The sponsor will be notified by the CoA-ATE of additional requirements, if any, that must be met to restore active status.

If the sponsor has not notified CAAHEP of its intent to re-activate a program by the end of the two-year period, CAAHEP will consider this a "Voluntary Withdrawal of Accreditation."

#### B. CAAHEP and Committee on Accreditation Responsibilities – Accreditation Recommendation Process

1. After a program has had the opportunity to comment in writing and to correct factual errors on the on-site review report, the CoA-ATE forwards a status of public recognition recommendation to the CAAHEP Board of Directors. The recommendation may be for any of the following statuses: initial accreditation, continuing accreditation, transfer of sponsorship, probationary accreditation, withhold of accreditation, or withdrawal of accreditation.

The decision of the CAAHEP Board of Directors is provided in writing to the sponsor immediately following the CAAHEP meeting at which the program was reviewed and voted upon.

2. Before the [committee on accreditation] allows the Initial Accreditation of a program to expire, the sponsor must have the opportunity to request reconsideration of that decision or to request voluntary withdrawal of accreditation. The CoA-ATE's decision is final and CAAHEP will not entertain any appeal on behalf of the program. CAAHEP will notify the sponsor in writing of the CoA-ATE's decision.

3. Before the CoA-ATE forwards a recommendation to CAAHEP that a program be placed on probationary accreditation, the sponsor must have the opportunity to request reconsideration of that recommendation or to request voluntary withdrawal of accreditation. The CoA-ATE's reconsideration of a recommendation for probationary accreditation must be based on conditions existing both when the committee arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors' decision to confer probationary accreditation is not subject to appeal.

4. Before the CoA-ATE forwards a recommendation to CAAHEP that a program's accreditation be withdrawn or that accreditation be withheld, the sponsor must have the opportunity to request reconsideration of the recommendation, or to request voluntary withdrawal of accreditation or withdrawal of the accreditation application, whichever is applicable. The CoA-ATE's reconsideration of a recommendation of withdraw or withhold accreditation must be based on conditions existing both when the CoA-ATE arrived at its recommendation as well as on subsequent documented evidence of corrected deficiencies provided by the sponsor.

The CAAHEP Board of Directors' decision to withdraw or withhold accreditation may be appealed. A copy of the CAAHEP "Appeal of Adverse Accreditation Actions" is enclosed with the CAAHEP letter notifying the sponsor of either of these actions.

At the completion of due process, when accreditation is withheld or withdrawn, the sponsor's Chief Executive Officer is provided with a statement of each deficiency. Programs are eligible to re-apply for accreditation once the sponsor believes that the program is in compliance with the accreditation Standards.

**Note: Any student who completes a program that was accredited by CAAHEP at any time during his/her matriculation is deemed by CAAHEP to be a graduate of a CAAHEP-accredited program.**

## Appendix B

### National Standard Curriculum For Accredited Programs

#### Section A General Content Areas

The curriculum of the program must include:

- A.1.1 Anatomy and Physiology
- A.1.2 Chemistry

*In addition Medical Terminology and Physical Education are recommended.*

*Each educational institution should determine whether the General Education component should be included into the professional curriculum or required prior to entry into the program.*

#### Section B Professional Curriculum Components

- B.1.1 Introduction to Anesthesia Technology.
  - B.1.1.1 Role of the Anesthesia Care Team
  - B.1.1.2 Scope of practice and specific duties of the Anesthesia Technologist.
  - B.1.1.3 Policies and Standards of patient care practice.
- B.1.2 Basic and Advanced Principles for Anesthesia Technology.
  - B.1.2.1 Set-up and function of basic equipment for anesthesia care.
  - B.1.2.2 Anesthesia machine checkout.
  - B.1.2.3 Hemodynamic monitoring.
  - B.1.2.4 Types of Anesthesia.
  - B.1.2.5 Functioning as a member of the Anesthesia Care Team.
  - B.1.2.6 Advanced equipment for anesthesia care.
- B.1.3 Anesthesia Pharmacology.
  - B.1.3.1 Intravenous therapy.
  - B.1.3.2 Emergency medications.
- B.1.4 Anesthesia Instrumentation (Lab).
  - B.1.4.1 Hemodynamic monitoring equipment; function, application and troubleshooting.
    - B.1.4.1.1 Invasive and non-invasive.
    - B.1.4.1.2 Emergent and non-emergent.
  - B.1.4.2 Advanced knowledge of Anesthesia machine.
  - B.1.4.3 Intubation equipment.
    - B.1.4.3.1 Emergency intubation techniques and equipment.
  - B.1.4.4 Set-up and use of complex Anesthesia equipment.

