

Application for 2025 AVTAA Examination

TABLE OF CONTENTS

General Instructions	3
PRE-APPLICATION Requirements and instructions	4-5
Professional History and Experience	6 - 9
License and Letter of Good Standing	10
Name Change, Letter of Agreement and Application fee	11
COMPLETE APPLICATION Requirements	12
Application Waiver, Release and Indemnity Agreement and Plagiarism Affidavit	13
Letters of Recommendation	13
Statement of Purpose	14
Continuing Education Requirements	14-15
Continuing Education Definitions	16-18
Skills Verification	19
Employment Location	20
Case Log Instructions	21-23
Advanced Anesthesia Skills Instructions	24-25
Case Report Instructions	26-27
Anesthesia Record Instructions	28
Case Report Layout	29
FINAL INSTRUCTIONS	30-32
Appeals	33
SUBMISSION CHECKLIST	34
WeTransfer Instructions for Pre-Application and Complete Application Submission	35
AVTAA Definition of Anesthesia (Addendum A)	36
ASA Ratings (Addendum B)	37
Profession History and Work Experience Example (Addendum C)	38-40
CE form Example (Addendum D)	41
Case log Example (Addendum E)	42
Skills List Example (Addendum F)	43
Case Report Example (Addendum G)	44-48
Anesthesia Record Example (Addendum H)	49

GENERAL INSTRUCTIONS

The Academy of Veterinary Technicians in Anesthesia and Analgesia (AVTAA) appreciates your interest in becoming a Veterinary Technician Specialist in Anesthesia and Analgesia or VTS (Anesthesia & Analgesia). The AVTAA's goal in certifying credentialed veterinary technicians/veterinary nurses is to assure the veterinary profession and the public that an AVTAA certified technician/nurse possesses the knowledge, skills and experience needed to practice anesthesia at an advanced level of competency. The academy requirements are rigorous and require the applicant to not only have a solid foundation of advanced clinical knowledge and skill but also a comprehensive understanding of concepts that can be properly described in written format. The process is intended to assure the public and the profession that technicians/nurses certified by AVTAA have demonstrated a high degree of competency in veterinary anesthesia and peri-operative analgesia.

The AVTAA application has **two** parts. First, you must receive approval on the pre-application packet. The pre-application evaluates work history and credential status. The deadline for the pre-application is May 31 2024; 11:59:59 pm Eastern Time. The total application fee is \$60.00 and must be paid in full as part of the pre-application process.

If approval of the pre-application packet is granted you then will be eligible to submit a complete application packet at the end of the year. The deadline for the complete application packet is **December 31 2024**; 11:59:59 pm Eastern Time.

Download the blank PDF forms from the website using **ONLY ADOBE READER**. Other download programs may not format the forms properly. Only use forms and follow instructions for the **CURRENT** application; previous year's application forms and instructions are no longer valid and will not be accepted. **DO NOT** alter the formatting or settings of **ANY** form; doing so may result in rejection of that form.

All dates entered on forms should follow **month/day/year** format. Include only the information requested. Extraneous documents will not be accepted and may result in your application being rejected. This is a professional application and all efforts should be made by the applicant to ensure it is an example of their highest quality of work.

WARNING to MAC users: MAC computers do not handle .pdf documents very well. If using a MAC, verify ALL fields are present and filled in correctly before sending documents for the pre-application or complete application. Compare the MAC document to the example forms located in the application instruction packet.

Questions about the AVTAA application process can be sent to the AVTAA Executive Secretary, avtaa.vts.executivesecretary@gmail.com. Emails are answered as soon as possible but please be aware that it can take up to 5 business days for a response depending on email volume. If you do not receive a response within 10 days it may mean that the email was not received so please email again.

Disclaimer: AVTAA supports and promotes professional honesty and personal integrity during the application process to become certified as a VTS (Anesthesia & Analgesia). Any form of professional dishonesty, including plagiarism, will not be tolerated. Any application found to have evidence of plagiarism or guilty of providing dishonest information will be automatically rejected. See plagiarism affidavit for more information. Statements made by candidate in public forums such as social media that contradict information provided on the application can and will be taken into account by the credentials committee. All acts of professional dishonesty will be reported to NAVTA-CVTS.

AVTAA does not support use of the title Veterinary Nurse for any credentialed veterinary technician residing in the United States or Canada. Veterinary Nurse refers only to international applicants who are legally given that title.

2025 Pre-Application Requirements

The following documents are required for the pre-application and are due no later than 11:59:59 pm Eastern Time, May 31 2024:

- 1. Professional History and Experience
- 2. Current license to practice as a veterinary technician or veterinary nurse (scanned copy)
- 3. Proof of original date of credentialing if not indicated on current license
 - a. See instruction below if state does not issue a paper license
- 4. Letter of good standing from veterinary medical board or regulatory body
- 5. Scanned copy of diploma (ONLY if requested)
- 6. Scanned copy of legal documentation of name change (only if more than one last name is used on any documents)
- 7. Scanned copy (after signatures) of Letter of Agreement
- 8. PayPal receipt indicating \$60.00 application fee has been paid (DATE and applicant NAME must be present on receipt)

Please read and follow the directions for each of these documents in the application instruction packet

Approval of the pre-application documents is required by the credentials committee for the applicant to be eligible to submit a complete application packet in December 2024. Failure to receive approval on the pre-application documents will result in immediate rejection of a complete application packet submitted in December 2024.

The pre-application committee will be verifying work experience hours and confirming credential status in order to grant approval of these forms. **NOTE**: All employment history listed on the form MUST have a contact name and **work email** for the person who can verify work experience hours. It is the applicant's responsibility to ensure the name and email address is correct. Each employer (present and past) will be contacted via email for verification of hours claimed on form. The employer will be asked to respond within 10 days from the date indicated in the email. **It is the applicant's responsibility to ensure ALL past and current employers respond to this email within the 10-day period.** Approval will NOT be granted until all employment hours can be verified.

NOTE: **International applicants** are encouraged to submit the pre-application packet early as extra time may be needed to verify credential status as a veterinary nurse/technician in countries outside the USA. All non-English documents must be translated into American or British English before submitting. A brief letter from the translator may be required to verify authenticity of translated documents.

The pre-application committee will contact the applicant via email within 7-10 business days of submission of these documents. A detailed report will be provided if any documents are rejected. If documents are missing or the professional history and experience form is filled out incorrectly the applicant can correct the issues and resubmit the forms at no additional cost as long as it is before the May 31 deadline. A rejection due to not enough work experience hours or inability to provide all required documentation is FINAL and additional submissions will not be reviewed.

Approval must be granted before the 11:59:59 pm Eastern Time May 31st 2024 deadline.

Therefore, it is recommended that these forms be submitted well before the 11:59:59 pm Eastern Time May 31st deadline. If these forms are submitted at 11:59:59 pm Eastern Time, May 31st and rejected then the applicant will **not** be able to submit new forms and will **not** be eligible to submit a complete application in December.

All pre-application documents should be **compressed into a single zipped folder**, titled yourfirstname.lastname.applicant2025.zip (e.g.betty.smith.applicant2025.zip) and submitted via WeTransfer, https://wetransfer.com/. Use the email avtaa.vts.preapp@gmail.com to submit the pre-application documents and submit before the 11:59:59 pm Eastern Time May 31, 2024 deadline. Individual files will NOT be accepted for the pre-application. Complete instructions for using WeTransfer can be found on page 35 of this packet or on the AVTAA website under the application tab.

The approval email for the pre-application will contain a **specific applicant number**. This applicant number **MUST** be used on all documents contained in Folder 2 of the complete application. The applicant number should be kept confidential to help maintain integrity of the blinding process. The applicant number will also be used for the examination so it must be remembered throughout the entire AVTAA process.

AVTAA Mentorship

AVTAA mentors are available to assist an applicant with putting together the complete application. Information on how to request a mentor will be provided in the pre-application approval email. Mentors are only available to applicants who successfully complete the pre-application process. Obtaining an AVTAA mentor is entirely voluntary and NOT a requirement for submitting the complete application in December.

AVTAA Pre-Application Documents

Professional History and Experience

You are eligible to apply to the AVTAA after you have completed a minimum of 8000 hours AND a minimum of 4 years of work experience as a **credentialed** veterinary technician/veterinary nurse. During that time, you must have provided a minimum of 6000 hours (75% of 8000) of anesthesia care as described in the AVTAA definition of anesthesia. For this eligibility requirement, the definition of anesthesia care as established by the Academy of Veterinary Technicians in Anesthesia and Analgesia will be used (See Definition of Anesthesia Addendum). All work experience MUST be completed by **June 1**st of the year you plan to submit a completed application.

Only list your experience working in a clinical setting as a **credentialed** veterinary technician in the **five years prior** to the application submission date. **Work experience prior to June 1**st **2019 will not be accepted.** A *credentialed technician* is a person who holds an active license to practice as a veterinary technician in some state or province. In the USA, this requires passing both the VTNE (excluding CA prior to 2014) and state examination (if applicable) where the active license is obtained.

International applicants must meet specific requirements set forth by their country. Please contact AVTAA to find out specific information about credentialing if your country is not listed.

Australia: must submit a copy of the Certificate IV in veterinary nursing or a Bachelor of Applied Science in Veterinary Technology. Currently, a diploma in veterinary nursing is not required.

Canada: must be credentialed to work as a veterinary technician in your province. This requires that you pass the VTNE and hold an active license to practice.

United Kingdom (UK): must submit a copy of the RCVS certificate. Candidates must hold a license to practice as an RVN and be in good standings with the RCVS. Currently, the RCVS diploma is not required.

List your name and contact information at the top of this form. Provide a **personal email** as the primary contact to ensure that you receive all communication from AVTAA emails. If any documents indicate a different last name, then BOTH names must be indicated on this form. Indicate birth name in parenthesis after your full name. For example, birth name is Sarah Smith; married name is Conrad \rightarrow Sarah Conrad (Smith).

Be sure to fill out all sections of the form or it will be rejected. Designate which group of patients (large animal or small animal) constitutes most of your experience (> 50% of your work experience). For the purpose of this application the AVTAA will include canine, feline, lagomorphs, avian, reptiles, primates, small exotic pets and small lab animals as "small animal patients". "Large animal patients" will include equine, bovine, swine, ovine, caprine, camelids (camel, llama, alpaca) and wildlife such as deer, bear, reindeer, exotic large cats,

elephants, etc. This selection will help determine which species make up the most of your case logs and case reports, which skills list you submit and which exam you take once your application is accepted. **NOTE:** You will NOT be allowed to switch animal groups after your pre-application packet is approved.

If you are a graduate of an AVMA accredited veterinary technician program, please indicate your graduation date **and school of record**. A scanned copy of your diploma may be requested if there are questions regarding your schooling, but it is NOT required to submit with the pre-application documents.

AVTAA strongly encourages you to become a NAVTA member and support your national veterinary technician association. However, NAVTA membership is NOT required to apply to the AVTAA.

Provide the date you passed the **VTNE** along with the license number and state(s) that you hold an active license to practice as a veterinary technician/nurse. Indicate the original date of credentialing that your license was obtained in each state/province. The **original date of credentialing** pertains to the date you received your license AFTER meeting state requirements. The VTNE pass date and the original date of credentialing may NOT be the same date if you obtained your license in a state that has a state exam before they issue a license to practice as a veterinary technician!

If your license has lapsed or been inactive at any time between June 1st 2019 and June 1st 2024, please indicate the reason why on the form. Work experience will NOT be counted during periods of an inactive license. Failure to disclose inactive status may result in rejection of the pre-application.

If you hold another VTS title you must declare the year that it was obtained on the professional history and experience form. You are **NOT** eligible to apply to the AVTAA if it has been less than 3 years since obtaining another VTS title. Applying to more than one academy at the same time is also prohibited.

If you have submitted a pre-application or complete application to the AVTAA in the past please indicate the year you submitted these documents. This information is for record keeping purposes only.

List your employment history for your **primary job(s)** in the first 5 boxes. Employment history will only be counted from the actual facility in which you receive a paycheck. If you work for a corporate hospital, you may not earn work experience hours at a different hospital within the corporation unless legally employed at that location. Volunteer hours are NOT accepted.

Each box designates your work experience for a ONE-year period between the dates listed below.

Indicate the month/day/year for each entry.

Primary Box 1	start date:	6/1/2019	end date:	6/1/2020
Primary Box 2	start date:	6/1/2020	end date:	6/1/2021
Primary Box 3	start date:	6/1/2021	end date:	6/1/2022
Primary Box 4	start date:	6/1/2022	end date:	6/1/2023
Primary Box 5	start date:	6/1/2023	end date:	6/1/2024

If you worked the entire year at the same practice, then the start and end dates should match the dates indicated at the top of each box. If you have worked multiple years at the same practice, then record the same practice information for each box and put the start and end dates as indicated. For example, if you have worked at the same practice from June 1 2019 till June 1 2024, then primary boxes 1-5 would all contain the same employment information with each ONE-year period of time indicated for the start and end dates.

If you only worked a few months during that year period, then use the start and end dates to indicate the appropriate time. Use the supplemental boxes on the second page to indicate a change of employment for a primary position mid-year (between June to June). For example, if you worked a primary job on June 1 2019 but changed jobs on Jan 4 2020 it would be recorded as follows:

 Primary Box 1
 start date:
 6/1/2019
 end date:
 1/4/2020

 Supplemental Box 1
 start date:
 1/5/2020
 end date:
 6/1/2020

The **supplemental box 1 would indicate the new job information. If you continued to work this new position during the dates indicated for primary box 2 (first page) you would record the practice information for this this new job in primary box 2 and ensure that the work experience is within the year timeframe indicated at the top.

In primary box 5, the end date will be June 1 2024 if you will be currently employed at this location past the 11:59:59pm ET, May 31 2024 deadline. If your pre-application documents are approved early (recommended) and employment indicated in primary box 5 is terminated before June 1 2024 then it is **your responsibility** to inform AVTAA of the change in employment status. Failure to do so will revoke your eligibility to submit a complete application in December.

Provide the name of the practice and indicate the practice type in each box (e.g. university teaching hospital, specialty/referral, general practice, research, emergency only). Provide the name and **work email** of your supervisor or practice manager that can provide verification of employment. Email will be used to contact the person you indicated for each job listed on the form. Please ensure this information is correct to avoid delays.

