The Aerial Rope Manual
Volume 2
A step-by-step reference guide for teachers and students of any vertical arts programming

Rebekah Leach
with Alex Allan, Allie Cooper, Constance Echo Palmer and Rain Anya
When practicing aerial rope, always perform warm up exercises before attempting any individual exercises. Also, when practicing aerial rope, always do so in the presence of a trained professional, with load-tested aerial equipment hanging from load-tested rigging, which has been set-up and inspected frequently by rigging professionals, along with crash pads underneath the hoop. It is recommended that you check with your doctor or healthcare provider before commencing any exercise program, especially one as rigorous as aerial hoop.

Whilst every care has been taken in the preparation of this material, there is a real chance of injury in execution of the movements described in this book. The Publisher and all persons involved in the making of this manual will not accept responsibility for injury to any degree, including death, to any person as a result of participation in the activities described in this manual. Purchase or use of this document constitutes agreement to this effect. Furthermore, rigging of aerial equipment is not discussed in this manual. Consult a professional rigger when it comes to using any hanging equipment.
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Welcome to another grand adventure in the aerial arts. This book has been four years in the making and it feels good to see it to completion! For many, this book marks the beginning of the advanced rope journey. For others, this book is the place where rope starts. Volume 1 covered the basics of foundational skills of any vertical apparatus: some of the highlights were footlocks, climbs, hip key and beginning inversion movement and wraps (same-side, opposite-side, s-wraps, beginning ankle hangs, etc). This volume picks up with more foundational skills. However the foundational skills in this book are harder, so I like to think of them rather as “building blocks.” The goal of this manual series is to clearly describe, connect, and apply the building blocks of rope. The skills can also transfer to other apparatuses, especially that of silks.

About This Book

Chapter One introduces more building blocks of rope that are generally harder than what was found in Volume 1. Chapter Two connects pathways between all the building blocks that were covered in Chapter One. Chapter Three is dedicated to seatbelts, which are a type of hitch around the thigh. Chapter Four summarizes the findings of chapter three and adds to them with putting together a ton of information about all the major hitches. Since some classic hitches such as ankle and knee hitches were introduced in Volume 1, this chapter focuses mostly on the hitches around the thigh and waist. A large goal of the chapter is to provide a language with which to speak about any hitch.

Chapter Five takes on a different direction all together, closing out the book with an introduction to momentum. In the words of one aerial teacher, this chapter is “worth rubies, diamonds and gold on its own.” It contains all the foundational ideas that can then be applied to create your own momentum sequences into all the building blocks that have been covered thus far.

Born to Fly Resources: AerialDancing.com for Videos of Moves

A resource available right from the comfort of your own home is found at AerialDancing.com. With a paying subscription you can access all of the moves in this book demonstrated through video by industry experts. If you’re a visual learner or if anything is not quite clear through pictures alone, you will appreciate seeing the move in live action. So log on and check it out!

Live Trainings

These books are designed to be a supplemental resource for teachers and students. You can further support the artists in these manuals by training with them directly. Find workshops and more information on the website: www.BorntoFlyAerial.com.
Terminology

As any teacher knows (and students really appreciate), it’s helpful to develop a consistent vocabulary so that communication can happen effectively. There are some terms that will be used heavily in this manual, so get comfortable with these before you dive in to the rest of the book:

Pole Versus Tail
Some in the aerial industry call these the live end versus dead end. I really like having a tail, so I use pole and tail. The pole is the taut rope above the body. The tail is what’s hanging loose below.

Base Leg Versus Free Leg
In this manual, you will often read instructions that refer to the base or free leg. The base leg always refers to what is most tied up in the wrap. If both legs are tied up, then the more-trapped leg wins. For example, the bottom leg in hip key is the base leg. In the same-side knee hook on the previous page, the base leg would be the right leg because it is most caught up in the wrap. The free leg would be the left leg since there is no wrap currently around it.

To Hook the Knee
I’d be curious to see what you do if I gave you the instruction “hook your knee” on the rope. From standing on the ground there are at least 8 ways to hook a leg, depending on how you count. There are only two ways the actual knee hook happens above the hands: regular and reverse. The other descriptions are based on where the tail is located under the hands. The regular knee hooking is the most common (pictured on the previous page). You can perform this knee hook with the tail in any number of places: on the same-side of your body, the opposite-side of your body; or you can invert with the rope between the legs or even over the shoulder. All these ways minus the last one were covered in Volume 1.

This Volume covers reverse knee hooking. Like the name suggests, the direction of the hook is reversed. Inside of hooking over the hands with the tail on the inside of the knee, the knee is hooked from the opposite direction, causing the tail to land on the side that is on the outer part of the knee while the inside of the leg faces the pole.