- B.1.4.5 Diagnosis and minor repair of Anesthesia equipment for proper function and maintenance.
- B.1.4.6 Cleaning and documentation.
- B.1.4.7 Safety
- B.1.4.8 Asepsis
- B.1.4.9 Policies and Standards.
- B.1.4.10 Quality assurance and process improvement.
  - B.1.4.10.1 Regulatory Associations and credentialing.
  - B.1.4.10.2 Researching future technologies.
- B.1.5 Clinical Experience.
  - B.1.5.1 Demonstrate clinical application of basic skills acquired from previous didactic coursework in the patient care setting.
  - B.1.5.2 Student will progress to independently set-up, and/or assess efficacy of equipment, medications, and technique.
  - B.1.5.3 Student will evaluate the circumstance of the patient, consult with the Anesthesia provider and assist in the care of the patient.
  - B.1.5.4 In the patient care setting, the student will progressively demonstrate their ability to function as a member of the Anesthesia Care Team.
  - B.1.5.5 Including:
    - B.1.5.5.1 Interaction with vendors.
    - B.1.5.5.2 Interaction with other departments.
- B.1.6 Capstone Project.
  - B.1.6.1 Student will discuss clinical scenarios and form patient care plans.
  - B.1.6.2 Possess critical thinking skills in caring for the anesthesia patient.
  - B.1.6.3 Possess ability to effectively collaborate with the anesthesia care team.
  - B.1.6.4 Review Anesthesia Technologist career opportunities.
  - B.1.6.5 Prepare for the national technologist credential exam.
- B.2.0 Anesthesia Technologist Terminal Student Learning Objectives
- B.2.1 Maintains vigilance and patient safety throughout the peri anesthetic continuum, by actively protecting patients from iatrogenic complications, and utilizes appropriate precautions in infection control.
- B.2.2 Collaborates with the anesthesia multi-disciplinary care team in the development of an anesthesia plan of care for patients in areas to which they are assigned, and subsequently assists the anesthesia provider in a variety of current anesthesia techniques and use of equipment for providing anesthesia. Provides support for anesthesia services to all patients and types of anesthesia, including trauma and emergency cases.
- B.2.3 Conducts a comprehensive and appropriate equipment check. Identifies and takes appropriate action when confronted with anesthetic equipment-related malfunctions and maintains service records.
- B.2.4 Uses critical thinking skills in assisting the anesthesia provider with patients of all types, ages and physical conditions for a variety of surgical and medically related procedures.
- B.2.5 Sets up and calibrates equipment, and understands data obtained from noninvasive and invasive monitoring modalities.
- B.2.6 In collaboration with the anesthesia provider recognizes and appropriately responds to anesthetic complications that occur during the perioperative period. Describes the relationship of fluid management and the equipment required.
- B.2.7 Functions as a resource person for the acquisition, preparation and application of warming, airway and ventilatory equipment.
- B.2.8 Serves as a member of cardiopulmonary resuscitation team, possesses BLS, and ACLS (obtained during program).
- B.2.9 Participates in quality management activities, and operates within budget limits and cost effectiveness.
- B.2.10 Functions as a student anesthesia technologist within appropriate professional standards, ethical, and legal requirements, accepts responsibility and accountability while assisting with the delivery of patient care.
- B.2.11 Demonstrates personal and professional integrity and has the ability to communicate, on a professional level verbally and non-verbally, regarding the delivery of perianesthetic care. Shows respect for human dignity to patients, peers, and organizations.
- B.2.12 Positively influences health care policy decisions and participates in activities, which enhance anesthesia technologist roles in improved patient care and is an advocate for patients, families and communities. Understands the various needs of diverse multi-cultural and complex client populations in the delivery of culturally competent care.

# ASATT REFRESHER / ADVANCEMENT / PROVISIONAL RECERTIFICATION PROGRAM STANDARDS

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*Refresher Program guidelines effective October 2014*

## General Information

### Purpose

**There are three methods by which certification can be re-established or advanced:**

The **Refresher Program** is offered to certified anesthesia technologists who have not been substantially engaged in the practice of anesthesia technology for more than 2 years and must update their skills and knowledge of current clinical and theoretical practice in anesthesia technology in order to meet the established standards of practice and to apply for recertification through examination.