AVTAA reserves the right to ask for verification of all hours claimed on this form. Additional documentation to support time spent performing anesthesia case management may be required before anesthesia specific hours are counted.

During the time period indicated in each box, determine how many **regular hours** you worked on average per **DAY** (e.g. 8hr/day, 10hr/day, etc.); the number of days worked per week and the number of weeks worked per year (not to exceed 50 weeks/yr). Hours worked per year are determined by the following equation (hours/day x days/week x weeks/year.) We will accept up to 2000hr/yr (40hrs/wk x 50wk/yr) of regular work experience for a **primary job**.

Read the AVTAA definition of anesthesia care and determine the average **hours** of time per **day** spent providing primary anesthesia care and case management. For example, if on average, you work 8 hours per day

and spend at least 6 hours of time each day performing anesthesia then you would indicate 6 hours on the form. In addition, indicate how many days per week you perform anesthesia. We do not accept 100% of time performing anesthesia regardless of type of employment. This is an unrealistic percentage when looking at average work experience over a years' time frame.

Note: Do NOT factor in on-call hours or overtime hours as these hours are often sporadic and difficult to calculate into an average calculation. However, cases performed during on-call or overtime hours between January 1 2024 and December 31 2024 may be used for the case logs, skills and case reports.

If you worked a **secondary position** in addition to a primary position during the last 5 years, use the boxes on the second page of this form to indicate this work experience. Include the start and end dates for a secondary position in ONE box even if it is longer than one years' time. Fill in the regular hours and hours spent providing anesthesia in the same fashion as the primary boxes.

Before submitting the history and experience form ensure all information for hours worked is accurate to the best of your knowledge. Any change in hours AFTER the initial pre-application submission will require further documentation to explain the change in hour status.

Save the Professional History and Experience form as **yourfirstname.lastname.history**. The document should be saved as a .pdf or .doc(x). Example: betty.smith.history.pdf

An **example** of a completed professional history and experience form is attached as an addendum.

History Addendum

If any personal information changes on the Professional History and Experience Form (e.g. name change, address change, employment status) after June 1st 2024, then you **MUST** contact AVTAA with the changes in order for them to be reflected on the complete application submitted in December. This is especially important if you changed jobs after June 1st and want to use cases on your application from your new job. If that new job is not indicated on a history addendum form and approved by AVTAA, then NONE of those cases will qualify as acceptable for the complete application.

Update the history form with the new information. If you have changed jobs then use the history addendum box on the last page of the form to provide your new work information. Hours claimed in the history addendum box will require employment verification before approval.

Save this document as **yourfirstname.lastname.addendumhx**. The document should be saved as a .pdf or .doc(x). Example: betty.smith.addendumhx.pdf

Send the history addendum form via email to the AVTAA executive secretary, avtaa.vts.executivesecretary@gmail.com. The form will be reviewed and approval will be granted once all information provided is verified.

AVTAA Pre-Application Documents

License

Applicant must be credentialed and hold an **active** license to practice as a veterinary technician (United States, Canada, etc.) or veterinary nurse (UK, Australia, etc.) for **ALL** years of work experience indicated on the Professional History and Experience Form. Graduation from an AVMA accredited veterinary technician program is strongly encouraged but not a requirement to apply.

Include a **scanned copy** of your **current** in-date license for the pre-application. If your state does not issue a paper license but has a voluntary credential process, then this should be stated in the letter of good standing. If your current license expires before December 31 2024, you **MUST** submit a current in-date license with the complete application. **Failure to do so may result in an automatic rejection of the complete application.**Save your license as **yourfirstname.lastname.license**. This document can be saved as .jpg, .doc(x), or .pdf. Canceled checks and other documents will not be accepted as proof of license. If submitting an updated license with the complete application the file should be named the same as above and placed in folder 1.

In locations that have non-regulated jurisdictions without voluntary credentialing for veterinary technicians (e.g. District of Columbia and U.S. Virgin Islands) then, at minimum, you must be a graduate of an AVMA approved Veterinary Technology program AND pass the VTNE in some state. **Exemption:** Those who passed the VTNE prior to 2014 and live in a non-regulated jurisdiction without voluntary credentialing are exempt from having to be a graduate from an AVMA approved Veterinary Technology program. In these cases, the pass date of the VTNE will serve as the original date of credentialing. **Proof of passing the VTNE** (e.g. original acceptance letter) may be required if no other licensing proof is available. AAVSB will NOT provide documentation of passing the VTNE. Please do NOT contact them to ask.

Letter of Good Standing

A letter of good standing from the veterinary medical board or regulating body must be submitted as proof of credentialing. The letter MUST be on letterhead and, at minimum, contain the original date of credentialing and declaration of any lapse or suspension in license. Additional requested information includes last renewal date and expiration date of current license. The information contained on a standardized letter from a veterinary medical board will be accepted. The letter does not need to be in a sealed envelope. Only ONE license verification is required if you hold multiple licenses in different states at the same time between June 1 2019 and June 1 2024. However, if you moved to a different state(s) during this 5-year period and let the old license lapse then a letter will be required from both the old and new state to verify an active license for all work experience.

Allow 2-4 weeks turnaround time to obtain this letter. This letter can be part of the pre-application documents submitted by the applicant or it can be emailed directly to AVTAA. If submitted with the pre-application then

save it as **yourfirstname.yourlastname.standing**. This document can be saved as .pdf or .doc(x). If the veterinary medical board or regulatory body wishes to directly email the letter then it can be sent avtaa.vts.preapp@gmail.com. Please ask them to include your name in the subject line. Contact the AVTAA executive secretary at avtaa.vts.executivesecretary@gmail.com for a physical address, if required, to send the letter.

A letter of good standing is required for international applicants only if a regulating body exists. International applicants from Canada and the United Kingdom are required to submit a letter of good standing. Currently, applicants in Australia and New Zealand are exempt from this requirement.

Legal Documentation for Name Change

If your last name is different on any document submitted for the pre-application then please submit a scanned copy of a legal document to verify this name change. Examples include marriage certificate, divorce certificate, legal name change form from state, etc. Save this file as **yourfirstname.lastname.legal**. This document can be saved as .jpg, .doc(x) or .pdf.

Letter of Agreement

AVTAA requires an applicant to work with a veterinary diplomat-board certified doctor (preferably an anesthesiologist, surgeon or criticalist), board eligible doctor (completed a three year residency but has not passed the certifying examination) or VTS (preferably anesthesia, surgery or ECC) during the year of case collection for the application. The letter of agreement is saved as a PDF on the AVTAA website under the application tab. Please present this letter to the diplomat doctor, board eligible doctor or VTS who will be assisting you through the process. This letter **must** be signed and dated by the selected individual and applicant as proof that the letter was read. Scan this letter after it is signed and dated by both parties and save as **vourfirstname.lastname.agreement**. This document can be saved as .doc(x) or .pdf.

AVTAA Application Fee

The total application fee is \$60.00 and must be paid in full as part of the pre-application process. Proof of payment (via PayPal receipt) is required for the pre-application documents to be processed. The date MUST be located on the PayPal receipt.

NOTE: If someone other than the applicant will be paying the application fee, then the applicant's name MUST be indicated on the PayPal receipt.

Pay the \$60.00 Application Fee through PayPal on the AVTAA website.

There is NO refund of the application fee if the pre-application is rejected.

https://www.avtaa-vts.org/application-fees.pml

2025 Complete Application Requirements

The following documents are required for the complete application and are due by 11:59:59 pm Eastern Time, December 31 2024.

The complete application is divided into Folder 1 and Folder 2. Extreme attention to detail must be taken to ensure the proper documents are put in the correct folder. ALL documents must be labeled appropriately.

FOLDER 1

Folder 1 will be unblinded and contain all the documents that identify the applicant and their place of employment.

Documents contained in Folder 1 include:

- Application Waiver, Release and Indemnity Agreement
- Plagiarism Affidavit
- Letters of Recommendation
- Statement of Purpose
- Current License (ONLY if expires before December 31)
- Anesthesia or peri-operative analgesia CE hours with proof of attendance
- Skills verification form

Folder 1 saved as yourfirstname.yourlastname.AVTAA2025.zip

FOLDER 2

Folder 2 will be blinded so that no information about the applicant's name or place of employment will be disclosed to the credential committee reviewers. A **specific applicant number** will be emailed with the approval of the pre-application. This applicant number **MUST** be used when naming all documents contained in Folder 2.

Documents contained in Folder 2 include:

- Employment Location Form
- Case logs
- Skills List (SA or LA)
- Case Reports
- Anesthesia Records

Folder 2 saved as yourapplicant#.AVTAA2025.zip

Each folder MUST contain the appropriate documents and then be individually compressed into a zipped folder. Both zipped folders for the complete application should be uploaded together using WeTransfer, https://wetransfer.com/. Use the email avtaa.vts.credential@gmail.com to send the complete application folders through WeTransfer. **BE AWARE:** The email to submit the complete application folders is different from the pre-application submission email!

Individual documents submitted for the complete application will NOT be accepted. Complete application documents submitted are FINAL; once you submit the zipped file an individual form cannot be exchanged for an updated form unless requested by AVTAA. Please ensure that you are submitting the correct and final copy (e.g. form filled out completely, all pages scanned, no track changes, correct format, etc.) of all the documents in each zipped folder.

2025 Complete Application – Folder 1 Requirements

Application Waiver, Release and Indemnity Agreement

The PDF of this form can be found as an individual document located here: https://www.avtaa-vts.org/application-forms.pml. This form must be signed and included in your application submission. Failure to sign and include this form may cause your application to be rejected. After signing the form, it should be scanned and saved as a pdf file. Save the document as yourfirstname.lastname.waiver. Example: betty.smith.waiver.pdf. Save this document in Folder 1.

Plagiarism Affidavit

This affidavit is located here: https://www.avtaa-vts.org/application-forms.pml. This form must be signed and included in your application submission. After signing the form, it should be scanned and saved as a pdf file. Save the document as your firstname.lastname.affidavit. Example: betty.smith.affidavit.pdf. Save this document in Folder 1.

Letters of Recommendation

You must obtain **two letters** of recommendation from people who can attest to your advanced knowledge and skills in veterinary anesthesia and peri-operative analgesia. One letter must be from a **diplomat** of an American or European Veterinary College, Fellow from Australia or New Zealand or a technician that holds a VTS credential from any academy. The second letter can be from your supervising veterinarian, direct supervisor, a different diplomat DVM, resident in training (anesthesia, surgery, ECC), or another technician who holds the VTS credential. Due to perceived conflict of interest, family members and spouses should NOT write a letter of recommendation for the applicant.

The letters should include details on training, ethical behavior and quality of anesthesia knowledge and skills. ALL letters of recommendation MUST be signed by the letter writer.

If the letter writer chooses, they may submit their letter of recommendation directly to the AVTAA by sending it to avtaa.vts.credential@gmail.com. The letter should be hand signed and scanned or have a digital signature. Save the letter as a .doc(x) or .pdf files. Subject line should say "LOR for {name of person} AVTAA Application."

If the applicant submits the letters of recommendation then they should be saved as **yourfirstname.lastname.letter1**, **yourfirstname.lastname.letter2**. These files can be saved as .doc(x) or .pdf files. These letters must be hand signed and scanned. A digital signature will NOT be accepted. **Save these documents in Folder 1.**

Statement of Purpose

Provide a brief letter that describes who you are; why you are interested in becoming an AVTAA member; what you feel you can contribute to AVTAA and what you plan to do with the certification once you have achieved it. Letters should be a **maximum** of ONE page in length, single spaced, with 12pt, Times New Roman font and 1-inch margins.

The statement of purpose serves the same function that a cover letter would if you were applying for a job. Please treat this as a professional document. This letter should contain your hand signature or digital signature to authenticate the document.

Name the document your first name. last name. purpose and save as a .doc(x) or .pdf file. Save this document in Folder 1.

Continuing Education

Applicant must submit a **minimum** of forty hours of advanced continuing education (CE) that pertains directly to anesthesia, anesthesia case management or peri-operative analgesia. More than 40 hours of CE may be submitted to compensate for any hours being rejected but will **only** be evaluated if additional hours are needed. CE hours MUST be presented by a VTS member (NAVTA approved academy), a veterinary diplomat (any diplomat of an American or European college or AVMA approved specialty board), a Fellow from Australia or New Zealand (FANZCVS) a board eligible doctor (anesthesia, ECC or surgery) who has completed a three-year residency program but has not yet passed boards or a resident in training (preferably anesthesia, ECC or surgery). AVTAA will also accept CE presented by boarded human anesthesiologists, surgeons or criticalists providing that the CE was presented at a veterinary specific conference and can be directly related to veterinary anesthesia topics. You must list the CE provider's **diplomat / credential** status (DACVAA, DACVS, DACVECC, VTS (Anesthesia & Analgesia), etc.) on the CE form. **Failure to include the speaker's credentials will result in those hours being rejected.**

We will **NOT** accept CE that is provided by people who **only** hold the following credentials: DVM, MRCVS, MANZCVS (MACVSc), DAAPM, CVPP, CCRP, SRA, LVMT, LVT, RVT, CVT.

Use the AVTAA CE Form to submit only the continuing education attended by the applicant from January 1, 2020 to December 31, 2024. CE hours ONLY count after you become a credentialed veterinary technician/nurse.

The required 40 CE hours can be obtained via the following formats: in person national/state conferences, interactive (live) virtual conferences, on demand virtual conferences, online courses and webinars. In addition,

CE can be obtained from these formats with restrictions: in-house CE (10 hours max), externship (10 hours max) or journal/magazine articles (3 hours max). See definitions below for each CE format.

The CE certificate provided by the organization or speaker MUST be provided as proof of attendance for each conference attended. Cancelled checks or other documents will not be accepted as proof of attendance. A letter can be used as proof of attendance for in-house and externships provided appropriate information is included in the letter (see details located under CE definitions). International applicants: If an RVN has earned Continuing Professional Development (CPD) from BVNA or RCVS then a screenshot of their CPD history log along with a letter from BVNA stating they attended congress will be accepted as proof of these CE events.

