IN THIS ISSUE:

**Thoracic Lobectomy**
Case Study of one Thoracic Lobectomy and the complications that arose after a motorcycle crash

**Board Nominations**
ASATT will soon introduce an impressive array of talented and committed members. More information inside!

Thoracic Lobectomy
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References

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Dear ASATT Members,

As we approach the peak summer months, I hope you are all finding time to enjoy the weather and making memories with your friends and Family. As far as ASATT goes, there has been a lot going on to serve and advocate for you.

We are excited to announce the launch of the new ASATT website, a streamlined, easily navigable service to optimize your experience with the organization. We want to thank you all for your patience as we've worked on migrating the old website to the new platform.

ASATT is currently working on launching the Professional Practice Assessment (PPA), a survey to provide the organization with information about the scope and capacity of anesthesia technicians and technologists working in the clinical setting. This survey will go out in Q3 of this year. ASATT aims to collect the data, analyze the results and use this information to revise the current Scope of Practice. We firmly believe this is an essential step for the profession as we continue to improve the standardization of the anesthesia technology field.

The organization is pleased to announce that the conference planning is well underway, and we are excited to see you in sunny Pasadena, California. Like last year's conference, we will operate a multitrack event allowing you to attend the sessions that meet your professional interests. Unlike last year, though, we will have panel discussions on travel anesthesia and academic programs. Furthermore, we will hold a CAAHEP workshop, providing professional development opportunities for current programs and those seeking to start a program. Finally, like conferences in the past, we will have break-out sessions for the regions to discuss the topics related to the regions. So if you have not registered yet, there is still time!

Finally, as we move toward the back half of the year, a new cycle of nominations has commenced, and elections will open in the coming weeks. As a volunteer organization, seeing numerous nominations for the board’s available positions is exciting. If you want to become more active with the organization, we have numerous committees that can benefit from your perceptions and insight.

I wish you all an excellent rest of your summer and look forward to seeing you in Pasadena!

Bryan Fulton, M.Ed., Cer.A.T.T.
ASATT President
Greetings from Headquarters!

Summer is finally here and with it the new ASATT website has launched. As with any new technology we are bound to have a few hiccups, please be patient as we strive to make the ASATT member experience easier to navigate. Here is one tip so that you can view your CE’s:

When you log in, you will automatically be taken to your “member home.” On member home, you will see a blue nametag that says "Hello My Name Is...."

Just under that graphic there’s a little menu bar. The first option reads "my profile." Click on that, and it will bring you to a new page with your membership details. Above your membership details you will see a blue menu bar. All the way to the right on that menu bar it says continuing education. Click that and every CEU you’ve ever taken with ASATT will be there.

We would also love to see you in Pasadena! The actual conference dates are October 19, 20 and 21. Sessions begin early on October 19, so you should plan to arrive at the hotel on the 18th. Information for registration and reservations at The Hilton, Pasadena is on the website.

Our webinars have been very successful, and we are planning another for Saturday September 9, look for more information at asatt.org.

All of us at HQ hope that you have a great summer. Please feel free to contact us with any questions that you may have.

Happy Summer!

Mike McManus
ASATT Executive Director
CASE SCENARIO

A 38-year-old female weighing 185 lbs. and stands five foot five inches tall (5’5”) was admitted for thoraco-abdominal trauma, following a motorcycle crash. Although trauma rescue teams provide pre-hospital care, it is limited to basic life support (BLS) and advanced cardiac life support (ACLS) (James & Pennardt, 2022). Therefore, upon arrival to the emergency department, the medical staff began to assess the patient’s status and promptly place her on monitors—ECG, pulse oximeter, and blood pressure—to attain a baseline measure of her vital signs. The vital signs will allow the doctors to formulate a plan of treatment. Obtaining a patient’s history and physical (H&P) is essential for treatment, but it may be challenging in an unresponsive or altered patient. Therefore, a complete physical exam, imaging, and lab tests are vital to the choice of therapy. During a trauma situation, coordination is necessary. This coordination is essential to direct blood bank, lab, x-ray imaging, and respiratory therapy for each to conduct the appropriate procedures on the patient (James & Pennardt, 2022). Damage to the brain and other internal organs is possible in trauma situations, especially motor vehicle accidents. Vital signs may be of assistance in determining a patient’s relative health status, but it does not directly reflect a specific location on the body, or area of concern which could indicate the need for imaging and or lab
testing. During this assessment period, a nurse inserted a 20g peripheral intravenous line (IV), this small gauge catheter is necessary for any initial administration of drugs and fluid, as well as potential blood draws. Indeed, the ER lab tech drew a blood sample to crossmatch the patient for potential transfusion, and the patient was prepared for imaging.

The patient was taken to the CT scanner which revealed a grade 4 spleen laceration with hemoperitoneum, and left hemopneumothorax along with a left lung contusion. The ER physician referred the case for surgery and called the trauma surgeon. An order for an emergency splenectomy and left chest tube insertion was communicated to the charge nurse in the operating room (OR). Traumas are most often reported directly to surgery personnel via a paging system or phone call. This allows trigger the surgical trauma team members to be activated. This will also facilitate the sharing of information about the patient’s injuries. In turn, the team will prepare for the appropriate procedure(s).

Since the patient is incoherent, no consent can be granted by the patient herself. The ER physician along with the trauma surgeon will fill and sign an emergency consent form. Only then can the surgical team proceed with the surgery.

Trauma to abdominal structures may certainly be characterized by major blood loss. Consequently, the provider proceeded to insert an additional large bore IV (18g) and ensured that banked blood units were type & cross, and immediately available upon request. Once the patient arrives to the operating room, she is given induction medications and intubated via a rapid sequence induction (RSI). RSI was utilized because the patient’s NPO status was unknown. An orogastric tube is also inserted following the induction of anesthesia to ensure the emptying of the stomach contents and deflation of any distending gasses (Gent & Blackie, 2017). The surgeon proceeds to make a midline incision by which could then remove the spleen. This approach “is preferable as it affords excellent exposure, rapid access, and evaluation of other structures” (Gent & Blackie, 2017). As determined earlier, the patient’s left lung is compromised because of to the hemopneumothorax associated with lung contusion. A chest tube was placed to drain the air and fluids that have collected in the pleural space. The chest tube was placed after the completion of the splenectomy taking advantage of the general anesthetic. The procedure can be performed in the ER. However, the trauma surgeon made a small incision on the chest, spread open the skin and muscle layers, then inserted the tube. The chest tube was secured with stitches and covered by a sterile dressing. The chest tube was connected to a negative pressure drain system which “allow[s] the air or fluid to drain on its own or [we] apply suction to draw the air or fluid out” (Batra et. al, 2020). Further imaging is needed to verify how much air or fluid was drained. Following the surgical procedures, the patient more than likely will remain intubated and transferred to the intensive care unit (ICU) for close monitoring due to the increased blood loss and compromised pulmonary function.