The **Advancement Program** is designed for the certified anesthesia technician who requires additional knowledge and skills in clinical practice in order to meet the established standards of practice of a certified anesthesia technologist.

**Provisional Recertification** may be granted for the previously certified anesthesia technologist/technician whose certification was allowed to lapse due to late or insufficient CE credits beyond the December 31st recertification deadline.

### Refresher Program Objectives

The objective of the **Refresher Program** is to promote attainment of the current knowledge and clinical skills necessary for safe anesthesia technology practice required for the technologist National Certification Exam (NCE).

### Refresher Program Overview

The **Refresher Program** consists of a continuing education (CE) component and a clinical component, both of which must be completed within a 24-month period. If the anesthesia technologist has not been actively engaged for more than 2 years but less than 5 years, the individual must retake and pass the National Certification Examination (NCE).

For the CE component of the **Refresher Program**, credits may be earned through completion of CE programs that have obtained prior approval by ASATT or a recognized approval organization.

The clinical component of the **Refresher Program** must be completed by the anesthesia technologist in an accredited medical facility located within the United States or its territories. The **Refresher Program** participant is responsible for locating a clinical site and selecting a certified anesthesia technician/technologist, nurse anesthetist, anesthesiologist assistant or anesthesiologist to act as a clinical site sponsor.

### Refresher Program Requirements

The two part **Refresher** process must occur as follows:

1. The Continuing Education Refresher Application for Approval and a \$325 non-refundable fee must be submitted to the ASATT. The application must be approved **before** the anesthesia technologist begins the CE component of the Refresher Program.



2. Once the minimum of 20 CE credits has been earned, the Program participant may submit the Clinical Anesthesia Refresher Application for Approval. The application must be approved by the ASATT before the participant begins the clinical component of the Refresher Program.

Both the CE and Clinical Anesthesia Refresher applications may be accessed on the Refresher/Advancement page of the ASATT website, at [www.ASATT.ORG](http://www.ASATT.ORG) or by contacting ASATT Headquarters at (414)908-4942.

The [Refresher Program](#) is sequenced so that a minimum of 20 CE credits must be completed prior to approval for entry into the clinical component. The additional 20 CE credits may be taken prior to or concurrent with the clinical component. The NCE, can be taken only after the anesthesia technologist has completed both the CE component and the clinical component of the [Refresher Program](#).

### Refresher Program Specifics

A previously certified anesthesia technologist must fulfill the following Refresher Program requirements to become eligible for full certification.

Previously certified anesthesia technologists not substantially engaged in clinical anesthesia practice for over 2 years but not more than 5 years or who failed to obtain the required CE's during the allowed recertification or provisional certification period must meet the following criteria:

1. Documentation of 40 CE credits that have been prior-approved by ASATT:
  - ♦ 10 CE credits: Foundational Science to include Anatomy, Pathophysiology, Physics and Pharmacology.
  - ♦ 10 CE credits: Advanced Principles of Anesthesia to include specialized surgical procedures and cases including; Pediatrics, Obstetrics, Trauma, Cardiac, Transplant and Regional Anesthesia.
  - ♦ 10 CE credits: Professional Aspects; Ethics, Scope of Practice, Regulatory Compliance and Safety.
  - ♦ 10 CE credits: Advanced Anesthesia Equipment, Instrumentation and Technology.
2. Documentation of 240 hours of clinical anesthesia time on the Transcript for Completion of the Clinical Anesthesia Refresher Component.
3. Documentation of completion of the number of required clinical anesthesia experiences which include a broad range of general anesthesia, monitored anesthesia care, and regional anesthesia. The required cases are listed on the Transcript for Completion of the Clinical Anesthesia Refresher Component.
4. Documentation of current ACLS and BCLS provider certification.
5. Documentation of having previously passed the Anesthesia Technologist National Certification Exam.
6. The examination may be attempted up to three times within one year from the date of official notification that the didactic and clinical requirements of the Refresher Program have been com-

pleted. The anesthesia technologist must successfully pass the exam within that time frame.

### Clinical Anesthesia Component

The Clinical Anesthesia Refresher Component Application for Approval must be approved by the ASATT before the anesthesia technologist/technician begins the clinical anesthesia component, and may be submitted only following completion of 20 credits of the required 40 credits from the CE Refresher Component.