Use the AVTAA's definition of anesthesia to determine whether your CE meets the requirements regarding content. If the title of the CE does not provide enough information to show that the CE was directly related to anesthesia care and case management, you MUST submit scanned copies of the lecture description or lecture notes provided by the organization providing the CE. AVTAA reserves the right to ask for additional information on lecture titles that do not provide enough information to show it is related to anesthesia care and case management. Examples of CE titles that would require a description include "Nursing the Neurological Patient" or "Management of the Acute Abdomen". Failure to provide documentation of how the CE relates to anesthesia may result in rejection of those CE hours. Examples of CE that will not be accepted include "Practical Wound Management", "Advanced Feeding Tube Management", "How to Interpret Radiographs", "Rehabilitation for the Orthopedic Patient", and "Management of Chronic Pain."

Each meeting attended should be listed on a **separate** copy of the CE form. For a particular meeting, each lecture attended should be listed on the form. **Indicate the type of CE at the bottom of the form**. Length of CE is indicated in minutes and will be automatically tallied at the bottom of the form as it is entered.

The CE form(s) for each individual conference AND the proof of attendance should be saved as ONE pdf file. For example, if you have two pages of lectures from IVECCS then you will need to scan and save both these pages PLUS the proof of attendance for this conference as ONE pdf file. CE forms submitted separate from the proof of attendance will NOT be accepted. CE documents submitted as .jpeg files will be rejected.

Save these documents as yourfirstname.lastname.CE1; yourfirstname.lastname.CE2; yourfirstname.lastname.CE3, etc. until you have scanned and saved all your CE documents for the application. Example: betty.smith.CE1.pdf, betty.smith.CE2.pdf, etc.

An **example** of a completed continued education form is attached as an addendum.

Save these documents in Folder 1.

Continuing Education Definitions

Nationally recognized meeting:

A gathering of people for the purpose of providing continuing education in the field of veterinary medicine. National meetings are advertised in numerous journals and other publications typically read by professionals in the field of veterinary medicine. There is an expectation that continuing education at a nationally recognized meeting will be provided by lecturers or instructors who are considered experts in the subject they are discussing. You will need an official CE certificate.

Please be aware: some speakers providing lecture or labs may not meet the AVTAA credential requirements for acceptable CE.

Local meeting:

A gathering of people for the purpose of providing continuing education in the field of veterinary medicine. Local meetings are announced by state/city organizations. There is an expectation that continuing education at a local meeting will be provided by lecturers or instructors who are considered experts in the subject they are discussing. You will need an official CE certificate.

Please be aware: some speakers providing lecture or labs may not meet the AVTAA credential requirements for acceptable CE.

NOTE: Special anesthesia programs such as Dr. Gaynor's Anesthesia Bootcamp must have individual lectures listed out along with the presenters and their credentials. Failure to list out each individual lecture will result in rejection of the CE hours associated with the program.

In-House training:

Continuing education provided for people who work at a particular practice or institution. This type of continuing education is not open to the veterinary profession at large and lecturers or instructors often work at the practice or institution. You must be currently employed at the facility providing the inhouse training. You may hire an outside speaker to come talk to your practice as part of in-house training. **AVTAA will accept a maximum of 10 hours of CE from in-house training.**

Please be aware: some instructors providing lecture or hands-on training may not meet the AVTAA credential requirements for acceptable CE.

Extra Requirement: In-House CE (meetings accessible only to technicians inside your facility) requires an official CE certificate obtained from the presenter or a **signed** letter from the person supervising your attendance. The CE certificate or letter should detail where and when the training took place, the name and diplomat status of the CE provider, the objectives and goals, a statement of your satisfactory performance and the total hours provided. (1 hour of lecture or hands on training = 1 hour of CE)

Online training:

Several companies provide online CE where a participant must meet certain requirements to receive a CE certificate. Examples of companies include VSPN, VetMedTeam, Vetbloom, On the Floor @ Dove, VETgirl, etc. This type of CE requires an official CE certificate issued by the company hosting the course online. (1 CE credit = 1hour CE unless specific CE credits are stated for a course)

Please be aware: some instructors providing online CE may not meet the AVTAA credential requirements for acceptable CE.

Externship:

Continuing education from an AVTAA approved program in which a person pays a monetary fee to spend time at another facility (specialty or university) and participates in multiple round sessions as well as hands on experience. This type of continuing education is not open to the veterinary profession at large and is usually restricted to 1-2 participants at a time.

AVTAA must be contacted (avtaa.vts.executivesecretary@gmail.com) at least 30 days prior to attending the externship for approval BEFORE including it in your application packet.

To obtain approval for an externship the following criteria must be met:

- DACVAA or VTS (Anesthesia & Analgesia) employed at facility and overseeing externship
- Must spend a minimum of 1 week (36 40hr) at location
- Attend a minimum of 5 hours of anesthesia/analgesia lectures or round topics presented by a DACVAA or VTS (Anesthesia & Analgesia)
- Submit written statement describing the objective and goals of the externship

Please be aware: some instructors providing lectures or hands-on training during the externship may not meet the AVTAA credential requirements for acceptable CE.

Extra Requirement: This type of CE requires a **signed** letter from the person supervising your attendance to the program. The letter should detail where and when the training took place, the name and diplomat status of the CE provider(s), a list of the lecture/round topics attended by applicant, a statement of satisfactory performance and the total hours the applicant was present for the externship.

NOTE: AVTAA will accept a maximum of 10 hours of CE from an externship program. The activities performed during the externship will **NOT** be acceptable for proof of mastery on the applicant's skills list. Cases performed by the applicant during the externship **CANNOT** be used for the case logs or case reports.

Journal/Magazine articles:

Journal or magazine articles authored by diplomat veterinarians or VTS members within the last 10 years (2014 to current) that pertain to anesthesia or perioperative analgesia and read by the applicant will count as acceptable CE. Each article will count as 0.25 CE hours; therefore 4 articles will count as 1 CE hour. We will **not** accept more than **3 CE** hours from this type of CE. **A scanned copy of the title page of the article must be provided.** We must be able to verify the author and their credentials, the title of the article and the full reference from where the article came from. Failure to provide this information will result in the CE hours being rejected. Conference proceedings and book chapters do **NOT** qualify as journal/magazine articles and therefore are not acceptable forms of CE for the AVTAA application.

NARKOVET Consulting® LLC & Vetbloom Certificate Course

Principle Techniques of Small Animal Anesthesia, Perioperative Analgesia & Critical Patient Care
This course consists of 4 modules taught by ACVAA or AVTAA instructors utilizing in-person,
laboratory/workshop and online webinar based learning. Successful completion of all 4 modules will
count as all 40 hours of CE needed for the application. If individual modules are completed then the
individual lectures will be tallied to determine total CE hours.

All lectures/labs and webinars attended should be recorded on the CE forms. Use individual forms for each type of learning (e.g. 1 form for all in-person lectures, 1 form for all webinars, 1 form for all labs). A certificate of completion is required to have all 40 hours count on the application. Attendance in the program will be verified.

NARKOVET Consulting® LLC & Vetbloom Certificate Course

Equine Anesthesia, Analgesia & Perioperative Care

This course consists of 3 modules taught by ACVAA or AVTAA instructors utilizing in-person, laboratory/workshop and online webinar based learning. Successful completion of all 3 modules will count as all 40 hours of CE needed for the application. If individual modules are completed then the individual lectures will be tallied to determine total CE hours. CE lectures, labs and webinars should be recorded in the same manner that is outlined above for the small animal course.

Successful completion of the Narkovet courses does NOT guarantee passing the AVTAA application or exam.

RECOVER CE offered online by VECCS for basic life support (BLS) and advanced life support (ALS) will count toward CE on the AVTAA application for a total of 8.5 CE hours if both courses are completed. The certificate must be within 2 years of issuance. https://recoverinitiative.org/veterinary-professionals/

Skills Verification Form

This form must be completed and signed by a board-certified (diplomat) doctor (preferably an anesthesiologist, surgeon or criticalist), board eligible doctor (completed a three year residency but has not passed the certifying examination) or VTS (preferably anesthesia, surgery or ECC) who works directly with the applicant and can verify that all indicated skills for a particular practice have met the definition of mastery by the applicant. If an applicant works at multiple locations during the case collection year, then an AVTAA approved individual must sign the skills verification form for each location. Mastered skills will not be accepted from a location if skills verification is not present. Mastery is defined as being able to perform the task safely, with a high degree of success and without being coached or prompted. Mastery requires that the applicant has performed the task in a wide variety of patients and situations, not just a handful of times. The skills described in this application MUST be performed between January 1 2024 and December 31 2024.

The signed location indicated on this form MUST correspond to the appropriate location indicated on the employment location form AND used in the case logs.

Location 1: The practice indicated in primary box 5 on the professional history and experience form submitted with the pre-application. The applicant is currently employed or has worked at this location between January 1, 2024, and December 31, 2024. If the applicant is still employed, put December 31, 2024, as the end date. If the applicant left this practice prior to December 31, 2024, then put the last day of employment in the end box.

Location 2: The applicant changed jobs between January 1, 2024, and June 1, 2024. This location is indicated in a supplemental box on the professional history and experience form. Location 2 can ALSO indicate that the applicant changed jobs after June 1, 2024. A history addendum is required if the applicant changed jobs after June 1, 2024.

Secondary 1: The applicant worked a secondary job between January 1 2024 and December 31 2024. This location is indicated in a supplemental box on the professional history and experience form OR on the history addendum if the secondary job was started after June 1 2024.

Scan this document after all required information is completed including signatures and save as **yourfirstname.lastname.skillsverify.** This document can be saved as .doc(x) or .pdf. If more than one qualified individual wishes to sign the skills verification form from the SAME location then a second page can be included with the scanned copy. **Save this document in Folder 1.**

2025 Complete Application – Folder 2 Requirements

Employment Location Form

This form must be completed by the applicant and included in **Folder 2** of the complete application. Folder 2 of the complete application is blinded so that the credentials committee reviewers do not know any information about the applicant's name or place of employment. This form should be used by the applicant to ensure that the location indicated on the case log form corresponds with the appropriate dates of employment indicated on the professional history and experience form +/- history addendum. This form may also be used to verify the current employment status of the applicant during the application year for case collection if the need arises.

The applicant number should be placed at the top of this form. **DO NOT include your name on this document.** You must select ONE option that corresponds to your work history status from January 1, 2024 till December 31, 2024. **Read each option carefully!**

Option 1: The location indicated in primary box 5 on the professional history and experience form is the same location worked from January 1, 2024 until December 31, 2024. Use "Location 1" on the case log document to represent this place of employment.

Option 2: Applicant changed jobs between January 1, 2024 and June 1, 2024. This new location is indicated in one of the supplemental boxes on the professional history and experience form. Use "Location 1" on the case log document **IF** you worked at the location indicated in primary box 5 between January 1, 2024 and June 1, 2024 before changing jobs. Use "Location 2" on the case log document to represent this new location.

Option 3: The location indicated in primary box 5 on the professional history and experience form is the same location worked from January 1, 2024 until December 31, 2024. Use "Location 1" on the case log document to represent this place of employment. In addition, a **secondary job** was worked between January 1, 2024 and December 31, 2024. This location is indicated in one of the supplemental boxes on the professional history and experience form. Use "**Secondary 1**" on the case log document to represent this additional place of employment.

Note: Any secondary job started after June 1, 2024 REQUIRES a history addendum if cases from this location will be used on the complete application.

Option 4: Applicant worked at the location indicated in primary box 5 from January 1, 2024 till June 1, 2024 but changed jobs after June 1, 2024. A history addendum MUST be submitted to the executive secretary and approved. Use "Location 1" on the case log document to represent the location indicated in primary box 5 on the professional history and experience form. Use "Location 2" on the case log document to represent the place of employment indicated on the history addendum.

Name the document **yourapplicant#.location** and save as a .doc(x) or .pdf file. **Save this document in Folder 2.** Your applicant number was issued at the time you received approval on the pre-application documents. You MUST use this applicant number to save this document. DO NOT use your name!

Case Log

Applicants must submit a case log of <u>at least</u> 50 cases (but not more than 60) completed between **January 01**, **2024 and December 31**, **2024** that meet the AVTAA definition of anesthesia care and case management. This document is **blinded** so that the credentials committee reviewers will NOT know the applicant's name or place of employment.

The first 50 cases in the case logs are considered the core logs. There must be at minimum 50 acceptable cases. You may choose to submit an additional 10 cases that will be used if some of the 50 core cases are thrown out. If only 50 cases are submitted, a single unacceptable case could result in the application being rejected.

Submitting only 50 case logs is NOT advised! The case logs should be used to demonstrate your experience in advanced anesthesia case management and your mastery of anesthesia skills. All 60 case logs may be used to demonstrate your mastery of the core and supplemental skills.

The case log should provide a summary of the anesthesia care you provided to the patient (e.g., drugs administered (including dose & route), abnormal monitored parameters and steps taken to correct (if needed), procedures performed (local/regional blocks, arterial catheter, CRIs, etc.) and how you dealt with co-existing diseases, anesthetic or procedural complications). Collectively, the case logs must reflect the applicant's advanced anesthesia knowledge and skills through all phases of anesthesia care. Proper medical terminology should always be used. All cases included in the case log must be completed at the location where the applicant is employed or while under the supervision of the employer at a different location (e.g., your practice takes patients to a separate MRI facility).

The case logs must include a variety of patients and procedures with an ASA physical status of I -V. Only 25% of the case logs (12 cases) should be ASA I or II, including ASA IE and ASA IIE cases. The remainder of the case logs should contain cases that qualify as ASA III or higher (including emergencies in these categories). The first 4 pages (12 cases) of the logs should be used to provide the ASA I, ASA II, ASA IE and ASA IIE cases. Except for "skills only" case logs (see below), these ASA ratings should NOT be present anywhere else in the case log document. The remaining cases (ASA III and higher) may be entered into the case log in a manner which you choose (e.g., random, by date, by ASA status, etc.). It is acceptable to submit less than 12 ASA I and ASA II (including emergencies) cases if you would rather use these slots to submit ASA III and higher cases.