Once in the ICU, the patient is continually monitored. The incision and surgical site are assessed for noticeable abnormalities, medication is concurrently administered as needed to sustain sedation, and to control postoperative pain. After 4 hours in the ICU, the critical care nurses continue to monitor the patient’s condition. Suddenly, dramatic changes are noted in the patient’s hemodynamics and electrophysiology. The suspicion is hypovolemic shock. A thoracic lobectomy involves the resection of thoracic tissue and potentially bone. The surgeon will use as a passage to enter the chest cavity and operate on the affected area of the lung. These procedures are expected to last approximately 3 hours. The patient is transferred to the operating room directly from the ICU with monitoring. Again, the patient remains intubated, and hand ventilated in transport.
DISCUSSION

Considering that this would be the patient’s second anesthetic with a 24-hour period, further investigation by the provider is necessary. Therefore, another assessment is necessary, the anesthesia provider will read the patient’s medical chart to evaluate the information and current conditions to prepare for the second round of this case. Certainly, the patient’s chart will include details regarding the most recent interventions and procedures from the first arrival to the hospital up-to the patient’s current condition. Since the patient’s current condition is life-threatening, rapid deliberate treatment is necessary. The use of invasive monitoring is indicated. The anesthesia technologist should communicate with the provider to review any major, patient-specific concerns and prepare to assist with the patient’s arrival back into the operating room.

Foremost, at the beginning of the day the anesthesia technologists’ team should perform a daily room check, making sure a full oxygen tank is available along with an AmbuÒ bag, patient warming devices, and a bougie in the room. The technologist will then proceed with a full machine test, following FDA protocols, to ensure there are no circuit leaks and the machine is ready for use. During this time the technologist should make sure suction is working and the non-invasive monitors are available and ready for use; per the American Society of Anesthesiologists (ASA) guidelines, this includes ECG leads, blood pressure, pulse oximeter, temperature probe, and EtCO2.

In preparation for the case, the anesthesia technologist should set up the necessary equipment that may be needed for this case. Given that the patient is scheduled for a thoracic lobectomy, a double-lumen endotracheal tube (DLT) is necessary to facilitate a collapsed lung for maximal surgical exposure. The “advantages to double-lumen tubes are relative ease of placement, the ability to ventilate one or both lungs, and the ability to suction either lung” (Butterworth et al, 2018, p. 558). Double-lumen tubes (DLTs) are available in several sizes, measured in French sizes (FR): 35, 37, 39, and 41 FR. They can be either left or right sided. There is no specific preference when choosing either a left or right-sided DLT. Either can be used “irrespective of the operative side. However, for simplicity, many practitioners prefer to use left-sided tubes for nearly every case” (Butterworth et al, 2018, p. 558). For female patients, a size 35 or 37 FR is adequate, so both sizes should be available for use. A fiberoptic scope may be used to determine the correct placement of the DLT, therefore, it will be set up along with the difficult airway cart. Given that the patient is already intubated, an airway exchange catheter may be used and should be available. Standard airway equipment should be set up such as a size 9.0cm oropharyngeal airway (OPA), 10cc, 5 cc and 3 cc syringes to assess the distal cuffs, a nasogastric or orogastric tube should also be available to empty the stomach of any gastric secretions and a video laryngoscope blade.

The use of invasive monitoring, such as an arterial line and central venous catheter, is indicated due to the major shifts that are predictable in this patient’s hemodynamics. It may also be useful to send continual arterial blood gas samples or use point of care testing to closely monitor the patient’s progress. A pressure bag with 0.9% normal saline and one or two transducers will be set up and zeroed along with sterile towels, an angiocath (Arrow arterial catheterÒ are common), a guidewire, gauze, and bio-occlusive dressing. An ultrasound probe with a sterile cover should be available for use if the provider is not able to palpate the artery. Likewise, a central venous catheter kit should be set up and available for placement to treat episodes of hypovolemia or intense blood loss. The ultrasound will be used for this procedure as well. Since the central venous line will be used for rapid fluid resuscitation, a high-flow catheter should be set-up in advance. Central venous catheters come in varied sizes; a double lumen, 9 FR multi-lumen access catheter (MAC catheter), is the most adequate to accommodate high fluid rates as high as 33,000 mL/hr.

In most cases, the patient will be transferred from the ICU into the operating unit by a transporter, accompanied by a
the catheter in place. This must be done quickly and carefully to maintain a secure airway and adequate oxygenation. The left sided DLT will then be lubricated and threaded over the catheter. The use of a Glidescope® or other video-assisted laryngoscope is ideal to provide the best view. The use of a video laryngoscope allows the provider to manipulate the oral structures and make room for the DLT as it passes through the vocal cords and into the larynx. “The tube is then rotated 90 degrees toward the bronchus that is to be intubated”—in this case the right lung—and then advanced to a depth of 27 cm (Nagelhout & Elisha, 2018, p. 633). Double-lumen tubes have a tracheal cuff and a bronchial cuff. To properly secure the DLT, the tracheal cuff requires 5-10 mL of air, and the bronchial cuff requires 1-2 mL of air.

Once placement has been established in the bronchus, “adapters are attached to the two lumens for interface with the anesthesia circuit” (Nagelhout & Elisha, 2018, p.633). “Each tube can be independently opened to the atmosphere, thereby allowing the lung on that side to collapse while ventilation to the other lung can continue” (Brodsky, n.d.).

While the provider may auscultate for bilateral breath sounds, auscultation can be unreliable. Therefore, a fiberoptic scope with lubricant, which should have been prepared by the anesthesia technologist. The fiberoptic scope will be used to confirm correct placement of the DLT. A defogging solution may be used to prepare the distal tip of the scope with the camera lens if the image is foggy or unclear.

Once the airway is secured, the anesthesia provider will proceed with the placement of the arterial line. The technologist will position the arm in a dorsiflexion position, using an arm board or rolled sterile towel under the wrist. Position may be secured using tape along the fingers and thumb. The area will then be cleaned using a Chloraprep® applicator and draped using sterile towels. The anesthesia provider will don sterile gloves and begins to palpate the artery and will inserts the catheter. The anesthesia technologist will be ready for the provider to indicate when a flash is seen on the catheter and will assist in connecting the catheter to the arterial transducer extension line. Once a waveform is seen on the monitor, the technologist may secure the catheter with a bio-occlusive dressing and tape, ensuring that a waveform is ever present. Before completion of the insertion of the arterial line it is important to release the patient’s arm from the dorsiflexion position and release the thumb to prevent any nerve damage.