The clinical component must be:

1. Established in conjunction with a clinical site sponsor (i.e., a certified anesthesia technologist/technician, nurse anesthetist, anesthesiologist assistant or an anesthesiologist; and
2. Conducted within a department of anesthesia at a medical facility located within the United States or its territories.

The individual must locate an accredited hospital or other facility that will meet the needs of the applicant and are willing to participate in the Clinical Anesthesia Refresher Component. It is strongly recommended that the anesthesia technologist find a clinical site prior to enrolling in the Refresher Program.

Included in the application process to obtain ASATT approval for the Clinical Anesthesia Refresher Component, the clinical site sponsor must submit the following information:

1. The beginning and projected end dates of the clinical program.
2. A description of the medical facility.
3. A brief outline of the kinds of cases that will be available.
4. The faculty involved in the clinical area.

In addition, the clinical site sponsor must review and agree to provide the type of educational experiences required and document all of the educational experiences identified on the Transcript for Completion of the Clinical Anesthesia Refresher Component.

### Completion of the Refresher Program

Upon completion of the clinical and CE components of the Refresher Program the anesthesia technologist must submit the CE and Clinical Refresher Program Applications, the ASATT will review the documentation submitted in order to determine if all requirements of the Refresher Program have been met within the time frame specified.

The anesthesia technologist refresher participant will be notified in writing of the completion status, as well as how to proceed with applying to take the Technologist NCE

### Advancement Program Objectives

The objective of the [Advancement Program](#) is to establish minimum education and clinical anesthesia experience needed to enable the certified anesthesia technician to meet the standards and practice of the anesthesia technologist in preparation for the technologist NCE.

### Advancement Program Overview

The [Advancement Program](#) consists of continuing education (CE) which must be completed within a 24-month period. The applicant

must be currently employed for a minimum of 3 years, as a certified anesthesia technician in a medical facility located within the United States or its territories.

The [Advancement Program](#) credits may be earned through completion of CE programs that have obtained prior approval by ASATT.

The technologist NCE can be taken only after the certified anesthesia technician has completed the CE credits and provides proof of the employment requirement.

### Advancement Program Requirements

The [Advancement](#) process must occur as follows:

The Continuing Education [Advancement](#) Application for Approval and a \$250 non-refundable fee must be submitted to the ASATT. The application must be approved **before** the certified anesthesia technician begins CE coursework.

### Advancement Program Specifics

A certified anesthesia technician must fulfill the following [Advancement](#) Program requirements to become eligible for the technologist certification NCE.

Previously certified anesthesia technicians must have been employed in clinical anesthesia practice for over 2 years or have graduated from an approved program to be eligible to take the technician NCE. The candidate must show proof of successfully passing the technician exam and is currently employed as a certified anesthesia technician for an additional 3 years for a minimum total of 5 years experience. CE credits must meet the following criteria:

1. Documentation of 40 CE credits that have been prior-approved by ASATT:
  - ♦ 10 CE credits: Foundational Science to include Anatomy, Pathophysiology, Physics and Pharmacology.
  - ♦ 10 CE credits: Advanced Principles of Anesthesia to include specialized surgical procedures and cases including; Pediatrics, Obstetrics, Trauma, Cardiac, Transplant and Regional Anesthesia.
  - ♦ 10 CE credits: Professional Aspects; Ethics, Scope of Practice, Regulatory Compliance and Safety.
  - ♦ 10 CE credits: Advanced Anesthesia Equipment, Instrumentation and Technology.
4. Documentation of current ACLS and BCLS provider certification.
5. Documentation of having previously passed the Anesthesia Technician National Certification Exam.
7. The examination may be attempted up to three times within one year from the date of official notification that the didactic requirements of the [Advancement](#) Program have been completed. The anesthesia technician must successfully pass the exam within that time frame.

### Completion of the Advancement Program

Upon completion of the CE components of the [Advancement](#) Program the anesthesia technician must submit the Continuing Education Program Application, the ASATT will review the documentation sub-

mitted in order to determine if all requirements of the [Advancement](#) Program have been met within the time frame specified.

The anesthesia technician advancement participant will be notified in writing of the completion status, as well as how to proceed with applying to take the Technologist NCE

### Provisional Recertification Objectives

The objective of [Provisional Recertification](#) is to provide an opportunity for the certified anesthesia technologist or technician to retain their certification status beyond the 30 day late term by means of conditional recertification.