The case log should reflect the diversity of systemic diseases/conditions, species and procedures to which you have experience providing anesthesia care. Drug protocols should be tailored to the patient based on the patient evaluation (history, physical exam, diagnostic tests) rather than clinical routine. The case log should include the following: date of procedure; ASA status; species/breed, age, sex, weight; duration of anesthesia (defined as the length of time that the patient does not respond to stimuli under the influence of inhalant or injectable pharmaceuticals); summary of care (pertinent information from pre-, intra- and post-op);

equipment and monitoring methods used; reason for anesthesia and diagnosis (state procedure, diagnosis and include pertinent information from patient evaluation to justify ASA classification); and location where procedure was performed. Every case log contains a drop-down menu that you can select location 1, location 2 or secondary 1. It is extremely important that these locations correspond to the appropriate location indicated on the employment location form and skills verification form and correlate to the information provided on the professional history and experience form. Incomplete case logs, including drop down menu for location, will not be accepted!

If you use a case log to show a particular skill you MUST describe the skill (e.g. list the context in which you used the skill) in the case log. The case summary is the most common location but if the skill applies to equipment then you can use the equipment section. Likewise, if the skill applies to the patient evaluation it can be described in the reason for anesthesia and diagnosis section. Multiple skills can be described in one case log, but skill description should NOT overshadow the information about the case.

Sedation only cases (e.g. patient does not lose consciousness) can be used for the case logs but should not be more than three (3) case logs for a small animal application. These cases tend to be short in duration and therefore limit the applicant's ability to show advanced case management. This limit does not apply to standing surgical procedures for the large animal application.

If you chose "more than 50% of my experience in providing anesthesia care is to large animal patients" on the professional history and experience form, then your case log and case reports should primarily contain species that fall under the large animal group. Likewise, if you selected "small animal" then your case logs and case reports should be species that fall under the small animal group. If you anesthetize both 'large animal' and 'small animal' patients, then both groups can be reflected in your case log but the majority (>50%) of the case logs and at least 3 case reports should come from the group you selected on the professional history and experience form.

The case log form will hold 3 cases per page. The case summaries should be brief and to the point. Use critical thinking skills to only provide pertinent information about the case. All drugs can be abbreviated with the first few letters of the name (e.g. "hydro" for hydromorphone, "aceprom" for acepromazine, etc.). Be careful not to abbreviate a drug so much that it can be confused with another drug (e.g. "dex" could indicate dexmedetomidine, dextrose or dexamethasone, and "ace" could indicate acetaminophen or acepromazine). Common medical abbreviations (e.g. WNL, BID, PRN, etc.) can be used in the case summaries. An approved abbreviation page is located with the application documents on the website. It is also included as the last page in the case log document. We recommend utilizing this abbreviation page and minimize other abbreviations to avoid confusion. If other abbreviations are used and the content cannot be verified it could lead to the rejection of that case log. **Use generic names for ALL drugs** aside from a few brand name exceptions (e.g., Telazol®, Zoletil®, Tzed®, Simbadol®, Nocita®, Vetstarch®, Zorbium®,

Zenalpha[®]). All drugs should be listed as dose (mg or mcg) or dosage (mg/kg or mcg/kg). Do not just list the mL volume! Appropriate units **MUST** be present for all drugs, fluids, CRIs, monitored parameters and blood work. Normal ranges for blood work and vital parameters may be presented in a case log, if needed, but are not required.

Skills Only Case logs

You may list a case in the case log that was **not** anesthetized by you if it is needed to represent a skill from the skills list. An example would be if you performed an epidural on a patient, but your co-worker was the primary anesthetist for the patient. These cases are designated "skills only" case logs and **should ONLY appear in case logs 51-60**. These cases MUST qualify as anesthesia cases rather than critical care cases. Fill out the case log completely and put "Skills Only" at the start of the case summary. State your involvement with the case and provide enough information to help justify the skill(s) you performed. The skill(s) MUST be described in the context in which it was used during the case. "Skills Only" cases can be any ASA status. **These cases will NOT count towards the 50 required case logs, but they do count towards the maximum total of 60 case logs.** Therefore, it is recommended that you only use "skills only" case logs if necessary to show mastery of a skill not documented elsewhere in the application. If 10 "skills only" case logs are provided, then there will be no extra case logs to potentially replace a core case log that is thrown out.

Use the **BLANK** case log form found here: https://www.avtaa-vts.org/application-forms.pml. Only download this form using **Adobe Reader**. The case log form should be saved frequently as you fill it in. It is designed to hold the maximum number of case logs that can be submitted. Extra copies or additional case logs will not be accepted. **DO NOT alter the formatting of this form or change any settings; doing so may result in rejection of the entire form.** It is recommended that you print out the case log form after you have filled it in. Verify that all information in each section of every case log is visible on the printed copy. *This is very important for MAC users since MAC computers do not handle .pdf documents well*. The credentials committee will only evaluate information that is visible on the printed copy of the case log form.

Save this document as yourapplicant#.caselog.pdf. Save this document in Folder 2.

Your applicant number was issued at the time you received approval on the pre-application documents.

You MUST use this applicant number to save this document. DO NOT use your name!

An **example** of 3 completed case logs is attached as an addendum.

Advanced Anesthesia Skills

The applicant must demonstrate mastery of 90% of the skills in the core section and 50% in the supplemental section of the small animal OR large animal combined skills lists by properly describing the skills in the case logs. To be included in the application the skills must be mastered and performed between January 1 2024 and December 31 2024. ONLY submit the combined skills list that aligns with the patient group (small animal or large animal) you selected on the professional history and experience form (e.g., if you marked small animal, then only submit the small animal combined skills list). DO NOT include both large and small animal skills list if you perform anesthesia on both groups.

The AVTAA requires that a veterinarian who is board certified by an American or European College/Board or Fellow from Australia or New Zealand (FANZCVS) (preferably an anesthesiologist, surgeon or criticalist), a veterinarian who is board eligible (completed a three-year residency but has not passed the certifying examination) or a VTS who has mastered the skill themselves, attest to your ability to perform and master the skills. Mastery is defined as being able to perform the task safely, with a high degree of success, and without being coached or prompted. Mastery requires that the applicant has performed the task in a wide variety of patients and situations, not just a handful of times. To include a skill in the case logs it must be considered mastered by the time the applicant uses the skill for the application. A skill should NOT be performed for the first time in a case used as a case log.

The combined skills list is **blinded** so that the credentials committee reviewers will NOT know the applicant's name or place of employment. The location where the skill is performed must be indicated for each mastered skill. Type the location (e.g. location 1, location 2 or secondary 1) that corresponds to where the skill was performed. It is imperative that any skill described in a case log corresponds to the appropriate location in which it is considered mastered.

ONE qualified individual who **works directly** with the applicant at each employment location will be required to complete the skills verification form (Folder 1) as proof of mastery for all skills indicated at that location. If the applicant has changed jobs between January 1, 2024 and December 31, 2024 or holds a secondary job then additional signatures will be required on the skills verification form. If more than one qualified individual from the same location wishes to sign the form, then additional copies can be made and scanned together as one document.

The mastered skills MUST be described in the case logs.

Simply listing a particular skill in a case log is NOT acceptable and the skill will not be counted as mastered. Select **ONE** case log that best represents each mastered skill. You **must** include the case log number in the allotted space on the skills list. If the skill is not properly described in the designated case log, then it may be rejected even if the skill is described elsewhere in the application (e.g. case reports). Do NOT put "ALL" in the column for skills that are done on every patient. **For each mastered skill select <u>ONE</u> of the following**

methods to describe the skill within the context of the case summary. Skills may also be described in the reason for anesthesia & diagnosis section and equipment section if the skill pertains to that information.

1) Physiological effect the skill had on the patient

Example: XXmcg dexmed IM premed; bradycardia (HR:40bpm) & 2nd degree AV HB noted on ECG 20 min post-inject; BP remained WNL, no tx indicated, norm effect of drug.

2) Rationale for using the skill in the case

Example: Xmcg dexmed, Xmg hydro IV premed; dexmed selected for sedation & analgesic properties; multi-modal analgesia when combined with opioid.

3) Troubleshooting a problem or adverse event and what was done to solve the issue

Example: SpO2 88-90% w/ probe placed on tongue; confirmed PaO2 438mmHg and SaO2 99% via arterial blood gas, low SpO2 likely due to vasoconstriction from dexmed.

4) Role that the skill played in the overall management of the case

Example: Xmcg dexmed, Xmg morphine premed IM; easily restrained for IV cath, iso at 1% after intubation, dexmed decr MAC of inhalant. Patient panting, depth appeared appropriate, gave Xmg morphine, no change; added 1mcg/kg dexmed IV, patient started taking deeper breaths. Intra-op dexmed used to smooth out maintenance period while inhalant % kept low.

5) Set up of equipment

Example: Pressure transducer used for direct BP monitoring; attached to art cath via low-volume ext tubing; placed at level of apex of heart and zeroed before use.

6) Information about performing skill

Example: Aseptically placed Xmg PF morp + Xmg bupiv epidural @L7-S1 using a 20g x 2.5" spinal needle; located inj site (L7-S1) by feeling cranial aspect of ilial wings and palpating caudal along spine.

If a skill was mastered at a prior place of employment that is listed on the professional history and experience form (within the last 5 years but outside case collection year), it must be independently validated by a letter detailing the mastery of the skill(s) from a board-certified veterinarian or VTS that worked at the practice. A maximum of 3 skills can be used in this manner. The letter must describe the skill(s) in detail using specific case examples to demonstrate that the applicant has met the definition of mastery. This option should ONLY be considered in special circumstances. Contact the AVTAA executive secretary at avtaa.vts.executivesecretary@gmail.com for more information on how to submit this information.

There are 6 skills listed at the end of the skills list that do not require a representative case log. All 6 skills **must** be demonstrated throughout the entirety of the case logs and case reports. The credentials committee will consider these skills mastered based on the overall presentation of cases in the case logs and case reports.

The case log numbers and location should be typed on the skills form. Verify that all skills with a blank line have the required information indicated (e.g., Indicate inhalant: Sevoflurane).

Save this document as yourapplicant#.skills.pdf. Save this document in Folder 2.

Your applicant number was issued at the time you received approval on the pre-application documents. You MUST use this applicant number to save this document. DO NOT use your name!

An **example** of one page of completed skills is attached as an addendum.

Case Reports

Select four cases from your case log that best demonstrate your expertise in anesthesia case management to submit as case reports. A complete case log **must** be filled out for each of the four case reports. The case log number that pertains to the report should be documented at the top of the report. This information will be used to confirm that the case is entered as part of your case log. The case reports should demonstrate your knowledge, skills and abilities in **advanced** anesthesia case management. The case reports **must** be written on cases that qualify as ASA III or higher. It is strongly recommended that each case report represent a different systemic disease/condition or procedure to show diversity in drug protocols and anesthesia case management. All drug amounts should be listed as dose (mg or mcg) or dosage (mg/kg or mcg/kg). Do not just state volume (mL) administered. All values included in the reports should contain the appropriate units (e.g., HR: 56bpm, MAP: 84mmHg, TP: 7.6g/dL, etc.)

The case report should describe, in detail, how the patient was evaluated and managed during all phases of anesthesia (e.g., pre-anesthetic, induction, maintenance, recovery). It is important that the information in your case report be clearly understood. Utilize critical thinking skills to present the information in a logical manner. Only provide pertinent details about the case that directly relates to anesthesia care and case management. ONLY use generic drug names (aside from few exceptions listed in the case log section) and proper medical terminology throughout the case report. Abbreviations must be spelled out the **first** time they are used (e.g., positive end expiratory pressure (PEEP)). Do not abbreviate a word unless it is used multiple times in the case report. It is important to show that you participated in the evaluation and management of the patient and were not just an observer. Consider some of the following ways of demonstrating your knowledge and experience:

- 1. Show how your observations, physical examination and history taking assisted the veterinarian with the development of an anesthesia drug protocol and management plan for the patient.
- 2. Explain why an observation was important or why you asked a certain question during the anesthesia period.
- 3. Describe how an observation and response by you helped to avoid an anesthetic complication.
- 4. Describe the procedures you performed. Explain why the procedure was performed.
- 5. Explain your reasoning for the physiological monitoring used.
- 6. Explain how you helped determine whether the patient's anesthetic plan and pain management strategy was effective.
- 7. Explain how your observations and monitoring helped modify the patient's anesthetic plan or treatment.
- 8. Explain your role in planning the patient's anesthesia care through all anesthesia phases.
- 9. Briefly show your understanding of the problem(s) being treated.
- 10. Explain your contingency plans for all anticipated problems.

Required format for case reports: Font: Times New Roman; Font size: 10.5-point; Line spacing: 1.5; Margins: 0.5-inch on all sides; Page length: not more than five, 8.5 x 11 inch. Reports should be written in either American or British English using proper spelling & grammar. Case reports that do not meet these requirements will be rejected. The case reports must be the original work of the applicant. These are professional reports so spelling and grammar factor into the overall evaluation. If excessive spelling and/or grammar errors are present that take away from the ability to evaluate the content of the report, it could result in rejection of the case report.

Case report layout: Follow the outline for the case reports listed below. All sections of the case report layout MUST be included in the report unless "optional" is indicated. The "anesthesia plan" section should detail what the applicant wanted to do BEFORE the case happened. The "anesthesia care/patient support" section should explain what ACTUALLY happened during the case. Writing tense does not matter as long as it stays consistent throughout each section. Hint: If a case report is shorter than 5 pages then it is likely not a good representative case to properly demonstrate your advanced anesthesia knowledge and skill. A good case will require you to evaluate the overall content of the case to determine the most pertinent information to present that helps show your advanced anesthesia knowledge and skill while maintaining the formatting requirements. The case reports should be written as if the applicant were explaining all details of the case to another veterinary professional in their own words without the need to quote reference material. Do NOT quote references in the case reports!

The case reports are **blinded** so that the credentials committee reviewers will NOT know the applicant's name or place of employment. Please ensure that NO identifying information such as names or the location where the case was performed is contained within the report. The applicant number (assigned at pre-application approval) will be used on the case report in lieu of your name. Instead of stating the name of the practice, the location should correspond to the information provided on the employment location form (e.g., location 1, location 2, secondary 1).

The case reports should be saved in **Folder 2** individually as **yourapplicant#.casereport1**, **yourapplicant#.casereport2**, **yourapplicant#.casereport3**, **yourapplicant#.casereport4** to correspond to each report. Save these reports as word files, (.doc) or (.docx).