The anesthesia provider will then continue with the next procedure, placement of the central venous line. Both
the provider and technologist may use surgical scrub techniques for preparation of aseptic technique and is followed by gowning and gloving. One of the most common access sites for central venous catheters is the right internal jugular (IJ) vein, chosen for its reliable anatomy, accessibility, low complication rates, and ability to employ ultrasound guidance. “Compared to the left IJ, the right IJ forms a more direct path to the superior vena cava and right atrium. It is also wider and more superficial, making it easier to cannulate” (Kolikof et al., 2022). A subclavian approach should be avoided in this case, as the possibility for pneumothorax is higher and insertion of the catheter is on the non-operative side (Nagelhout & Elisha, 2018, p. 628). The technologist will begin by cleaning the skin with a Chloraprep® applicator along the patient’s neck, extending to the ear lobe and nipple line. Once dry, sterile towels and a drape will be placed to keep the area sterile. The doctor will use the ultrasound probe to locate the IJ vein and the technologist will hand the introducer needle. A return of venous blood (dark red in color) indicates correct placement, and a guide wire will be used to guide placement of the venous access catheter. A scalpel will be used to pierce the skin along the puncture site to facilitate the insertion of the dilator and catheter over the guide wire. The dilator will be removed along with the guide wire, while the catheter remains in place. The provider will confirm placement of the catheter using the ultrasound probe and secure it using a non-absorbable suture (like silk) with a curved needle and needle driver. After suturing is done, the technologist may secure the site using a bio-occlusive dressing, and an antimicrobial patch.

The anesthesia provider will then need to treat the hypovolemic shock resulting from the left lung hemorrhage. To aid in monitoring of the patient’s fluid status and fluid management the nurse will insert a foley catheter. As monitor urine output, is an analog measurement to help guide fluid replacement therapy, and an important measurement in the treatment of hypovolemia. If the body senses the loss of at least 10% of its total blood volume, the body switches into a state of anaerobic metabolism resulting in a buildup of lactic acid to maintain adequate perfusion. However, we must note that this may result in a predictable metabolic acidosis. The remaining blood is diverted to the heart and the brain, resulting in tachycardia and an initial increase in diastolic blood pressure. As more blood is lost, the tissues that are no longer receiving oxygenated blood will start to become hypoxic and die. The central venous pressure may rapidly decrease, and the patient’s blood pressure will drop about 25% to 30%. Prompt and effective treatment is necessary to avoid multi-organ failure or death.

Primary therapies for hypovolemic shock involve rapidly identifying and treating the cause of the bleeding through volume replacement with fluids and blood products, along with vasopressor and inotropic support (Elisha et. al, 2012, p. 185). The CT scan in this case revealed the cause to be the left lung hematoma which will be treated with an inferior left lung lobectomy. Fluid replacement and blood product administration can be achieved through the central line. However, the anesthesia technologist will also have the Belmont Rapid Infuser® primed and on standby in case of increasing hemorrhage. Blood products, such as plasma, platelets, and packed RBCs are to be given at a 1:1:1 or 1:1:2 ratio which is known to provide better hemostatic outcomes compared to crystalloid-driven resuscitation (Taghavi & Askari, 2022).

Additional blood products will further help to replenish the patient’s reserve post-splenectomy. The spleen is partly responsible for controlling the amount of red blood cells, white blood cells, and platelets in the body therefore the patient will be at an even larger deficit and replacement of these products is vital. The anesthesia provider will also avoid rapidly infusing isotonic crystalloids, such as 0.9% normal saline, as that can cause hyperchloremic acidosis (Eisenhut, 2006). This could further exacerbate the patient’s acidotic state and could lead to a higher likelihood of tissue and organ ischemia. Instead, the anesthesia provider will administer colloid solutions, like albumin, as an alternative. In addition to blood products and fluid replacement, tranexamic acid, an antifibrinolytic, will be given to reduce blood loss from the unresolved hematoma. The anesthesia technologist ensures that vasopressors are in the room (i.e., dopamine, vasopressin, or norepinephrine) and inotropic agents. These drugs will increase the blood pressure and stabilize heart rate. Throughout the remainder of the case, the anesthesia provider should closely monitor patient pH levels, hematocrit and hemoglobin levels, blood urea nitrogen, and serum creatinine via frequent arterial blood gasses (ABG) to assess tissue perfusion, kidney function and electrolyte balance. Complete blood cell counts (CBC) and ABG values will guide the anesthesia provider to specific drug and fluid therapies to keep the patient as hemodynamically stable as possible. During this time the anesthesia technologist must remain flexible and focused as they will be very involved in supplying fluids, retrieving blood, running ABGs, or managing the Belmont®; whichever is needed most by the anesthesia provider.
To combat hypovolemia during the thoracotomy procedure, the anesthesia provider will utilize a permissive hypotension strategy to reduce blood loss until the lobectomy is complete. As the procedure is scheduled to last for three hours, it meets the time required to be effective and not cause damage to the patient (Ramesh et. al, 2019). Permissive hypotension is achieved by giving just enough intravenous fluids to increase systolic blood pressure but not to a normal level. In turn, this allows the vasculature to clot more quickly, further reducing bleeding. This strategy is associated with “decreased, intra-abdominal bleeding, risk of intra-abdominal hypertension, acidemia, hemodilution, thrombocytopenia, coagulopathy, apoptotic cell death, tissue injury, sepsis, volumes of crystalloid administration needed, and blood product utilization, and improved organ perfusion and survival” (Ramesh et. al, 2019).

Once the patient is intubated with the double lumen tube and all lines placed, she must be moved into a lateral decubitus position with her left side facing upward. Movement of the patient is done cautiously and with clear communication to prevent dislodging the DLT or the lines. The anesthesia technologist along with the other staff should rely on the anesthesia provider’s direction throughout the movement of the patient. Once the patient is lateral, the anesthesia technologist will pass the anesthesia provider the fiberoptic scope to verify that the double lumen tube was not dislodged in any way and ventilation remains feasible. Then, the anesthesia technologist assists with securing of the patient: Sandbags are placed at the front and back of the patient; tape or a belt wrapped around the hips will secure the patient’s body from sliding. The lower arm is fixed to an arm board at a right angle to the table. The upper arm is placed on an airplane board rotated forward and upward. An axillary roll placed just below the armpit will reduce the risk of brachial plexus injury. The legs must be cushioned with pillows at the knees and ankles, with the lower leg flexed and the upper leg extended straight. Upon completion of positioning, the anesthesia provider will proceed to the block.