### Requirements

Before provisional recertification can be granted, the anesthesia technologist/ technician must submit a completed application for Provisional Recertification along with a Remediation for Expired Certification Application including all applicable fees. In addition to current recertification fees for the appropriate certification level ([www.ASATT.ORG](http://www.ASATT.ORG)), there will be a Provision fee of \$200.00 required. The requirements are as follows:

1. 30 CE credits will be required at the technician level in order to regain Certified Anesthesia Technician status.
  - a. The applicant must follow the same requirements listed for the technician on the ASATT website, at the Certification tab under Recertification.
2. 40 CE credits will be required at the technologist level in order to regain Certified Anesthesia Technologist status.
  - a. The applicant must follow the same requirements listed for the technologist on the ASATT website, at the Certification tab under Recertification.

Accrual of required CE's begins after ASATT approval of the application for Provisional Recertification. Previously earned CE's will not be accepted for remediation purposes.

All applications, documentation and fees must be completed and **approved** within the 12 month deadline (effective December 31st through December 31st, 1 year following) without exception or the individual must complete the Refresher Program to take the Technologist NCE regardless of current certification level.

## Refresher/Advancement Continuing Education Component

### Overview

The Continuing Education Refresher/Advancement Application for Approval must be approved by the ASATT Education Committee before the anesthesia technologist/technician begins the Continuing Education component of the Refresher or Advancement Program.

Continuing education (CE) credits toward fulfillment of the criteria for the Refresher or Advancement Program must be earned in clinical topics; CE credits cannot be earned in stress management, administration, research, education, non-anesthesia topics or solely through home-study programs. **At least 16 CE credits of the required 40 CE**

**credits must be completed through attendance at a program in a classroom or similar lecture setting.**

Earning CE credits may be achieved utilizing **one** of the following methods:

1. The anesthesia technologist/technician earns CE credits through attendance at approved CE programs of their choice. These programs must have obtained prior approval by ASATT or a recognized approval organization. The anesthesia technologist/technician is responsible for:
  1. Ensuring that the program he or she attends has content that meets the CE credit requirements; and
  2. Maintaining a record of CE credits and submitting documentation of completed credits to the ASATT as described under the Recordkeeping – CE Credits section below.
2. The anesthesia technologist/technician completes a CE Refresher/Advancement Course that has received prior approval from the ASATT to offer the entire quantity of CEs required. The Refresher or Advancement Course provider submits the attendance record directly to the ASATT headquarters.
3. The anesthesia technologist/technician can earn credits for attendance to prior approved CE programs and earn credits while enrolled in an ASATT approved CE Refresher/Advancement Course. For all credits earned the anesthesia technologist/technician is responsible for maintaining a record of the CE credits and submitting the documentation to the ASATT as described under **Recordkeeping – CE Credits section below.**

## Recordkeeping – CE Credits

### Overview

If the anesthesia technologist/technician is responsible for maintaining a record of CE credits and submitting it to the ASATT, documentation of credits must be submitted so the material can be reviewed and evaluated.

The following procedure should be used when submitting a record of CE credits:

### Classroom or Lecture Programs

- Submit a copy of the certificate of attendance issued by the provider. The certificate must include your name, the provider name, the program title, and the program date, documentation that the program was approved for CE credit by a recognized approval organization\*, and the number of CE credits awarded.
- Submit a copy of the program, hourly schedule or lecture outline that clearly shows the lectures attended. One CE credit is awarded for every 50 - 60 minutes of participation.
- Mark each lecture according to the group to which it belongs:

- Foundational Science
- Advanced Principles of Anesthesia
- Professional Aspects
- Advanced Anesthesia Equipment, Instrumentation and Technology.