Do NOT submit case reports as PDF files.

Do not combine all 4 reports as one document.

An **example** of a complete case report is attached as an addendum.

Anesthesia Records

Include a legible, scanned **copy of the anesthesia record** for each of the four case reports. The anesthesia record **MUST** be saved as a separate document and correspond to the appropriate case report (e.g., anesthesia record 1 for case report 1). The anesthesia records are **blinded** so that the credentials committee reviewers will NOT know the applicant's name or place of employment. Please ensure that NO identifying information such as names or the location where the case was performed is contained within the anesthesia record. **Information that should be HIDDEN includes name of all individuals involved with the case (e.g., head clinician, resident, intern, student, applicant), name and logo of the facility where the case was performed and all personal client data (e.g., owner name, address, phone number, etc.). AVTAA reserves the right to request unblinded anesthesia records (without client information) should the need arise during the review process. Only unblinded AVTAA individuals (e.g., Board of Regents) would review an unblinded anesthesia record.**

You may use your facility's anesthesia record (including computer generated options), or the one provided on the AVTAA website. If you choose to use your facility's anesthesia record it at least must provide the same information that is contained on the AVTAA anesthesia record. The anesthesia records must be legible so that all information is easy to see and read. Please be mindful when copying anesthesia records after the required information is hidden as copying may decrease the visibility of the information contained on the anesthesia record. Illegible records may be rejected.

NOTE: Compare your facility's anesthesia record to AVTAA's anesthesia record early in the process of starting the application. If there are significant differences, it is advised that you use the AVTAA anesthesia record for any case used in the application. For legal reasons, it is not advised to copy the information to a different form after the case has been performed. The **original anesthesia record** used to record information during the case should be submitted in conjunction with each case report.

The anesthesia records should be scanned and saved in Folder 2 individually as yourapplicant#.anesrecord1, yourapplicant#.anesrecord2, yourapplicant#.anesrecord3, yourapplicant#.anesrecord4 to correspond with each case report. Your applicant number was issued at the time you received approval on the pre-application documents. You MUST use this applicant number to save these anesthesia records. DO NOT use your name! Each anesthesia record should be saved as an individual file. Save these files as .doc(x) or .pdf. Do NOT submit anesthesia records as .jpeg files.

An **example** of a complete anesthesia record is attached as an addendum.

Case Report Layout

1. Applicant Number Date of anesthesia Case log number Patient Name and/or ID# (put this information in the header or make a text box on the 1st page for your case reports)

Patient Signalment: (Species, Age, Sex, Weight) and reason for presentation

Indicate facility by using location that corresponds to information provided on employment location form.

2. Summary of the patient's physical status on presentation.

Pertinent physical examination findings

Pertinent diagnostic and laboratory test results (provide reference ranges for all values listed)

Pertinent previous history (e.g., past anesthetic complications, drug reactions, etc.)

Current history of presenting complaint (e.g., duration, procedures performed at referring DVM, etc.)

Current medication(s)

Diagnosis made by DVM

ASA physical status rating (III – V +/- E) with explanation of why this rating was selected

3. Reason for anesthesia

4. Anticipated patient complications

Detail what problems you anticipated the patient may experience from the anesthetic drugs.

Detail how you thought the patient's co-existing conditions or diseases might affect the anesthetic plan.

Detail what problems you anticipated the patient may experience from anesthesia or procedure.

5. Anesthesia plan

Anesthetic drugs

Detail the drugs you planned to use. Record all drugs in milligrams (mg) or micrograms (mcg) or provide the dosage (mg/kg or mcg/kg).

Explain the reasoning for specific drug(s) chosen for this patient.

Explain fluid therapy plan during procedure.

Detail the pain management strategy during all stages of anesthesia (pre-op, intra-op, post-op).

Indicate approval of the anesthesia plan by the overseeing clinician and any changes made.

Patient physiological monitoring and equipment

Explain choice for anesthesia equipment used during case

Detail the parameter(s) you intend to monitor; provide normal ranges you expect to see.

Explain how you planned to assess the parameter(s).

Explain how the information from this parameter(s) would aid in the management of the patient.

Additional procedures

Detail any special procedures performed on the patient to facilitate the anesthesia and pain management plan (i.e., epidural injection, nerve blocks, jugular catheter, arterial catheter placement, etc.).

6. Anesthesia Care/Patient support

Detail pertinent events of the case. Provide actual times in report to help establish a timeline of events. Explain how you were able to provide physiological support to the patient during the anesthesia period. Explain any problems encountered by the patient or equipment, how you analyzed the situation and responded with a solution.

Explain any discrepancies between the original plan and what actually happened during the case (if applicable).

7. Post anesthesia recovery

Explain in detail your plan to evaluate the patient's pain level and plan to provide post procedure analgesia.

Explain what you did to support the patient through the recovery period.

Detail the quality of the patient's recovery and any complications.

8. Case Reflection (optional) *Do not include if it goes over the maximum 5 page limit.

Use this section to indicate your thoughts about the case overall.

Was there something you would do differently next time if you are presented a similar case in the future?

Was there a valuable skill or concept that you learned during the case that can be applied to future cases?

Final Instructions

All the application forms are designed to be downloaded to your computer, filled in and saved. ONLY use ADOBE READER to download the blank PDF forms. Do not modify or change the formatting of any form. Forms may be rejected if they have been altered. All dates on forms should be written in month/day/year format. With exception to signatures and anesthesia records, all forms must be typed or word-processed. Handwritten forms will not be accepted. Remember, this is a professional application; spelling/grammar and overall presentation will be considered when the application is reviewed. If submitting the completed application using a MAC computer, please ensure that all .pdf files are complete and are not missing any information.

Check all scanned documents to make sure orientation is correct. They should NOT be upside down or sideways. Unless otherwise stated, DO NOT save scanned documents as .jpeg files. CE forms with certificates and anesthesia records will NOT be accepted if they are .jpeg files.

The AVTAA reserves the right to contact the applicant and ask for additional documentation to verify information contained in the application. This includes, but is not limited to, all anesthesia records of cases provided in the case logs and additional information regarding CE lectures.

The pre-application and complete application (Folders 1 and 2) MUST be submitted **online** using WeTransfer, https://wetransfer.com/. **NOTE:** the email addresses for submitting the pre-application and complete application are different! Attention to detail is paramount to ensure documents are submitted at the appropriate time and to the correct email address. Instructions to use WeTransfer are located on page 35 of this document and on the AVTAA website.

If you have trouble with the online process, please contact us through the website contact page. Problems encountered on May 31 (pre-application) or Dec 31 (complete application) may not be solved in a timely manner and may result in your application being rejected if not submitted by 11:59:59 pm Eastern Time. Please do not wait until the last minute to submit your pre-application or complete application packet.

The \$60.00 application fee must be paid in full when submitting the pre-application. The fee is non-refundable. This fee should be paid using the PayPal link located on the AVTAA website, https://www.avtaa-vts.org/application-fees.pml. A copy of the PayPal receipt (with date) must be included with the pre-application documents submitted no later than May 31, 2024. If someone else, besides the applicant, is paying the application fee please indicate the applicant's name on the PayPal receipt. The AVTAA receipt of payment emailed by the treasurer after payment is also an acceptable form of proof of payment for the application.

The **Pre-Application documents** must be submitted via WeTransfer on or before **11:59:59 pm Eastern Time, May 31, 2024.** All pre-application documents, including the application PayPal receipt, must be submitted as ONE zipped folder. Follow the instructions contained in this packet to properly name each file that should be contained in the pre-application zipped folder.

Documents submitted via WeTransfer and time stamped after 11:59:59 pm Eastern Time, May 31, 2024 will not be accepted and will result in an automatic rejection. There are NO exceptions for the May 31 deadline! Failure to receive approval on the pre-application documents means that you are NOT eligible to submit the complete application packet in December 2024.

The approval email for the pre-application will contain a **specific applicant number**. This applicant number **MUST** be used on all documents contained in Folder 2 of the complete application. Should an application be accepted the applicant number will also be used for the certifying examination in 2025.

The Complete Application documents must be submitted via WeTransfer on or before 11:59:59 pm Eastern Time, December 31, 2024. Complete applications submitted via WeTransfer and time stamped after 11:59:59 pm Eastern Time on December 31, 2024 will not be accepted and will result in an automatic rejection. There are NO exceptions for the December 31 deadline! All application submissions in December are final. Nothing may be added or exchanged to the complete application unless requested by AVTAA.

The complete application is broken down into Folder 1 and Folder 2. Folder 1 is unblinded while Folder 2 is blinded so that the credential committee reviewers will NOT know the applicant's name or place of employment. It is imperative that there is NO identifying information about the applicant or the location of employment on all documents contained within Folder 2. The applicant number (assigned at preapplication approval) MUST be used in lieu of the applicant's name. The employment location form will be used to verify the facility where a particular case or skill was performed should the need arise during the review process.

Each folder for the complete application MUST contain the appropriate documents and then be individually compressed into a zipped folder. There will be two zipped folders submitted for the complete application. Aside from individual letters of recommendation submitted by the letter writer, no single documents will be accepted. Use the checklist located on page 34 to ensure you have properly named and included every required document for each folder before creating the zipped folders and submitting them via WeTransfer. Please ensure all files contained in the zipped folders are the <u>final</u> copy of each document (e.g., no track changes in word documents, no file that contains incomplete case logs, etc.). Incomplete applications will be automatically rejected and will not be processed or reviewed.

All files submitted in December for the complete application will be opened and quickly checked for formatting issues at the time they are received. If it is noted that requirements set forth in the instruction packet for any document were not followed, the application will be automatically rejected and not reviewed by the credentials committee. For example, if it is noted that a case report is single spaced then the entire application may be rejected without review by the credentials committee. Please take all requirements seriously and strictly adhere to them for each individual document contained in the complete application.

WeTransfer will send you an immediate confirmation email indicating the files were transferred successfully. A second confirmation email will be sent by WeTransfer when AVTAA downloads your files. Please keep BOTH email confirmations with time stamps as verification that the process was conducted properly.

In fairness to all applicants completing this process, time extensions for the pre-application and complete application deadlines are NOT allowed. Please plan ahead to ensure you have met all requirements well before the deadlines. It is recommended that you submit the pre-application documents as soon as possible if you plan to apply this year. If your pre-application was approved, then a reasonable goal would be to submit the complete application no later than Dec 25. **Again, NO extensions will be granted for either deadline.**

Unless otherwise noted, you will receive notification of your eligibility to participate in the certification exam no later than March 31, 2025. You may take the examination a total of 3 times in 3 **consecutive** years with the acceptance of the application.

Appeals

If your application is rejected, you may appeal the decision within 15 days of the notification of rejection. Detail the reasons for your appeal in a letter to support your rebuttal. A simple email stating that you wish to appeal is NOT acceptable. Incomplete applications that did not follow directions or are missing documents are NOT eligible for appeal.

Email your letter to the appeals chair noted in the rejection letter. All rejected applications are provided with an **overview** of the application deficiencies. Please be advised, this is a **brief overview** and may not be reflective of ALL examples of deficiencies within the application.

If you have questions concerning the appeal process or the rejection overview please contact the executive secretary at avtaa.vts.executivesecretary@gmail.com.

All appeal decisions will be based on the **original submitted application**. You may **not** submit additional data to augment the original application. Therefore, ensure the original application is complete and accurately reflects your qualifications.

The appeal letter MUST be written by the applicant. A letter written on the applicant's behalf will NOT be included as documentation for the appeals process, but AVTAA will address any concerns that are brought forth. To protect applicant confidentiality AVTAA will address concerns directly with the applicant rather than a third party.

NOTE: Applicants who submit an appeal will have an extension until June 15th 2025 to submit preapplication documents for the next 2026 application packet should the appeal not overturn the original decision of the credentials committee.

Appeal Process

The chair of the appeals committee will be provided both Folder 1 (unblinded) and Folder 2 (blinded) for all appealed applications. At least 3 appeal committee members will read the blinded Folder 2 for each appealed application. Folder 2 is reviewed by each appeal committee member before they see the credential committee score sheets or appeal letter from applicant. The same score sheet is completed that is used for the credentials committee. Deficiencies in Folder 1 will be addressed by the committee as a whole after all Folder 2 reviews are complete. The appeal letter and the credentials committee score sheet is then reviewed and discussed to render the final decision. Appeal decisions are then sent to the BOR for final review and approval before being sent to the applicant. **NOTE:** It is possible that the appeals committee will notice other deficiencies that were not noted in the initial review or present on the rejection overview.

AVTAA Application Submission Checklist

Email any questions to avtaa.vts.executivesecretary@gmail.com

Pre-Application (Approval needed to become an official AVTAA applicant)

- Submit pre-application documents to avtaa.vts.preapp@gmail.com via WeTransfer as a compressed zipped folder saved as yourfirstname.lastname.applicant2025.zip
- Pay \$60.00 application fee using PayPal link on AVTAA website

Submit Pre-Application Documents before 11:59:59pm Eastern Time, May 31 2024

Professional History and Experience yourfirstname.lastname.history. (pdf or doc(x))

Current, in-date license (scanned copy) yourfirstname.lastname.license. (jpg or pdf)

Letter of Good Standing yourfirstname.lastname.standing. (doc(x) or pdf) (obtained from Veterinary Medical Board)

Diploma, ONLY if requested (scanned copy) yourfirstname.lastname.diploma. (jpg or pdf)

Letter of Agreement yourfirstname.lastname.agreement. (doc(x) or pdf)

Legal document for name change, if applicable (scanned copy)

yourfirstname.lastname.legal. (jpg or pdf)

PayPal Receipt for Application Fee (MUST show name & date) vourfirstname.lastname.receipt. (doc(x) or pdf)

your in schame accept. (doc(x) or pur

Complete Application

- Approval of pre-application required to be eligible to submit complete application
- Submit both Folder 1 and Folder 2 of the complete application **together** to avtaa.vts.credential@gmail.com via we WeTransfer each as their own compressed zipped folder.
 - Save Folder 1 (unblinded) as yourfirstname.lastname.AVTAA2025.zip
 - Save Folder 2 (blinded) as yourapplicant#.AVTAA2025.zip

Applicant number (issued at pre-application approval) MUST be used for Folder 2 of complete application!