Thoracotomies are often associated with vast amounts of pain, both visceral and somatic. A regional anesthetic will allow the patient to recover and become ambulatory much sooner postoperatively with reduced opioid assistance. Opioids cause respiratory depression and usage should be minimized as much as possible due to the patient’s compromised lung. An erector spinae plane (ESP) block will be administered with the patient positioned in the right lateral decubitus position. While other blocks, such as thoracic epidural analgesia, thoracic paravertebral, or serratus anterior plane, could be used to treat thoracotomy pain, they are associated with higher rates of complications and failure due to how technically challenging they are. The ESP block, first reported in 2016, is a regional anesthetic technique that recent studies have shown to provide analgesic effects lasting more than two weeks, fewer occurrences of local anesthetic systemic toxicity (LAST), and earlier ambulatory rates (Sohby et. al, 2020). The block is performed under ultrasound guidance and involves injecting 20-30 mL of local anesthetic around the erector spinae muscle at levels ranging from T5-T12. This area allows for a greater spread of the local anesthetic and wider area of pain relief, compared to an epidural block, as it is placed in an area larger than the epidural space (Sohby et al. 2020). Additionally placing the block in myofascial tissue keeps the local anesthetic away from any major vessels, pleura, or neuraxial, attributing to fewer instances of LAST (Forero et. al, 2019).

The anesthesia technologist is responsible for gathering the supplies needed for the ESP block and assisting the anesthesia provider during block placement. The supplies needed are an ultrasound, sterile probe cover, sterile gel, sterile gloves, antiseptic skin preparation, nerve block needle, and 30 mL syringe. The technologist will steriley prep the area while the anesthesia provider prepares 20 to 30 mL of 0.5% Ropivacaine. Once the anesthesia provider has donned their sterile gloves, the technologist will pass the ultrasound probe and look for common landmarks, such as the transverse processes and erector spinae muscle. Before the provider inserts the needle, the technologist will ensure to flush the nerve block needle of any air. Following that, once the provider is in a good position, the anesthesia technologist will aspirate by pulling back on the syringe, observing for any blood at the tip of the needle before pushing any medication. When injecting the local anesthetic, the technologist should hold the syringe with the plunger facing up so that any remaining air bubbles do not transfer into the patient. It is pivotal throughout the entire block placement for the technologist to utilize closed-loop communication with the anesthesia provider. Upon completion of the block, the surgeon will begin the surgery.

Prior to incision, suction must be discontinued from the chest tube and remain that way for the duration of the procedure. Once the lobe is exposed after the successful surgical visualization, the left lower lobectomy begins. The surgeon must first divide and dissect both the inferior pulmonary vein and interlobar pulmonary artery with a bipolar cautery.
device taking special caution not to nick the arterial branches of the upper lobe. Next, the left lower bronchus and lobe are divided and removed, followed by excision of the connected lymph nodes. Prior to closing, the functionality of the upper lobe must be examined either by reinflating the lung or by bronchoscopy to ensure lung compliance. Re-expansion of the lung may be achieved by reaching a peak inspiratory pressure of 30-40 cmH2O. Close observation is indicated to prevent atelectasis. In conclusion of the procedure, the surgeon will reinsert the chest tube for post-operative care.

Thoracic surgery increases airway resistance by reducing functional residual capacity (FRC). To support lung ventilation and perfusion during the maintenance period of anesthesia, medications that will least impact pulmonary function should be considered. Therefore, the anesthesia provider will discontinue the administration of propofol and will transition to a combination of ketamine, sevoflurane, and cisatracurium for the maintenance of anesthesia. The choice of a hypnotic agent will not affect pulmonary outcomes. In fact, “ketamine has direct bronchodilatory effects and antagonizes bronchoconstriction from histamine without depressing respiration”. It also maintains the hypoxic pulmonary vasoconstriction (HPV) response and supports cardiovascular stability, a key factor in a hypovolemic patient (Brodsky, n.d.). Ketamine also provides “analgesic properties that can be exploited for treatment of perioperative pain”, an important consideration for an open surgical approach (Nagelhout & Elisha, 2018, p.101). It is a good adjunct to the nerve block for intraoperative pain management. The sole use of intravenous agents may be considered for the maintenance of anesthesia – as a total IV anesthesia (TIVA) approach–because they do not inhibit HPV. However, volatile agents benefit thoracic surgery as they produce bronchodilatory effects and “allow the use of a high fraction of inspired oxygen to help prevent hypoxemia during one-lung ventilation” (Nagelhout & Elisha, 2018, p. 638). They also “decrease airway irritability in patients subjected to direct manipulation of lung tissue” (Nagelhout & Elisha, 2018, p. 638). Dr. Jonathan Maskin, of Huntington Health, suggests that sevoflurane be administered slowly and titrated carefully, using a low tidal volume at a higher rate, to support ventilation. For muscle relaxation, the provider may consider the use of cisatracurium because some muscle relaxants may cause histamine release. Cisatracurium is “completely devoid of any chemically mediated histamine release and can be used for patients with reactive airways” (Brodsky, n.d.).

While the left lung remains collapsed, the anesthesia provider employs one-lung ventilation (OVL). As the collapsed lung is no longer ventilating, perfusion still occurs causing a mixture of oxygenated blood from the right side and deoxygenated blood from the left. This admixture can cause arterial hypoxemia as the body begins to shunt blood from the right side to the left. Preventative measures include the administration of vasodilators, such as nitroprusside or nitroglycerin, to relax the smooth muscle and increase blood flow in the deflated lung (Brodsky, n.d.). The anesthesia provider must closely monitor EtCO2 intra-operatively as it is a value dependent on blood flow to the lung and serves as an indicator of hypoxemia.

In the event of hypoxemia, the first step is to confirm proper placement of the tube and ensure that it has not shifted. Secondly, the anesthesia provider will employ continuous positive airway pressure (CPAP) to the non-ventilated lung. It is discouraged that the provider uses the anesthesia gas machine to do this because the non-ventilated lung will have a different ventilation and perfusion mismatch ratio compared to the ventilated lung. Use of a separate device is associated with almost 100% efficacy in reversing hypoxemia (Elisha & Nagelhout, 2018, p. 640). Alternative treatment involves application of positive end-expiratory pressure (PEEP) that will recruit any collapsed alveoli, increase lung compliance, and increase functional residual capacity (Elisha & Nagelhout, 2018, p. 640). However, this is accomplished through intermittent reinflation of the operative lung. Therefore, the anesthesia provider and the surgeon must maintain effective communication during this specific treatment.