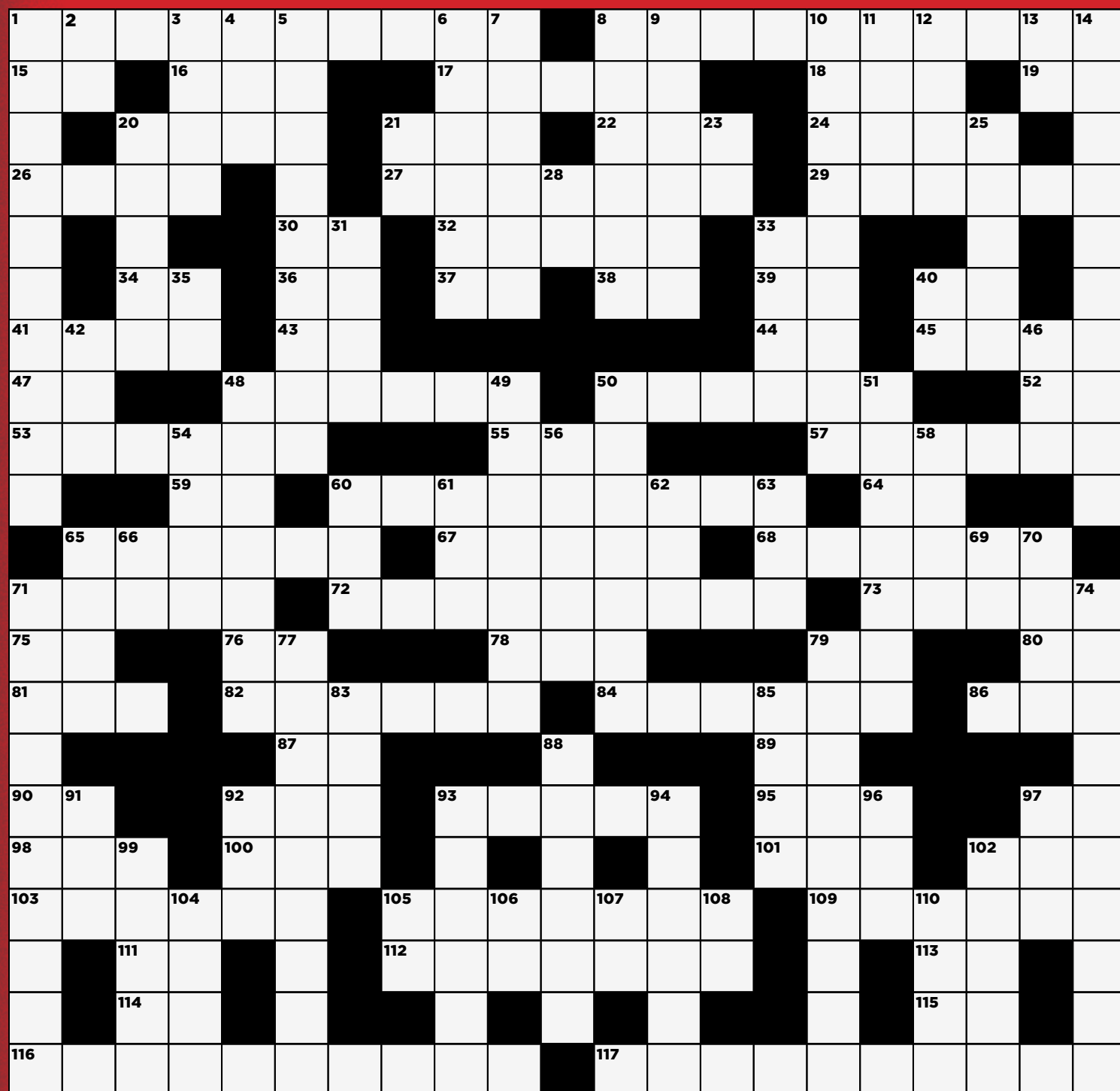
- Lectures should be marked with the appropriate group on the top of the program certificate(s).
- For ACLS and BCLS programs, submit a copy of the life support card, the certificate of attendance, and an hourly schedule or lecture agenda.

### Provider-Directed or Independent Study Programs

1. If the program was prior-approved by the ASATT, submit the following:
  - Copy of the certificate(s) of completion.
    - The certificate(s) must include your name, the provider name, the program title, the program date(s), the ASATT program code number and the number of CE credits awarded.
  - Mark the certificate according to the group to which it belongs:
    - Foundational Science
    - Advanced Principles
    - Professional Aspects
    - Advanced Anesthesia Equipment, Instrumentation and Technology.
2. If the program was approved by a recognized organization other than the ASATT\*, submit the following:
  - Copy of the certificate of completion.
    - The certificate must include your name, the provider name, the program title, the program date (s), documentation that the program was approved for CE credit by a recognized approval organization, and the number of CE credits awarded.
  - Course objective and a minimum of 10 test questions are required for every credit requested or an approval code by issuing organization.
  - Mark the certificate according to the group to which it belongs:
    - Foundational Science
    - Advanced Principles
    - Professional Aspects
    - Advanced Anesthesia Equipment, Instrumentation and Technology.

\*i.e., ASA, AANA, etc.