Submit the Complete Application no later than 11:59:59 pm Eastern Time, December 31, 2024 All submissions are FINAL!

Folder 1 (unblinded)

Application Waiver, Release and Indemnity Agreement

Plagiarism Affidavit

Two letters of recommendation (if not sent by letter writer)

yourfirstname.lastname.letter1-2. (doc(x), pdf)

Statement of Purpose yourfirstname.lastname.purpose.(doc(x) or pdf)

Current license (ONLY if expires before December 2024) yourfirstname.lastname.license2. (jpg or pdf)

CE forms AND proof yourfirstname.lastname.CE1.pdf; yourfirstname.lastname.CE2.pdf; etc.
Skills Verification yourfirstname.lastname.skillsverify.(doc(x) or pdf)

Folder 2 (blinded)

Employment Location yourapplicant#.location.(doc(x) or .pdf)

Case Logs: minimum of 50 / maximum 60 cases yourapplicant#.caselog.pdf

Combined skills list (ONLY for selected group of animals) yourapplicant#.skills.pdf

Case reports (submitted individually)

Anesthesia records (submitted individually)

yourapplicant#.casereport1-4. (doc(x) ONLY)

yourapplicant#.anesrecord1-4. (pdf or doc(x))

We Transfer Instructions

NOTE: Email addresses are different for pre-application and complete application!

To submit the 2025 AVTAA Pre-Application, follow these steps:

- 1. Go to https://wetransfer.com/. This service is free and does not require an account.
- 2. Enter avtaa.vts.preapp@gmail.com in the "email to" box
- 3. Enter your **personal email address** in the "your email" box (work email addresses not advised due to firewalls)
- 4. Enter 2025 AVTAA Pre-Application in the "title" box
- 5. Enter your full name in the "message" box
- 6. Click upload files at the top of the box
 - a. Ensure that ALL pre-application documents are present before zipping the folder.
 - b. ONLY zipped Folders (containing multiple files) can be sent via WeTransfer
 - c. Individual files will NOT be accepted!
 - d. Name the zipped folder yourfirstname.lastname.applicant2025
- 7. Click the TRANSFER button

NOTE: You will be asked to verify your email by **entering a code** sent to your email address.

- 8. Enter code and click "verify."
- 9. The uploaded files will be transferred to AVTAA.
- 10. You will receive an immediate email confirming files were transferred successfully. You will also receive an email when AVTAA downloads your files. Please keep both emails for reference.

To submit the 2025 AVTAA Complete Application, follow these steps:

- 1. Go to https://wetransfer.com/. This service is free and does not require an account.
- 2. Enter avtaa.vts.credential@gmail.com in the "email to" box
- 3. Enter your **personal email address** in the "your email" box (work email addresses not advised due to firewalls)
- 4. Enter 2025 AVTAA Complete Application in the "title" box
- 5. Enter your full name in the "message" box
- 6. Click upload files at the top of the box
 - a. Submit Folder 1 and Folder 2 together, each as their own individual zipped folder.
 - b. ONLY zipped Folders (containing multiple files) can be sent via WeTransfer
 - c. Individual files will NOT be accepted!
 - i. Name Folder 1 yourfirstname.lastname.AVTAA2025.zip
 - ii. Name Folder 2 yourapplicant#.AVTAA2025.zip
- 7. Click the TRANSFER button

NOTE: You will be asked to verify your email by **entering a code** sent to your email address.

- 8. Enter code and click "verify."
- 9. The uploaded files will be transferred to AVTAA.
- 10. You will receive an immediate email confirming files were transferred successfully. You will also receive an email when AVTAA downloads your files. Please keep both emails for reference.

Addendum A

AVTAA Definition of Anesthesia

In collaboration with a veterinarian, a VTS (Anesthesia & Analgesia) practice according to their expertise, state statutes or regulations, and institutional policy. VTS (Anesthesia & Analgesia) technicians administer anesthesia and anesthesia-related care in four general categories:

- (1) Pre-anesthetic preparation and evaluation
- (2) Anesthesia induction, maintenance and emergence
- (3) Post-anesthesia care
- (4) Anesthetic equipment maintenance.

A VTS (Anesthesia & Analgesia) technician scope of practice includes, but is not limited to, the following:

- (a) Performing and documenting a pre-anesthetic assessment and evaluation of the patient, including in collaboration with a veterinarian, requesting consultations and diagnostic studies, administering pre-anesthetic medications and fluids.
- (b) In collaboration with a veterinarian developing and implementing an anesthetic drug plan.
- (c) In collaboration with a veterinarian selecting and initiating the planned anesthetic technique which may include: general, regional, local anesthesia or intravenous injectables for maintenance of anesthesia.
- (d) In collaboration with a veterinarian selecting, obtaining, or administering the anesthetics, adjunct drugs, accessory drugs, and fluids necessary to manage the anesthetic, to maintain the patient's physiologic homeostasis, and to correct abnormal responses to the anesthesia or procedure.
- (e) In collaboration with a veterinarian selecting, applying, or inserting appropriate non-invasive and invasive monitoring modalities for collecting and interpreting patient physiological data.
- (f) Managing a patient's airway and pulmonary status using endotracheal intubation, mechanical ventilation, pharmacological support, respiratory therapy, and extubation.
- (g) Managing emergence and recovery from anesthesia by administering medications, fluids, or ventilatory support in order to maintain homeostasis, to provide relief from pain and anesthesia side effects, and to prevent or manage complications.
- (h) Releasing or discharging patients from a post-anesthesia care area. In collaboration with veterinarian providing post-anesthesia follow-up evaluation and care related to anesthesia side effects or complications. **NOTE:** This is not the same as discharging a patient from the hospital.
- (i) Assessing and managing an appropriate perioperative pain management protocol.
- (j) In collaboration with a veterinarian respond to emergency situations by providing airway management, administration of emergency fluids or drugs, or using basic or advanced cardiac life support techniques.
- (k) Inspect the anesthesia machine, endotracheal tubes and all other anesthesia equipment before and after use assuring that the anesthetic machine and all other equipment is in proper working order.

Addendum B

American Society of Anesthesiologists (ASA) Physical Status Scale

Class I

Minimal Risk

Normal healthy animal, no underlying disease

Working Definition: "Young, healthy patient for elective procedure"

Class II

Slight risk, minor disease present

Animal with slight to mild systemic disturbance, animal able to compensate

Examples: neonate or geriatric animals, obesity

Working Definition: "Healthy patient that needs a procedure"

Class III

Moderate risk, obvious disease present

Animal with moderate systemic disease or disturbances

Examples: anemia, moderate dehydration, fever, heart murmur, emaciation, compensated systemic

disease

Working Definition: "Systemic disease complicates anesthesia"

Class IV

High risk, significantly compromised by disease

Animals with preexisting systemic disease or disturbances of a severe nature

Examples: severe dehydration, shock, uremia, toxemia, high fever, uncompensated systemic disease

Working Definition: "Systemic disease jeopardizes anesthesia"

Class V

Extreme risk, moribund

Surgery often performed in desperation on animal with life threatening systemic disease

Examples: advanced systemic disease or condition (e.g. cardiac failure, renal failure, hepatic failure, cerebral insult, end stage endocrine disease, etc.), uncompensated shock, severe trauma, terminal malignancy or infection that is a constant threat to life.

Working Definition: "Patient will likely die with or without the procedure"

"E" denotes emergency and can be added to any of the above classes that require immediate intervention or surgery.

Addendum C

Professional History and Experience Example

Full Name:	GREAT TECH (First Name) (L	ast name)				
Email:	TECHATVETHOSPITA	AL@WORK.COM				
Phone:	123-456-7890					
Address:	123 MAIN STREET AN Street City	State Zip	TE 12345 USA Country			
Present Occupation/Titl	le: ANESTHESIA T	TECHNICIAN				
You provide anesthesia	primarily to: SMALL	ANIMAL				
Are you a graduate of a	n AVMA accredited veterin	nary technology progran	n? YES	NO 🔵		
School: BEST TECH S	SCHOOL IN COUNTRY	C	Fraduation Date: 1			
	3/5/2017 (onth/day/year		, i	/lonth/day/year		
	r VTS title: YES NO	 If yes, indicate year 	obtained:			
Repeat AVTAA Ap Pre-application: Complete Appli		If yes, indicate year(s) submitted:	Original Date of Credentialing (mm/dd/year)		
		AL	1234	4/1/2017		
List each state in v	-					
active license to pr as a veterinary tec						
INDICATE origin	nal date of credentialing	·				
Has your license ever la	apsed or been inactive?	YES 🔘	NO	0 •		
Explain:						
International Candidate	s: (List your current certific	cation(s) obtained and li	cense information	u)		
	For Credentials Committee use only:					
		REDENTIALED HO				
Total # of ANESTHESIA HOURS:						

LIST YOUR EMPLOYMENT HISTORY from 6/1/2019 till 6/1/2024

Primary Box 1: Work History from 6/1/2019 to 6/1/2020 Start Date: 6/1/2019 End Date: 6/1/2020

Name of Practice/Institution: BEST PRACTICE Type of Practice: Specialty/Referral

Supervisor name: Dr. BOSSY LADY Contact email: BOSSYLADY@BESTPRACTICE.COM

Regular hours worked per DAY: 10 (maximum of 2000 hr/year is accepted)

Number of days worked per week: 4 Number of weeks worked per year: 50 Number of days/week performing anesthesia: 4

Average hours of work day spent providing primary anesthesia care: 7

Primary Box 2: Work History from 6/1/2020 to 6/1/2021 Start Date: 6/1/2020 End Date: 6/1/2021

Name of Practice/Institution: BEST PRACTICE Type of Practice: Specialty/Referral

Supervisor name: Dr. BOSSY LADY Contact email: BOSSYLADY@BESTPRACTICE.COM

Regular hours worked per DAY: 10 (maximum of 2000 hr/year is accepted)

Number of days worked per week: 4 Number of weeks worked per year: 50 Number of days/week performing anesthesia: 4

Average hours of work day spent providing primary anesthesia care: 7

Primary Box 3: Work History from 6/1/2021 to 6/1/2022 Start Date: 6/1/2021 End Date: 6/1/2022

Name of Practice/Institution: BEST PRACTICE Type of Practice: Specialty/Referral

Supervisor name: Dr. BOSSY LADY Contact email: BOSSYLADY@BESTPRACTICE.COM

Regular hours worked per DAY: 10 (maximum of 2000 hr/year is accepted)

Number of days worked per week: 4 Number of weeks worked per year: 50 Number of days/week performing anesthesia: 4

Average hours of work day spent providing primary anesthesia care: 7

Primary Box 4: Work History from 6/1/2022 to 6/1/2023 Start Date: 6/1/2022 End Date: 2/15/2023

Name of Practice/Institution: BEST PRACTICE Type of Practice: Specialty/Referral

Supervisor name: Dr. BOSSY LADY Contact email: BOSSYLADY@BESTPRACTICE.COM

Regular hours worked per DAY: 10 (maximum of 2000 hr /year is accepted)

Number of days worked per week: 4 Number of weeks worked per year: 37 Number of days/week performing anesthesia: 4

Average hours of work day spent providing primary anesthesia care: 7

Primary Box 5: Work History from 6/1/2023 to 6/1/2024 Start Date: 6/1/2023 End Date: 6/1/2024

Name of Practice/Institution: GOTTANEWJOB Type of Practice: University Teaching Hospital

Supervisor name: Dr. SLEEPY Contact email: DRSLEEP@NEWJOB.COM

Regular hours worked per DAY: 8 Number of days worked per week: 5 Number of weeks worked per year: 50

(maximum of 2000 hr/year is accepted) Number of days/week performing anesthesia: 5

Average hours of work day spent providing primary anesthesia care: 7

The area below is for **SECONDARY POSITIONS** held during the same year as a primary job or a change of primary employment mid-year (btw June to June) for any of the 5 primary boxes.

Supplemental Box 1 Start Date: 2/20/2023 End Date: 6/1/2023

Name of Practice/Institution: GOTTANEWJOB Type of Practice: University Teaching Hospital

Supervisor name: DR. SLEEPY Contact email: DRSLEEP@NEWJOB.COM

Regular hours worked per DAY: 8 Number of days worked per week: 5 Number of weeks worked per year: 14 Number of days/week performing anesthesia: 5

Average hours of work day spent providing primary anesthesia care: 7

Supplemental Box 2 Start Date: End Date:

Name of Practice/Institution: Type of Practice:

Supervisor name: Contact email:

Regular hours worked per DAY: Number of days worked per week: Number of weeks worked per year:

(maximum of 2000 hrs. / year is accepted) Number of days/week performing anesthesia:

Average hours of work day spent providing primary anesthesia care:

Supplemental Box 3 Start Date: End Date:

Name of Practice/Institution: Type of Practice:

Supervisor name: Contact email:

Regular hours worked per DAY: Number of days worked per week: Number of weeks worked per year:

(maximum of 2000 hrs. / year is accepted).

Number of days/week performing anesthesia:

Average hours of work day spent providing primary anesthesia care:

History Addendum (ONLY use if employment has changed after June 1 2024)

Addendum Start Date: End Date:

Name of Practice/Institution: Type of Practice:

Supervisor name: Contact email:

Regular hours worked per DAY: Number of days worked per week: Number of weeks worked per year:

(maximum of 2000 hrs. / year is accepted) Number of days/week performing anesthesia:

Average hours of work day spent providing primary anesthesia care:

Addendum D

CE Form Example

Date(s) of Conference: 2/8/21 - 2/15/21

Name of conference, meeting, etc.: Western Veterinary Conference

Organization or Person providing the CE: WVC

Speaker Name	Credentials	Title of Presentation	Minutes
O.R. Thopedic	DACVS	Anesthetic Considerations for Thoracic Surgery	<u>60</u>
I.M. Edicine	<u>DACVIM</u>	Importance of Acid-Base and Electrolytes during Anesthesia	<u>50</u>
G.O. Tosleep	DAVCAA	Geriatric Anesthesia	<u>60</u>

Total Time 170 mins

Type of CE: National Meeting

All requirements MUST be met for CE hours to be accepted. Please ensure you have read the CE instructions BEFORE filling out the CE forms. Ensure a presenter meets the AVTAA credential requirements before including a lecture/lab on the CE form. The lecture title MUST show that it directly pertains to veterinary anesthesia, anesthesia case management or peri-operative analgesia. Review the application instruction packet for further information.