Additional ventilatory support is required for post-operative care. Therefore, the anesthesia provider will exchange the DLT for a standard ETT to ventilate both lungs. The anesthesia technologist will assist with the exchange of the tube via an airway exchange catheter. A video laryngoscope may be of assistance during this process. Once placement of the ETT has been achieved, the provider will begin the reversal of the neuromuscular blocking agent, cisatracurium, with neostigmine and glycopyrrolate. Neostigmine causes bradycardia and must be administered in combination with glycopyrrolate to increase heart rate. Complete reversal of neuromuscular blockage will be confirmed using a nerve stimulator. Since the patient will remain intubated during post-operative care, the anesthesia provider will continue sedation via a propofol drip. This will be administered once ketamine has been completely metabolized.
Post-operative ICU care is indicated for this patient, due to considerable risk of complications associated with hypovolemic shock and emergency lobectomy surgeries. To minimize barotrauma, low tidal volume ventilation and moderate levels of PEEP (less than 10 cmH2O) will be used (Yadav & Purwar, 2022). Additionally, to reduce the occurrence of air trapping when the lungs are unable to completely exhale deoxygenated air and overload the lungs, the patient must receive adequate tidal volume and expiratory pressures via controlled ventilation (Yadav & Purwar, 2022). For the management of postoperative pain, non-steroidal anti-inflammatory drugs (NSAIDs), such as Toradol, will be used. An advantage to the use of NSAIDs, in comparison to using opioids, is that they do not cause respiratory depression.

To encourage early ambulation and physical recovery, the patient should be weaned off ventilation as soon as the lungs are self-sufficient and perfusion appropriate. Ideally, the patient would be extubated after one to two days. Use of suction during extubation is critical in preventing postoperative pneumonia. A high flow nasal cannula can be employed in the occurrence of mild hypoxemia post-extubation (Yadav & Purwar, 2022). The patient will then work with a respiratory therapist to improve respiratory function. Chest tube output will be monitored multiple times daily and can be removed once fluid and air leaks achieve output less than 300 mL per day (Yadav & Purwar, 2022). Another key factor to consider, are the deficiencies post-splenectomy. The spleen contains infection-fighting white blood cells, putting the patient at elevated risk for developing infections quickly around the surgical site. Simple precautions must be taken to minimize the risk of infection. The patient will be kept hospitalized until she is cleared to be discharged by appropriate staff and criteria.

References


2023 Board of Directors Voting Information

The 2023 candidate statements for the ASATT Board of Directors are provided to assist you with voting. Voting is conducted online, please CLICK HERE to visit the ASATT website to proceed to the voting website. Note: You MUST hold a ASATT membership for 2023 for your vote to be valid. Log on to the ASATT website to renew your membership today!

Position Nominated For:
PRESIDENT-ELECT
(Vote to Approve)

Name: Greg Farmer, Cer.A.T.

Nominee Message:
Greeting ASATT members,

I am very appreciative of the nomination to lead you again as President, and I accept the nomination. Some of you know me and some may not. Allow me to introduce myself.

I am a proud certified anesthesia technician and have been fortunate to represent ASATT members in the past as region 5 director and ASATT President for a double term. But my work is not done.

During my previous tenure in the midst of Covid, I led the ASATT board of directors in many historic events to great success. Such as:

• ASATT first webinar
• ASATT second virtual national education conference
• ASATT new membership model which ensures the future existence of a healthy society while providing a tremendous value for members
• ASATT virtual regional education meeting schedule
• ASATT revised ethics policy to enshrine a thorough and just methodology utilizing due process and due diligence
• ASATT streamlining of procedure to better service our membership
• and much, much more.

But there is still much work to be done to better provide service and opportunities to our members, and I am not done yet.

I look forward to having the ability to represent and serve you all again.

Sincerely,
Greg Farmer Cer.A.T.
Position Nominated For:  
SECRETARY (Vote to Approve)

Name: Bryan Cobangbang

Nominee Message:  
My name is Bryan Cobangbang. I first got into the medical field starting with an internship program called Clinical Care Extender (CCE), which provided hands-on experience. Simultaneously in school, I worked for a third-party medical company providing intra-aortic balloon pump and cell savage services. Finally, a couple years down the line a good family friend introduced me to my current profession called Anesthesia Technologist, one in the medical field I have never heard of before. I was intrigued and interested, so I looked into it and applied to Pasadena City College and the rest is history. I graduated from Kaiser Permanente Anesthesia Technologist program in 2017 and am currently working as the Lead Anesthesia Technologist at UCLA Santa Monica Medical Center. My biggest achievement thus far has to be the trustworthy relationship I have built with the medical providers and surgical staff at UCLA, that they can rely on me during urgent matters. Especially, when the manager is on vacation, I am left in charge of managing six anesthesia techs, twelve operating rooms, and ten offsite rooms. Some responsibilities include but are not limited to getting setups for rapid infusers, A-line, and cell savage, as well as, events during induction such as difficult airway with video scope or the use of fiber optic.

Position Nominated For:  
REGION 1 DIRECTOR (Vote for 1)

Name: Jamie DeCaro

Nominee Message:  
My name is Jamie DeCaro, and I am the Chief Anesthesia Technologist at Boston Children’s Hospital (BCH). I have been working in the field for ten years after transferring from my role as a lead Cardiac Stress Technician at Massachusetts General Hospital. After working closely within the anesthesia care team as an entry-level Anesthesia Technician with on-the-job training, I returned to school to further my education and for career advancement opportunities. After obtaining the Anesthesia Technology degree, I became a Certified Anesthesia Technologist in 2017. The advanced skill set and knowledge acquired during the Anesthesia Technology program allowed me to apply them to cover some of our patient population's most complex and unique cases.

In 2020, I was promoted to Chief Anesthesia Technologist at BCH. Our hospital growth and large-scale renovation projects allow us to support over seventy (70) anesthetizing locations. Since 2020, the team has expanded from thirty (30) to over sixty (60) Anesthesia Technicians and Technologists. Our staffing ratios for room coverage adhere to ASATT recommended guidelines. The career ladder pathway at BCH for Anesthesia Technicians and Anesthesia Technologists is well-defined, emphasizing education and certification. A comprehensive training curriculum for Anesthesia Technicians has been established to assure consistency and clinical competency. The training and competencies are documented in the Hospital’s Educational platform.