FROM THE FIRST ISSUE of our newsletter through the Spring issue of 1999 — the first 35 issues — there was a Crossword Puzzle. To celebrate the 100th issue of *The Sensor*, the Crossword Puzzle returns for a single-issue engagement. Enjoy! Answers will appear in the next *Sensor*.



## ACROSS

- 1 It'll knock you out
- 8 Pills, etc.
- 15 Comedian Louis \_\_. \_\_.
- 16 Garden tool
- 17 Beat it!
- 18 Not a PPO
- 19 Slice o' heaven
- 20 Superboy's girlfriend
- 21 Sunshine state (abbr)
- 22 3 Down's former employer
- 24 Meter maid of song
- 30 Where Baghdad is
- 27 Delbert, Sr.
- 29 Cow, run over by a dairy truck
- 30 Tuberculosis (abbr)
- 32 XTC hit, "Making Plans for \_\_\_\_"
- 33 Wenner's mag (abbr)
- 34 Medical TV show for 15 seasons
- 36 Adverb suffix
- 37 Particular attorney
- 38 "Consider Me Gone" singer (initials)
- 39 He phoned home
- 40 Shh! Keep it on the \_\_!
- 41 Opposite of previous
- 43 Certified Technician: Cer. \_\_\_\_
- 44 You say you saw Sue, señor?
- 45 \_\_\_\_, There and Everywhere
- 47 Thoracic duct (abbr)
- 48 \_\_\_\_ the road
- 50 Auxiliary actor
- 48 Throw \_\_ (emesis)
- 49 Ridiculous
- 55 Experimental autoimmune encephalomyelitis, for short
- 57 No "sense of touch" without 'em
- 59 Compensated with \$\$ (abbr)
- 60 Where HQ is
- 64 Gastrointestinal (abbr)
- 65 \_\_\_\_ pending
- 67 Former ASATT Pres from PA
- 68 Overdoses on purpose
- 71 Uncontrolled cell growth
- 72 "If he's late for work again, there will be \_\_\_\_ \_ \_\_\_\_!"
- 73 Kosher, generically
- 75 Dorothy Gale's aunt
- 76 Like an Ave. or Blvd.
- 78 Colon cancer operation (abbr)

- 79 Mrs. Kettle
- 80 Variety of PCP
- 81 Cardiopulmonary resuscitation, familiarly
- 82 "Sings" in the Alps
- 84 Scalpel
- 86 \_\_\_\_-Mex dip
- 87 Non-responsive (abbr)
- 89 "I can call you Betty, and Betty, if you call me, you can call me \_\_\_\_."
- 90 Tar Heel state (abbr)
- 82 Born in the \_\_\_\_
- 93 Arranges for delivery
- 95 FEB - \_\_\_\_ - APR
- 97 The OR would be hell without it
- 98 Critical-patient units
- 100 Scooby-Doo's PCP
- 101 2 qts = 4 \_\_\_\_
- 102 Life prefix
- 103 Orgasm
- 105 Former ASATT President, Ms. Grandona
- 109 Reachable 24/7
- 111 Nuh-uh
- 112 Accelerate
- 113 Atop
- 114 14th letter
- 115 Felonious Mr. Simpson
- 116 City of ASATT's birth
- 117 *Sensor* feature article, *Science & \_\_\_\_*