Addendum E

Case log Example

Case Log Applicant Number:

03/25/21 Case Log #: 31 Date:

Duration: 110 mins ASA Rating: IV Canine/Sheepdog

Weight: 43 kg Sex: M/C Age: 8y

Reason for anesthesia and diagnosis:

Exploratory Laparotomy for liver lobectomy. Hepatic mass identified via ultrasound; abdominocentesis revealed hemoabdomen. Patient presented lethargic, tachycardic and hypotensive. Stablized in ICU with Normosol-R and started whole blood transfusion prior to sx. Anemic at 23% (37-55), hypoalbuminemic at 1.9g/dL (2.3-4.0), PT/aPTT WNL

Facility where performed: Location 1

Equipment and monitoring methods:

Drager anes machine w/ ventilator, rebreathing wye circuit, 3L reservoir bag, laryngoscope, 11mm ET tube, 2nd venous catheter, arterial catheter, Hot Dog warmer, ECG, RR, MM, CRT, SpO2, ETCO2, BP (Doppler), IBP, temp, esophageal stethoscope, ISTAT, Bair Hugger, jugular catheter

Species/Breed

Summary of Care
Premed w/8.5mg mida & 4.4mg hydro IV. Induced w/ 110mg prop IV; connected to rebreathing circuit. Maintained on 2.5% Sevo in 100% O2. Norm-R started at 5mL/kg/hr, continued whole blood transfusion. Bradycardia (HR:40bpm) and hypotensive (SAP: 70mmHg) after induction.Gave 0.2mg glyco IV, anticholinergic, blocks ACH, expect incr in HR. HR did incr to 80bpm but no change in BP. Assessed depth and decr sevo to 2%, gave 5mL/kg Vetstarch bolus; ETCO2: 40-43mmHg. Moved to OR, started fentanyl CRI 0.1mcg/kg/min. Utilized hypotensive resuscitation till bleeding was controlled (MAP:55-60mmHg); Liver mass adhered to diaphragm, started vent at 12brpm w/ Vt 650mL. PCV 17%, TP: 3g/dL, started 2nd unit of whole blood. PaCO2: 45-47mmHg, PaO2: 320mmHg, no change made to vent. Incr rate of whole blood once bleeding was controlled, MAP incr btw 64-67mmHg for remainder of procedure. Extubated w/o complications, uneventful recovery, hypothermic (97.2F), place Bair hugger, temp WNL w/in 2hours.

Date: 06/15/21 ASA Rating: III Duration:230 mins

Species/Breed Feline/DSH

Weight: 3.9 kg Sex: F/S Age: 12v

Reason for anesthesia and diagnosis: CT, rhinoscopy and bulla osteotomy due to aural adenocarcinoma; slight head tilt with nystagmus and vestibular dysfunction noted during neuro exam. HR:160bpm, RR:24brpm, Temp:102 F, MM: pink, CRT: 2 sec, PCV: 32%, TP: 7.6g/dL, Glucose: 97mg/dL, Lactate: 0.9mmol/L. Heart ascultated WNL w/ no pulse deficits. Lungs ascultated WNL.

Facility where performed: Location 2

Equipment and monitoring methods:

Drager anes machine, Jackson Rees NRB circuit (FGF: 300mL/kg/min), 0.5L reservoir bag, laryngoscope, stylet, 4mm ET tube, Hot Dog warmer, Bair Hugger, ECG, SpO2, temp, esophageal stethoscope, BP (Doppler), MM, CRT, RR, ETCO2

Premed w/ 0.2mg hydro & 1mg midaz IV; robena 8mg SQ, induced w/ 8mg alfax IV, smooth induction. Connect to NRB circuit, maintained on 1.5% iso in 100% O2. IV LRS 3mL/kg/hr. Uneventful anes during CT & scope, SAP 90-100mmHg, HR130-140bpm, ETCO2 43-47mmHg; Moved to OR; started ket CRI at 10mcg/kg/min. Depth good for sx stim (medial ventral eye position, no palpebral, slight jaw tone); SAP incr to 120mmHg once sx started. Gave 8mcg fent bolus, started CRI at 0.1mcg/kg/min. ETCO2 35-38mmHg with spont vent. SAP incr to 140mmHg, HR incr to 230bpm, gave 8mcg fent bolus, incr fent CRI to 0.2mcg/kg/min; SAP incr to 180mmHg, attribute to pain, gave 1mcg/kg dexmed IV. HR decr to 110bpm, BP stayed elevated for 20min, then decr to 120mmHg (norm physiologic response for dexmed), decr Iso to 1% (dexmed MAC sparing). Good recovery, normothermic (100.2 F)

Case Log # Date: 08/25/21 33

ASA Rating: V F Duration: 260 mins

Species/Breed Equine/Quarter Horse

Weight: 597 kg Sex: M Age: 4v

Reason for anesthesia and diagnosis: Exploratory Laparotomy due to colic w/ 6 hour duration of onset. Patient depressed, sweating and extremely painful on presentation. Multiple doses of detomidine (10mg) admin along w/ flunixin meglumine (600mg). HR 76bpm, RR 34brpm, Temp 98F. Spontaneous nasogastric reflux observed from both nostrils. PCV 58% TP 7.4g/dL

Facility where performed: Secondary 1

Equipment and monitoring methods:

Anesco anes machine and ventilator, rebreathing wye circuit, gas analyzer, 26mm ET tube, ECG, IBP, ETCO2, ET ISO, CRT, MM, RR, ISTAT, PCV/TP, 2nd jugular catheter, arterial catheter placed in facial artery, Nasal gastric tube

Summary of Care

Agitated in induction stall. Premed w/ 300mg xyla & 10mg butor IV. Induced w/ 1400mg ket & 55mg diaz IV, induction slow but smooth. Connected to rebreathing circuit & maint on 2.5% iso in 100% O2. Started vent at 5brpm, Vt 4L, PIP 30cmH2O; IV LRS started at 20mL/kg/hr, placed NG tube. ETCO2 43mmHg, PaCO2 68mmHg, incr gradient likely d/t V/Q mismatch, PaO2 198mmHg; incr Vt 4.5L but PIP 40cmH20 so decr Vt to 4L & incr RR to 8bpm. Once abdomen open, incr Vt to 6L, PaCO2 decr to 55mmHg & PaO2 incr to 258mmHg. IBP indicated hypotension (MAP 55mmHg); started dobut CRI 1drop/sec (62.5mg dobut added to 250mL NaCl); used to incr myocardial contractility by stim beta-1 receptors. MAP maintained above 70mmHg for remainder of procedure. 1.5hr into sx, MAP incr to 98mmHg, depth adequate, 10mg butor admin for analgesia. Horse appeared in resp. distress after extubation, airway swollen, admin phenylephrine spray, placed 16mm ET tube in each nostril. Rope recovery uneventful

Addendum F

Skills List Example

Skills Instructions

- Select ONE of the following ways to describe each skill within the designated case log.
 - o Physiological effect the skill had on the patient
 - o Rationale for using the skill in the case
 - o Troubleshooting a problem or adverse event and what was done to solve the issue
 - o Role the skill played in the overall management of the case
 - o Set-up of equipment
 - o Information about performing skill

NOTE: Select the best option to describe each signed skill so that it fits within the contents of the case. The skill descriptions should NOT overshadow the information provided about the case.

- Only provide ONE case log per skill. The designated case log should be the BEST representation of that skill. If the
 skill is not described within the designated case log it will be rejected even if it is described elsewhere in the case
 logs.
- When asked, fill in additional information for skill on form.
 - Anesthesia phase refers to premedication, induction, maintenance or recovery.

		L.				
Small Animal Core Skills 90% mastery required (63 of 72)	Representative Case Log Number	Location Mastered				
Pharmacology						
Administer and describe the use of an inhalant anesthetic via precision vaporizer. Indicate inhalant: Isoflurane	32	Location 1				
Administer and describe the use of an anticholinergic. Indicate anesthesia phase drug was used: Maintenance	4	Location 1				
Administer and describe the use of a phenothiazine. Indicate anesthesia phase drug was used: Premedication	50	Secondary 1				
Administer and describe the use of a pure agonist opioid. Indicate anesthesia phase drug was used: Premedication	23	Secondary 1				
Administer and describe the use of an agonist/antagonist. Indicate anesthesia phase drug was used: Recovery	18	Location 2				
Administer and describe the use of a partial agonist opioid. Indicate anesthesia phase drug was used: Recovery	33	Location 1				
7. Administer and describe the use of an alpha-2 adrenergic agonist. Indicate anesthesia phase drug was used: Premedication	6	Location 1				
Administer and describe the use of a benzodiazepine. Indicate anesthesia phase drug was used: Induction	29	Location 1				

Addendum G

Case Report Example

Applicant #: 123456 March 9, 2020 Case Log #39 "Spot"

Patient Signalment: Feline-Domestic Shorthair, Spayed Female, 10yrs, 4.7kg

"Spot" presented to Location 1 on March 3rd with acute dyspnea.

Summary of patient's physical status on presentation

"Spot" had been at the referring veterinarian for two days after becoming acutely dyspneic. She was treated with supplemental oxygen, dexamethasone, cefovecin, penicillin, and enrofloxacin. She was placed in an oxygen cage set at 40% upon her arrival at Location 1. "Spot" rested comfortably with a mild increased respiratory effort while in oxygen, but became significantly more dyspneic when taken out. Her temperature, pulse, and respiration were 100.6°F (100.5-102.5), 188bpm (140-220), and 40brpm (20-30), respectively. She had decreased left cranial lung sounds, with no crackles or wheezes on auscultation. No other abnormalities were noted on physical exam. Thoracic radiographs, and computed tomography scan (CT) were performed at Location 1. She was treated with Normosol-R (Norm-R) at 8mL/hr, dexamethasone SP, albuterol, terbutaline, and ampicillin while waiting for imaging results. Thoracic radiographs and CT revealed severe atelectasis of the left cranial lung lobe. Additionally, CT revealed a cystic and mineralized left cranial lung lobe mass that invades the left mainstem bronchus, resulting in obstruction of the left caudal lobar bronchus. A nodule in the right caudal lung lobe and multiple smaller nodules throughout the other lung lobes are concerning of metastasis. Other findings on the radiology report included complex and cavitated nodules within the liver that are suggestive of metastatic neoplasia. "Spot's" bloodwork was fairly unremarkable. A complete blood count (CBC) and chemistry panel revealed (normal range values): decreased ALKP 12U/L (14-192) and hypochloremia at 112mmol/L (115-126). "Spot" clinically improved with initial treatment and her owner wanted to move forward with surgical excision of the entire left lung, however he wanted to give her more time to regain her strength and perform the procedure in the early part of the following week. During that time, "Spot" was eating well and was able to be removed from the oxygen cage with minimal increase in respiratory effort. "Spot" is current on vaccinations and has no history of other illness. Her only history of surgery was for her ovariohysterectomy as a kitten in 2007. Based on the findings from "Spot's" physical exam, blood work, and imaging results, I categorized her as an ASA physical status III.

Reason for anesthesia

"Spot" was anesthetized for a left lateral thoracotomy and left pneumonectomy. This would include excision of the left cranial lung lobe which was occupied by the primary cystic mass and the left caudal lung lobe which was obstructed. Surgery revealed multiple smaller pulmonary cystic masses in the remaining lung lobes. Intra-operative, a tumor embolus became lodged within the right primary bronchus creating an airway obstruction, which had to be surgically excised. Pathology later confirmed a primary bronchogenic carcinoma with metastasis to the liver.

Anticipated patient complications

- 1. Due to loss of negative pressure once the thoracic cavity is entered, controlled intermittent positive pressure ventilation (IPPV), either by manual or mechanical means, will be required.
- 2. Inappropriate ventilator settings leading to excessive inspiratory pressure (barotrauma) or volume (volutrauma) can impede venous return and cause a subsequent decrease in cardiac output.
- 3. Due to ventilation-perfusion mismatch the end tidal CO₂ may not be an accurate assessment of the partial pressure of CO₂ in the arterial blood during a lateral thoracotomy. Blood gas analysis should be used to assess ventilation.

- 4. Intrapulmonary dysfunction (atelectasis and bronchial obstruction) will impede proper lung inflation. Significant loss of functional lung capacity and development of ventilation to perfusion mismatch may result.
- 5. This patient is at greater risk for developing hypoxemia during induction due to loss of functional lung capacity.
 Preoxygenation will fill the functional residual capacity with a higher percentage of oxygen than room air and prolong the onset of hypoxemia.
- 6. Surgical manipulation can impede tidal volume by physically obstructing lung inflation, resulting in hypoventilation. Hypoventilation may also occur due to the depressant effects of the anesthetic agents, especially the volatile anesthetics.
- 7. Small patients are prone to hypothermia due to their large surface area to body mass ratio. The large area of shaved fur for this procedure will also contribute to hypothermia. An active heat source is always required during anesthesia.
- 8. Inhalant anesthesia causes dose dependent vasodilation and may induce or worsen hypotension. Prolonged hypotension leads to hypoperfusion of vital organs and can compromise organ function.
- 9. Thoracotomies are painful and require a multimodal approach to pain management both intra-operative and post-operative.