As the Chief Anesthesia Technologist, I continue to advocate for the profession and highlight our clinical value to the anesthesia care team. I look forward to the future of additional Anesthesia Technology programs, especially needed in the Boston/New England area. If elected Regional 1 Director, I commit to continuing this work within our region and nationally.
Position Nominated For: REGION 1 DIRECTOR (Vote for 1)
Name: Jonnalee Geddis
Nominee Qualifications:
EDUCATION:
2005 - Management Skills; Lebanon College, Lebanon, NH
2005 - Critical Thinking; Lebanon College, Lebanon, NH
2000- Associates Degree in Nursing; Norwich University, Northfield, VT
1996 - Certified Anesthesia Technician; American Society of Anesthesia Technicians and Technologists
HOSPITAL OFFICES AND COMMITTEES:
2019 – present: Timekeeper for Anesthesia ; VA Medical Center
2003 – 2013: Code Box Committees; Dartmouth-Hitchcock Medical Center
2003 - 2005: Quality Assurance Committees; Dartmouth-Hitchcock Medical Center
2003 – 2005: Clinical Alarm Committee; JCAHO Standards; Dartmouth-Hitchcock Medical Center
1996 – 2003: SNAFU Committees; Anesthesia, Operating Room and Medical Errors; Dartmouth-Hitchcock Medical Center
NATIONAL OFFICES AND COMMITTEES:
2007 – Present: Region 1 Director, American Society of Anesthesia Technicians and Technologists
2005 - 2007: President, American Society of Anesthesia Technicians and Technologists
2004- 2005: President-Elect, American Society of Anesthesia Technicians and Technologists
2000 – 2004: Region 1 Director, American Society of Anesthesia Technicians and Technologists
2003 – 2007: Anesthesia Patient Safety Foundation, National Committee on Technology
CERTIFICATIONS: Anesthesia Technician; Cell Saver; Laser Operator
DEGREE: Associates Degree in Nursing from Norwich University in Northfield, Vermont
LIAISON’S AND RESPONSIBILITIES: Biomedical Engineering, Blood Bank, Point of Care Testing, Adult Intensive Care Unit, Cardiothoracic Intensive Care Unit, Pediatric Intensive Care Unit, Coronary Care Unit, Birthing Pavilion, Anesthesiology Providers, Engineering, Pharmacy, Clinical Coordinators, Inventory & Logistics and Central Sterile Reprocessing, Timekeeping for the Department of Anesthesia, between cases cleaning, sterilizing and setting everything back up for the next case, Restocking all of the Anesthesia Carts including Pyxis drugs (not controlled), Doing Inventory for Capital Equipment, Ordering for the whole Department, responsible for Quotes for Capital Equipment, the role of Administrative Assistant for the Department of Anesthesia, Adding patients to the Pyxis on a daily basis.

Position Nominated For: REGION 3 DIRECTOR (Vote for 1)
Name: Lisa Cable
Nominee Message:
My name is Lisa Marie Cable. I'm a certified Anesthesia Tech at Northeast Georgia Medical Center in Gainesville Georgia. At Northeast Georgia most days I work in one of the three heart rooms. Most recently Northeast Georgia hired two robotic heart surgeons, so I also get to enjoy working in the robotic heart room. I've also taken the preceptor class at the hospital, and enjoy training many of the new techs that come in. I've been employed at Northeast Georgia for 4 years.

My previous employment was a Duke University Hospital in Durham, North Carolina. At Duke I had to pleasure of Hosting the very first at Duke ASATT District conference in March of 2019. At Duke I worked in the heart rooms, in a neuro room, general surgery, one of my rooms was designated as a liver transplant room and our trauma room. In 2015 while working at Duke I sat for my certification exam. I started working at Duke in March of 2013 and I left Duke in July of 2019.

In August 2010 I went to Sanford Brown University in Pittsburgh Pennsylvania I studied anesthesia technology. Graduating in October of 2011. After graduation Sanford Brown help me land my first job as a cardiac monitor at the VA Hospital in Oakland Pennsylvania.

When I'm not at work I spend time with my husband of 40 years our two dogs and our cat. My hobbies are kayaking.
motorcycle riding, and reborn doll collecting. I'm a mother of four and a grandmother of 13.

I look forward to working with ASATT in the advancement of the anesthesia technician and technologist career. I hope to see more schools and I would like to see State Licensing in our states. I also hope to advance my career, recently I applied and will be interview for a lead tech position.

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Position Nominated For:  
REGION 3 DIRECTOR (Vote for 1)  
Name: Phillip Hood, Jr.  
Nominee Message:  
Hello,  
My name is Phillip Hood Jr. I am currently your Region 3 Director. I will be running again for the seat because I want to serve our techs and do the work for us to advance in our careers and raise awareness. Here are some of the things I am currently working on in this region, I have created Georgia Society of Anesthesia Technologists (GSAT). We are currently looking for members. Please let me know if you are interested in joining. I am meeting with Georgia Society of Anesthesiologist (GSA) to help raise awareness of ASATT and GSAT. This will give us the opportunity to start making the necessary changes we would like to see as certified anesthesia technicians and technologists. I will be hosting an in-person meeting in Atlanta, GA on August 19th. I will continue to work hard for this region if you vote me in to be your region director.

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Position Nominated For:  
REGION 5 DIRECTOR (Vote to Approve)  
Name: Ahmed Hamdan  
Nominee Bio:  
Ahmed is a Senior Education Specialist in Anesthesia with the Department of Education Development & Innovation at The University of Texas MD Anderson Cancer Center (UT MDACC). He graduated from Sanford Brown College Houston in 2012 with an Associates. of Applied Sciences. During the two-year program, his training included clinical rotations throughout 8 different hospital systems in the Texas Medical Center (TMC) which happens to be "the largest medical complex in the world!" This is where he gets his diverse background of expertise in anesthesia support services.

Ahmed has been a certified anesthesia technician since 2012 and has held the credential of certified anesthesia technologist for more than seven years. He has experience in education, teaching labs and didactics for anesthesia specific courses. He also has leadership experience as a supervisor of anesthesia services and educating cell saver operation. Ahmed helped launch the anesthesia services line at the West HAL location which is another Houston Area Location of UT MDACC that started same day procedures in 2019. Currently, the anesthesia education specialist holds a Bachelor of Science in Healthcare Management and is a firm believer in nonstop, continued education. Ahmed has a diversified portfolio of serving in a myriad of committees. He serves on the Development Committee for the Division of Anesthesiology, Critical Care and Pain Medicine at UT MDACC. Ahmed also serves on ASATT committees as an Item Writer on the National Certification Examination (NCE) and as the Co-Chair of the Financial Committee.