## DOWN

- 1 Unintentional
- 2 L'il Kim's country (abbr)
- 3 Former NBA superstar
- 4 1,000kg = 1 metric \_\_\_\_
- 5 Region 5 is America's \_\_\_\_
- 6 No man is one
- 7 Herbal treatment for indigestion
- 8 "Though I am native here and to the \_\_\_\_ born..." ~ Shakespeare
- 9 Preserve to prevent decay
- 10 *Sensor* editor, Sue \_\_\_\_
- 11 Antibody-Mediated Immune Response (abbr)
- 12 "And your little dog, too!"
- 13 Where that little dog was visiting
- 14 Sleep condition related to 1 Down
- 20 Glove "fabric"
- 21 After AM, before Sirius
- 23 \_\_\_\_ God is my witness
- 25 Where the tibia meets the talus
- 28 Farming prefix
- 31 One millionth of a meg
- 33 Take vitamin C, stay warm, and get plenty of \_\_\_\_
- 35 Opp. of left or wrong
- 40 Author Lawrence
- 42 Wane
- 46 "Golden Girl" McClanahan
- 48 Nurse's assistant
- 49 Tainted product notices
- 50 Profanity adversaries
- 51 Diesel's partner
- 54 I've had it \_\_\_\_ here!
- 56 Everyone's favorite artery
- 58 Yeast will make your loaf do this
- 60 Internet surfer's expletive
- 61 Symptom Check List (abbr)
- 63 Can a horse really talk?
- 65 Infusion \_\_\_\_
- 66 "I \_\_\_\_ the Walrus" (goo goo g'joob)
- 69 For example (abbr)
- 70 GE's request: "Please turn over on your \_\_\_\_."
- 71 The "T" in Cer.A.T.
- 74 Science of poison
- 77 Platonic
- 79 Sleep hormone
- 83 Fiddlesticks!
- 85 Tent city
- 88 What's seen cannot be \_\_\_\_
- 91 250 in ancient Rome
- 92 Form of ultraviolet light
- 93 Tool manufacturer
- 94 Sewing accessory, in a way
- 96 Registered Surgical Nurse (abbr)
- 97 Suffer illness
- 99 Holds the bones together
- 102 Susanna's musical instrument
- 104 "Kissing disease," for short
- 105 Disease that took the lives of Annette Funicello and Richard Pryor
- 106 Reply email subject-line starter
- 107 Touchdown
- 108 Anterior pituitary (abbr)
- 110 Getting recertified makes you \_\_\_\_

# CONTINUING EDUCATION QUIZ



SCIENCE+  
TECHNOLOGY

To test your knowledge on this issue's **Science + Technology** article on page 6, provide correct answers to the following questions on the form below. Follow the instructions carefully.

- Benefits of the use of autotransfusion during surgery include:**
  - Compliance with religious beliefs
  - Eliminates the risk of disease transmission
  - Maybe a psychological benefit to some patients
  - All of the above
- Autologous blood can be obtained by:**
  - Preoperative donation
  - Preoperative hemodilution
  - Intraoperative salvage
  - Postoperative salvage
  - All of the above
- The first blood salvage device collected blood through a suction line, saved in a bottle and then strained through a cheese cloth before being re-infused.**  
 True  False
- The principle of autotransfusion is based on centrifugation.**  
 True  False
- An air embolism maybe transfused to the patient's infusion line if it is directly receiving the salvaged blood from:**
  - The primary reinfusion bag of the autotransfusion system
  - The wash bag
  - The reservoir
  - The transfer pack
- Postoperative salvage is the procedure in which blood is aspirated from the surgical site and collected in a reservoir.**  
 True  False
- The decision to use autotransfusion is the responsibility of the:**
  - Blood bank director
  - Anesthesiologist
  - Surgeon
  - Autotransfusionist
- Orthopedic procedures that may benefit from the use of autotransfusion include all of the following except:**
  - Spinal instrumentation
  - Knee arthroscopy
  - Laminectomy
  - Discectomy
- To avoid red cell lysis, suction vacuum levels should be maintained above 200mmHg.**  
 True  False
- Accepted anticoagulants for use with an autotransfusion device include:**
  - 30,000 units of Heparin mixed in a 500mL bag of NS
  - 30,000 units of Heparin mixed in a 1,000 mL bag of NS
  - Premixed citrate
  - Both B & C

## To apply for Continuing Education/ Contact Hours:

- Provide all the information requested on this form.
- Provide correct answers to this issue's quiz in this box > >
- Mail this form along with \$10.00 (check or money order, payable to ASATT) to:  
ASATT  
7044 South 13th Street  
Oak Creek, WI 53154-1429

The answers to the Summer 2015  
Continuing Education Quiz are:  
(circle correct answers)

- |              |             |
|--------------|-------------|
| 1: A B C D   | 6: T F      |
| 2: A B C D E | 7: A B C D  |
| 3: T F       | 8: A B C D  |
| 4: T F       | 9: T F      |
| 5: A B C D   | 10: A B C D |

Name \_\_\_\_\_ ASATT Number \_\_\_\_\_

Street Address \_\_\_\_\_ Phone \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ ZIP Code \_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

# ASATT CALENDAR

2015

Online voting begins for ASATT Board of Directors..... July 13

Online voting closes for ASATT Board of Directors..... August 14

Annual Educational Conference in Salt Lake City, UT ..... August 27-30

*presentation of Regional Education Awards on the 29th*

Region 2 Meeting, Hershey, PA.....October 10-11

Recertification for cycle ending 2015 begins.....November 15



**AMERICAN SOCIETY OF ANESTHESIA  
TECHNOLOGISTS AND TECHNICIANS**

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