Anesthetic plan

I plan to give methadone 0.3mg/kg intravenously (IV) as a premedication. Methadone is a pure agonist opioid and provides analgesia for moderate to severe pain in a dose dependent manner. I will add a fentanyl continuous rate infusion (CRI) at a rate of 10mcg/kg/hr once in the operating room. Fentanyl is a pure agonist opioid commonly used as a CRI to provide analgesia and reduction of minimum alveolar concentration (MAC) of the inhalant. This will help minimize the hypotensive effects of the volatile anesthetic agent. Both opioids can cause bradycardia and respiratory depression in a dose dependent fashion. If tolerated, "Spot" will be preoxygenated using a facemask prior to induction for 3 to 5 minutes to help prolong clinical signs of hypoxemia. I will use ketamine 7mg/kg and midazolam 0.3mg/kg IV for induction titrated to effect. Ketamine is a dissociative anesthetic and also has analgesic properties through its action as an NMDA antagonist. Alone ketamine will cause muscle rigidity, so it will be combined with midazolam, a benzodiazepine, which will produce skeletal muscle relaxation. This drug combination should provide a smooth induction to allow for rapid intubation and expedite initial ventilatory support for this patient. Laryngospasm is commonly seen in cats and if significant can result in airway obstruction. To prevent laryngospasm, I will apply a drop of 2% lidocaine to each arytenoid prior to intubation. Oxygen via flow-by will be provided while waiting for the lidocaine to take effect. After induction the patient will be intubated and connected to a pediatric dual wye rebreathing circuit. A rebreathing circuit will be more economical by conserving volatile anesthetic and oxygen, retaining moisture, and minimizing hypothermia due to respiratory losses. The potential resistance in this system for a small patient will be overcome by positive pressure ventilation. I plan to use isoflurane (ISO) in 100% oxygen for maintenance. ISO has low blood solubility which can contribute to faster changes in anesthetic depth. ISO does cause dose dependent vasodilation and subsequent hypotension, so adjustments in concentration and other MAC reduction techniques will need to be considered if this patient becomes hypotensive under anesthesia. An intercostal block with bupivacaine will be performed on the caudal aspect of the 3rd, 4th, 5th and 6th rib due to the overlapping nerve supply. Bupivacaine is a local anesthetic with an onset of about 5-20 minutes and duration of 4 to 6 hours. Additional bupivacaine can be infiltrated through the chest tube post-operatively for continued analgesia and will be tracked to prevent exceeding the maximum dosage and subsequent toxicity of local anesthetic. Multimodal analgesia is provided using opioids, ketamine and local anesthetic and is superior to a single analgesic agent for this

type of procedure. Intra-operatively I will utilize Normosol-R (Norm-R) for maintenance fluid. Norm-R is an isotonic, balanced crystalloid solution that has a similar osmolarity and electrolyte composition when compared to extracellular fluid. I plan to administer Norm-R at 3mL/kg/hr which is the current recommended rate for cats, or 15mL/hr for this patient. An electrocardiogram (ECG) will be used to monitor heart rate and rhythm and will be compared to pulse palpation. My goal is for heart rate (HR) to remain between 120-150bpm. If bradycardia does occur, I will give glycopyrrolate at a dosage of 0.01mg/kg IV. Glycopyrrolate is an anticholinergic which blocks acetylcholine, causing an increase in HR. Blood pressure will be monitored invasively by placing an arterial catheter in the dorsal pedal artery and attaching it to a transducer that will provide information for systolic (SAP), diastolic (DAP) and mean (MAP) blood pressure. Placement of an arterial catheter will also allow for arterial blood gas analysis. A Doppler probe will be placed on the front metacarpal artery so the audible flow of blood can be heard and a pulse rate obtained. In the event the arterial catheter is unable to be placed, an occlusion cuff can be placed proximal to the Doppler probe to obtain the SAP. My goal is to maintain the MAP above 60mmHg and the SAP above 90mmHg to ensure adequate perfusion to vital organs. A dopamine CRI will be used to help combat hypotension during anesthesia. At a dosage of 4-10mcg/kg/min, dopamine stimulates beta-1 receptors and is a positive inotrope that will increase myocardial contractility. At 10mcg/kg/min, dopamine will activate alpha-1 receptors and cause peripheral vasoconstriction. Ventilation will be assessed by monitoring end-tidal carbon dioxide (ETCO₂) with the goal of keeping it between 35-45mmHg. Under anesthesia I want a rhythmic breathing pattern with a respiratory rate (RR) between 8 and 20 brpm. I will provide manual IPPV as needed until the patient is moved into the operating room and then connected to the mechanical ventilator. Care will be taken to avoid barotrauma by limiting the peak inspiratory pressure (PIP) to less than 20cmH₂O. Once the chest is open, the PIP and/or tidal volume may need adjusting to keep ETCO₂ within normal limits. Normal tidal volume is 10-15mL/kg. I calculated tidal volume at 10mL/kg or 50mL to start since the mass prevents ventilation of a significant portion of lung. I will set her RR at 12brpm and adjust from there, depending on the PIP and ETCO₂ measurements achieved. Increasing the RR or tidal volume on the ventilator will cause a decrease in ETCO₂. Capnography will be especially helpful in assessing the effectiveness of IPPV. Oxygen saturation (SpO₂) will be monitored using a pulse oximeter with an ideal reading of 99-100%. If desaturation occurs, positive end-expiratory pressure (PEEP) can be applied to increase alveolar volumes during exhalation which will minimize the continued collapse of alveoli as the ventilator cycles. This in turn will help improve oxygenation. Monitoring mucous membrane (MM) color and capillary refill time (CRT) will give a subjective measure of tissue perfusion. Jaw tone, eye position, and palpebral reflex will be monitored to assess patient depth. Body temperature will be monitored with an esophageal temperature probe. Ideally, the temperature should be above 99° F. Hypothermia will be counteracted by warming intravenous and lavage fluids and using a forced warm air blanket. This plan was made in collaboration with an anesthesiologist, who will provide support when needed through the peri-anesthetic period.

Anesthesia Care/Patient Support

The morning of surgery, "Spot's" temperature, pulse, and respiration were 100.6°F, 180bpm, and 28brpm, respectively. "Spot" had a 20 gauge IV catheter placed in the left cephalic vein and I gave 1.4mg of methadone IV. She was placed in sternal recumbency and preoxygenated with a facemask for 5 minutes prior to induction. At 10:31am, I induced her with 1.4mg midazolam and 32mg ketamine IV. I applied a drop of 2% lidocaine to each arytenoid, waited 30 seconds and then intubated her with a 4mm endotracheal (ET) tube. I connected her to a pediatric dual wye rebreathing circuit and administered 100% oxygen at 1L/min. I leak checked "Spot's" ET tube using a 3mL syringe and inflated the cuff with about 1mL of air. Immediately after induction I began manual IPPV at 4brpm to prevent further complications from the preexisting at electasis. I

turned the ISO vaporizer to 1%. During prep, "Spot" was spontaneously ventilating at 8brpm with an ETCO₂ of 39mmHg. I applied artificial tears to both eyes. An arterial catheter was aseptically placed in the right dorsal pedal artery. A baseline arterial blood gas was taken and yielded the following results: pH: 7.4, PaCO₂: 43mmHg, PaO₂: 238mmHg, HCO₃-: 20mEq/L, BE: 1mEq/L SaO₂: 97%. A Doppler probe and size 2 occlusion cuff was placed on the right forelimb. Initial HR was 178bpm with a Doppler reading of SAP 85mmHg. "Spot" was moved to the operating room (OR) and connected to monitoring equipment via a SurgiVet V9204 monitor. She was placed on top of a Bair Hugger for thermal support, and connected to a Hallowell EMC 2002 ventilator previously set up with pediatric bellows. Initial ventilator settings were tidal volume (V_T) 40mL, PIP 12cmH₂O, and RR 12brpm. SpO₂ readings ranged from 96%-100% and ETCO₂ 40-43mmHg. No adjustments to ventilation were warranted at this time. The arterial catheter was attached to the transducer but unfortunately would not flush. In the interest of time, it was decided to proceed with non-invasive BP using the Doppler rather than attempt to place another arterial catheter. The Norm-R was started at 15mL/hr and the fentanyl CRI was started at 10mcg/kg/hr. "Spot's" SAP decreased to 65mmHg after transport to the OR, so I started a dopamine CRI at 6mcg/kg/min to increase myocardial contractility. The dopamine CRI was made by adding 12mg (0.3mL) dopamine to 11.7mL saline in a 12mL syringe to create a 1mg/mL solution and then administered by using a programmable syringe pump. The rate was 1.69mL/hr. The SAP did not increase above 80mmHg over the course of 20 minutes, so I increased the dopamine CRI to 10mcg/kg/min. This increased the SAP to 85-90mmHg. An intercostal block was performed on the caudal aspect of the 3rd, 4th, 5th and 6th rib using 0.4mL(2mg) bupivacaine at each injection site. Surgery began at 11:29am. Once the chest was open, I had to increase the tidal volume to 60mL and the PIP to 16cmH₂O to maintain ETCO₂ at 40mmHg. The SAP increased to 126mmHg. Depth appeared adequate with a ventral medial eye position, no palpebral response and loose jaw tone and no other vital parameter indicated nociceptive stimulation so I decreased the dopamine CRI to 7mcg/kg/min. Around 12:00pm, I noticed a change in the capnograph that showed a diminishing waveform until it ceased. The ventilator was functioning and did not have any indication of a leak. PIP was still being produced, but still no waveform on the capnograph. I switched the patient to manual IPPV to get a feel for the lung compliance and found great resistance in the circuit. I suspected "Spot" had an airway obstruction. I turned the vaporizer off and called the anesthesiologist for assistance. She held the drapes up so that I could exchange ET tubes. The original tube had a mucus plug in the distal end. We felt we had found the obstruction; however we were still unable to elicit a waveform on the capnograph. The pulse oximeter probe was off during the exchange of ET tubes and when I replaced it the SpO₂ was 78% and her MM were cyanotic. Since she was already in a state of respiratory arrest, I pulled up emergency drugs to have available as I felt that a cardiac arrest was imminent. This included a 0.01mg/kg dosage of epinephrine and 0.02mg/kg dosage of atropine. At 12:07pm, I gave 50mcg fentanyl IV bolus to keep the patient comfortable while the vaporizer was turned off, but surgery was still occurring. The HR made a steady decline from 152bpm to 104bpm during the time the obstruction was present. I continued attempts to ventilate without much success, so the anesthesiologist instructed me to give a breath up to 30cmH₂O in an effort to dislodge the obstruction. There was still no change. I connected a red rubber catheter to the suction unit and passed it down the ET tube. That produced an ETCO₂ reading of 33mmHg on the monitor and the MM color changed to pale purple. I continued to manually ventilate and suction the ET tube despite no improvement to oxygen saturation. "Spot's" pupils became dilated and her eye position changed from ventro-medial to central due to CNS depression likely caused by hypoxemia and hypercapnia. The pulse oximeter continued to give readings around 80%. Around 12:30pm, the surgeon had located a tumor embolus in the right primary bronchus and was able to remove it. There was an immediate change in "Spot's" condition. The ETCO₂ spiked to 78mmHg, the pulse oximeter returned to 98% and MM color returned to pink. The ventilator was started again at a V_T 60mL, PIP 12cmH₂0, RR 20brpm to help decrease the ETCO₂ to around 40-45mmHg. A lingual arterial stick was obtained and provided these results for a mixed sample: pH: 7.2, PaCO₂: 86mmHg, PaO₂: 108mmHg, HCO₃: 18mEq/L, BE: - 1mEq/L SaO₂: 83%. I turned the ISO back on to 1% now that gas exchange was occurring. Throughout the desaturation episode the SAP remained above 90mmHg so the dopamine CRI was maintained at 7mcg/kg/min. At 12:45pm, I tried to decrease the RR to 12brpm but that resulted in the pulse oximeter reading decreasing to 73%. Concerned for atelectasis in the previously functioning lung lobes, I decided to add 5cmH₂0 PEEP to the circuit. PEEP allows for recruitment of collapsed alveoli and reduces ventilator induced lung injury. During this time the PIP was about 18cmH₂O. Oxygen saturation improved with SpO₂ increasing back to 98%. The remainder of the procedure was uneventful. A chest tube was placed prior to closing the thoracic cavity to help return the pleural space slowly back to negative pressure over time. Rapid return to negative pressure can lead to re-expansion pulmonary edema. Mechanical ventilation was stopped at 1:00pm and "Spot" immediately began spontaneously breathing. During the ET tube exchange and manipulation from attempts to clear the obstruction I had observed that "Spot's" larynyx was reddened and did produce small amounts of blood. Per the anesthesiologist, I administered 0.44mg dexamethasone SP IV for inflammation.

Post anesthesia recovery

"Spot" was extubated 8 minutes after turning the ISO off and it was discovered that another mucus plug was present in the ET tube. I administered oxygen by flow-by with the flow meter on 4L/min. Post-extubation vitals were Temp: 97.6°F, HR: 180bpm, RR: 24brpm, and SAP: 95mmHg. I recovered "Spot" in the oxygen cage with a Hot Dog blanket and wrapped her in warm towels. The fentanyl CRI was decreased to 5mcg/kg/hr. I reapplied artificial tears to both of her eyes, which were still central and dilated. A primary concern post-operative is the long-term effects of cerebral hypoxia which could lead to blindness. I attempted to get another reading from a pulse oximeter but was unable to due to patient movement. Her MM remained pink and CRT was about 1 second. I drew blood from the medial saphenous vein to check blood lactate levels. The results indicated hyperlactatemia at 4.2mmol/L (< 2mmol/L), consistent with her recent episode of hypoperfusion and hypoxemia. Lactate levels rise in response to lactic acidosis produced by anaerobic metabolism, secondary to decreased tissue perfusion and hypoxia. Treatment includes fluid therapy and oxygen supplementation. As the hypoperfusion and hypoxia are corrected, blood lactate levels should start to decrease. Assessing "Spot's" pain level in recovery was difficult since she appeared mentally altered. Using the Feline Grimace Scale, I gave her a pain score of 3 which indicated that no further analgesia is needed at this time. Orders were left with ICU to infiltrate bupivacaine into the chest tube every four to six hours to alleviate discomfort from movement and breathing. She will continue to have her pain score monitored to adjust the analgesic plan, if needed, as well as serial lactate samples every 6 hours until normal.

Case Reflections

It was unfortunate that the arterial catheter was not patent once the patient was moved into the OR. An arterial catheter attached to a transducer is the most accurate measurement for blood pressure and would have provided real time information during the obstruction. An arterial catheter would have also allowed for regular blood gas samples that would help guide management decisions for proper ventilation. Although the Doppler continued to read SAP values above 90mmHg we knew that blood flow to the brain was compromised and therefore leading to cerebral hypoperfusion. "Spot" recovered well after spending 5 days in the ICU and did not appear to have any long-lasting consequences associated with the events during the surgical procedure.

Addendum H

Anesthesia Record Example