Ahmed enjoys quality time with his family. He spends his weekends going on early morning walks where he encourages his two daughters to lead the family in scavenger hunts. His hobbies involve jigsaw puzzles, building Legos and participating in sports such as ping-pong, volleyball and basketball. His passion has set him on a mission to build an anesthesia technology program to develop and advance the anesthesia tech role in direct patient care. The anesthesia education specialist is an advocate to the profession and believes that the certified anesthesia tech is vital when it comes to patient safety.

Here is what Ahmed says about the profession, "the certified anesthesia tech will have the solid knowledge and understanding of what a patient requiring anesthesia will need according to procedure to optimize and enhance patient safety in any healthcare setting. Yes, we are a support service, however, certified anesthesia techs are crucial members of the anesthesia care team. Certified anesthesia techs are in the room and behind the scenes of safe anesthetic delivery pre, intra and post operatively. Take pride in your work and know that you directly and indirectly influence the patient's outcome. We all work as a team for the safety and best outcomes for our patients."
Position Nominated For:
REGION 7 DIRECTOR (Vote for 1)

Name: Patrick Hegge

Nominee Bio:
My Adult life started in the Fire Department as a Paramedic graduating from UCLA Daniel Freeman School of Prehospital Medicine, while working as a Medic Fireman later in my career I became involved in Adult Education, which included continuing my education at Columbia in Adult Education as well as Training and Teaching Paramedics. My Educational Tenure included Teaching at Various Colleges, developing subject matter, curriculum and authoring a text and workbook on EKG Interpretation for Technicians which is widely used today.

I have spoken at Regional, National and International Conferences on a variety of topics, am a supporter of ASATT Educational programs, been a member as a AT for many years currently working in Seattle as a Tech. I was Very honored to receive the ASATT’s Region 7 Educator of the Year Award in 2020 participating and Lecturing in Virtual and teams meetings during the worst of the Pandemic. I started coordinating the Region 7 Educational Meeting in Hawaii to help the Anesthesia Technicians living in the state earn CE’s toward recertification. Remember this was when there wasn’t much CE’s available online for Anesthesia Technicians. The meeting started as a two day event so you could get all of your CE’s in one weekend. I coordinated the Region 7 Education Hawaii Meeting for 21 years before it was shut down by the pandemic. If Covid had not hit us, Region 7 would have had five meetings in 2020. Region 7 held the last live/face to face meetings on February 29, 2020, in Salem, OR. On August 9, 2020 I coordinated ASATT’s first “Zoom” teleconference to replace the Region 7 Hawaii meeting. It was ASATT’s initial successful international teleconference. The attendance was well over 200.

Since the pandemic, we have had tremendous success with teleconferencing, but I would like to see some face to face/ live meetings return to ASATT. If re-elected I will continue to help educate Anesthesia Technicians and Technologists and will try to have a few live meetings.

Aloha,
Delbert

Position Nominated For:
REGION 7 DIRECTOR (Vote for 1)

Name: Gary West

Nominee Bio:
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Happy Summertime, the fair season is upon us, so please stay safe and try not to get sunburned. The ocean waves splashing and the sight of little ones playing in the pools, all of it is so enlightening. Put your windows down in your car and let the summer breeze set your hair into a tizzy. I love it all so much. Going for walks and just taking in the beautiful New England air.

ASATT has a lot of great things to report. First is the Q1 Webinar that was held on Saturday March 27th, Region 6 Director (Otoniel Castillo) was a huge success. We had over 500 attendees. Thank you to all that attended. It was very rewarding and even the two speakers that I had asked to speak were shocked that we had so many attendees. They were so tickled with the success that we had. The next Webinar is scheduled to be on Saturday, June 24th.

If you live in New Jersey, and you do not mind sharing some information with an individual who is doing some research regarding hourly pay and where you live in New Jersey. If you do not mind sharing just email me the information and I can forward it to her. Thank you in advance for your time and willingness to share.

The registration for our national meeting being held in Pasadena, California is now open, so get onto the website and get the early bird special. You will also see the dates and any updates will be posted onto the Website. We will be having so much fun. Cannot wait to see you all. Stay safe and healthy, wear your masks by setting an example of what is best for all of us.

Respectfully Submitted and Happy Summer,
Jonnalee Geddis, Cer.A.T.
Remember to visit our ASATT website; it has very useful information and updates about our zoom meetings and articles on healthcare news. It also has a discussion panel where you can ask questions and share your ideas.

This year up for re-election for regional directors will be 1, 3, and 5, let’s think about getting more involved as a member. One of the biggest things I always hear when talking to members is how you can be more involved well voting is a great way to get started. Other great ways you can be more involved is join a committees and help better our profession.

Save the Date: Our National Conference will now be held in Pasadena! The conference dates are 10/17-10/21 at the Hilton. More updates will post shortly on the ASATT website. I hope you can join us and I look forward to seeing everyone in person.

Please everyone stay Safe and Healthy!
Karen Patrick, Cer.A.T.

Here are some of the things I am currently working on in this region, I have created Georgia Society of Anesthesia Technologists (GSAT). We are currently looking for members. Please let me know if you are interested in joining. I am meeting with Georgia Society of Anesthesiologist (GSA) to help raise awareness of ASATT and GSAT. This will give us the opportunity to start making the necessary changes we would like to see as certified anesthesia technicians and technologists. I will be hosting an in-person meeting in Atlanta, GA on August 19th. I encourage all member to attend, especially Region 3.

Respectfully yours,
Phillip Hood, Jr., Cer.A.T.

Share. Inquire. Learn.
I’m going to start this off exactly the same as last quarter because I still feel pretty naive to the inner workings of ASATT...

I’m new to the ASATT Board of Directors as Director of Region 4 this year and I’m excited to learn as I go and connect with all of you working in the profession not only in our region but across the country. I’m amazed at how much is going on to promote recognition and standardization of the education and certification in our profession! There’s always something exciting going on within ASATT!

As always I’m open to emails from any of you with questions, comments, or concerns. My hope is to offer support to those in or interested in this profession while growing recognition of our certification from health systems and other anesthesia professional organizing bodies. I also hope to connect and help compile data regarding what being an anesthesia technologist is like for you!

Well, we’ve certainly had some interesting weather, dryness, and air quality that we are not accustomed to here in the midwest. At least not for me in rural central Wisconsin! Gardening season is in full swing for me! We are done with our maple syrup collection and cooking and the honey bees are producing like crazy so we have a constant supply of mother nature’s sugars around here. In our house, we’ve already started making jams and jellies and are on to weeding and watering while we wait for the veggies and the rest of the berries to ripen! We’ve been hitting the lakes for some fishing and fun and have a nice long backcountry canoe trip planned for Canada coming up soon! I hope you are enjoying a nice summer as chill or hectic as you like!

Here are the upcoming events-

• First, the big one! The ASATT National Education Conference Re:Evolution from October 19-21, 2023, in Pasadena, California. This is a great opportunity for networking and gaining CEUs. There will be flexible tracks and customizable educational experiences so you can get the most out of the conference. Stay tuned for more information and registration for this event.

• December 16th- webinar hosted by region 7 director

If you haven’t heard yet, the Practical Experience Pathway went live on February 1, 2023. I will link the guidelines here.


If you are hoping to gain certification but are unable to attend a program, with the appropriate work history and education requirements, this is the pathway for you.

Sincerely,

Samantha Groshek, Cer. A.T.T.
I hope you have had a wonderful spring and are ready for summer. ASATT and I would like to honor military members and their families. For those who made the ultimate sacrifice in service of our country, and the Gold Star families who have borne the unimaginable brunt of that sacrifice. We thank you. We also recognize those who have served and thank them for their service.

As we begin the busy summer season, please remember that nominations are open for various ASATT Board of Director’s positions. We need as many of you to participate in the voting process. It is a representative process. To keep with the topic of ASATT activities, we also want to call you attention to the upcoming ASATT National Educational Conference will be held in Pasadena, CA during October 19th-21st. The conference is being held within region 6 territory, and we would love for all Region 6 members to join us. Please take part in this opportunity to gain continuing education credits. Many local anesthesia professionals will be speaking at the conference. I would also like to inform you that we are planning a face-to-face meeting sometime in July or August for ASATT members. The location will forthcoming.

If you have a member of anesthesia care team that is thinking of becoming certified and has five (5) or more year of on-the-job experience and meets other criterion found on the Practical Pathway Web portal, please refer them to this URL https://asatt.org/index.php/cerat-ceratt/practical-experience-pathway you can click on it or copy and paste it into your browser. Also please use the ASATT website to access other educational opportunities. You have access to the Sensor quizzes and do not forget about your BLS and ACLS as useable credits for your recertification.

I want to leave you with a quote from General George Patton Commander of the 7th United States Army in the Mediterranean Theater of World War II. He said, “Do More Than Is Required of You.” Doing the minimum amount of work did not cut it for General Patton. He wanted his men to think about what more they could do for the greater good of the unit, instead of only thinking about themselves. It is an interesting thought. What do you think?

Enjoy your summer. Be well and enjoy your vacations, holidays, or simple long weekends with friends and family.

Be well.
Otoniel Castillo, BA, Cer.A.T.

Howzit Everyone!!!

Summer is here and the Major League baseball season is in full swing. I love it!!! When I get home from work just about every day, I sit, relax, and watch highlights of the day on the MLB app. I have spent so much of my life around baseball, having played or coached for over 50 years. It’s in my blood.

“Life is like a roller coaster, Live it, Be happy, Enjoy life.”
~ Avril Lavigne ~

Unfortunately, many of you are still experiencing severe weather. Our jobs at times will put us in harm’s way because when there is a disaster we need to head to work. Please do your utmost to stay safe.

The 2023 ASATT Annual Educational Meeting will be held on October 19th -21st, at the Pasadena Hilton in Pasadena, CA. This will be the second time that the meeting will be held at this venue. It’s a great place to have the meeting that’s within walking distance to many fine places to dine and establishments to have cold drinks at the end of the day. Pasadena is not very far from Hollywood and other fun places to visit. Please start making plans to attend the meeting. President Bryan Fulton is hard at work coordinating a great meeting for continuing education. I had family priorities so I could not attend the Annual Meeting in Fort Worth, Texas last year. So, I’m really looking for seeing old friends/peers that I haven’t seen since the meeting in
Orlando. But, I’m also looking forward to meeting new peers and making new friends. As I have said before education is a critical aspect of everyone providing patient care. It’s the reason we can improve our patient care skills. Last, I look forward to sitting with and communicating with our board of directors instead of on our computer skills and iPads.

Region7 it’s not too far away so let’s attend in record numbers...

“There are friends in life, and there friends for life.”

~ Unknown ~

2023 is an election year for the Region 7 Director. The nomination period has ended and elections will be up on the website shortly. Please ensure that you cast your ballot when elections begin. Thank you very much

This is repeated message because we have a competing society. ASATT is the society that is established and recognized by other professional societies and continues to help our profession grow and move forward into the future.

I know ASATT’s plan DOES NOT make everyone happy, but you must look at the overall direction that our profession is headed. Many of you have not been around as long as I have... I remember the days before we even had the National Certification. This has been a long hard journey to get to where we are now, there are no short cuts. Things haven’t always been smooth sailing and we are still headed through rough seas ahead. There is no easy way to get to where we want to go. There will be some extremely hard decisions to be made and they are making these decisions with careful consideration to improve our profession. There’s only a small percentage of our peers that have been in this profession >30 years like I have. As I have said before... We are laying the foundation for future generations of Anesthesia Technicians & Technologist and we MUST continue to grow and build this together.

PLEASE BE SAFE AND PROTECT YOURSELVES, and TAKE CARE...

Aloha,

Delbert Macanas, Sr., Cer.A.T.T
Write an article for The Sensor

Interested in writing an article for the Sensor? It’s a wonderful opportunity for you to gain national recognition and earn CEUs!

To support you, the Editorial Board will be available to answer questions and provide guidance: proofing grammar, reference documentation, etc.

Click here for details outlined on the ASATT website.

DID YOU KNOW?

You can now earn up to 5 CEUs per year for contributing SENSOR articles!
Keep an eye out for an email with more information.
2023 SPONSORS!

Looking to Volunteer on a Committee?

Join one of our ASATT Committees by visiting our Committee page.

- Bylaws Committee
- Code of Conduct and Ethics Committee
- Financial Committee
- Nominations Committee

- Strategic Planning Committee
- Item Writers
- Accreditation Committee
- Continuing Education Committee

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