Find more information about the reverse knee hook in chapter one. The key thing we need to highlight here is that if you read the instruction “hook the knee” it assumes a regular hook of the knee unless stated otherwise.

To Block
A block refers to a limb that is pressing into the apparatus preventing a fall. Often, on rope, a block is a flexed foot up on the rope (not wrapped, just blocking some weight of the body). Some circles of aerialists refer to this flexed foot as a flag. However, in the Born to Fly Curriculum, we use the term flag to refer to when the arms are holding and the body is out at an angle, flying in the wind.

Inside Versus Outside
Inside and outside are going to be terms that you might get sick of because they are everywhere in this manual! By the end of this manual, you should have a complete understanding of what these terms mean. For consistency’s sake, we did our best to have these words have the same meaning every time. An inside move is when the tail is traveling along the inside of the torso. An outside move is when the tail is traveling around the outside of the torso (along the backside). Typically, you can easily switch from an inside to an outside move by flipping where the tail is located. However, sometimes this is not easily done. It depends on the move. The fun part is seeing how the inside moves connect to one another and vice versa. This culminates in chapter four, when we cover hitches.
We covered basic building blocks in The Aerial Rope Manual Volume 1. It is important that the information in Volume 1 has been studied and that the material in this manual is being built upon a strong foundation. That foundation includes but is not limited to: inversions, climbs, opposite and same side wraps (OS and SS), s-wraps, and moves that are derived from these. For the purposes of this manual, it will be assumed the reader is an expert at everything that was covered previously in Volume 1.

In this chapter we pick up with some new foundational material. Just because skills are foundational does not mean they are easy! This is why they are known as the “advanced building blocks.” This chapter will include moves such as front balance, back balance, break beat, shoefly and meathooks. While we covered hip key in Volume 1, hip key is such an advanced move in its entirety, we are covering it again in a new light. In this chapter, you will also find Amazon. This is an advanced progression of the ‘round the back material that was also covered in Volume 1. Chapter 2 will focus on the transitions between all these positions.
**Front Balance**

**Prerequisite(s):**
grip strength, 
SS wrap (Vol1)

**About this move:** Volume 3 will include moves such as rolling up the rope and other maneuvers that will be impossible without the foundation of training that should be mastered here. An important part of rolling is understanding the different positions that a body passes through as it rolls. This has become widely known as “c-shaping.” Front and back balance are two very important “c-shapes.”

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**Practice Thumb-up and Thumb-down**

Thumb-up front balance is useful for dynamic transitions in the air, but it can take some practice. It is possible to get a straight arm position here, just like on thumb-down, but it can take some time to build up strength. Try to keep the wrist in a neutral position & avoid too much buckling—with practice it will get stronger!

**Entry from the Ground**

**Steps 1-4:** Stand on the ground with one hand around head height and one hand around hip height (thumb-down). Post the lower hand below the hip as you transfer your weight into the rope. Take your second leg up, passing behind the pole. Fold over the rope. Next, perform the same exercise with the thumb up (photo 4).

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**Entry from SS Knee Hook** (note: an OS knee hook gets you here too)

**Steps 1-2:** From a same-side (SS) knee hook, release the same hand as hooked knee to grab the tail. Bring the tail up towards the ceiling and set a post (with thumb up) with a straight, strong arm. This creates a shelf for the bent leg to transfer onto. Only transfer if you have the rope set cleanly at the hip crease. If the hips sink, the rope will be at the thigh. (In this case, don’t try to transfer the weight. Exit and start over.)

**Steps 3-4:** Once you have established this strong shelf with the first leg forward in a pike, the next task is to bring the second leg behind the pole to join the shelf. When the second leg is there, gradually release the top hand and reach overhead. Keep the posted arm straight and strong throughout this entire process.

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**Recall from Vol1: Post means to hold the tail with a straight arm.**

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**Technique Notes for Beginning Front Balance (from the ground)**

Similar to a hip key, the friction of the bight (the bend in the rope) in front balance is stronger once your head and torso are tilted downward. Starting with the top hand too high can make it hard to find enough tilt. Slide the top hand down and tilt the torso. Trust your position. It will actually feel stronger once you are comfortable letting the top hand release. Extend it towards the ground, assisting gravity and increasing the bight of the rope.

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**Names**

In this manual, you will see front balance often referred to as ball. Technically, “ball” is when you bend the legs in a front balance.
Back Balance

Prerequisite(s):
- strong one arm grip strength,
- core strength

About this move: The back balance is one of the “c’s” in c-shaping technique. This shape will become important as you move forward in your corde lisse journey. C-shaping is the prerequisite to learning roll-ups and other quintessential rope moves. It is vital that proper technique is established from the beginning. More on c-shaping technique will be covered in Volume 3.

SS Knee Hook into Back Balance

Steps 1-3: From a same-side (SS) knee hook, post your bottom hand on the rope. Straighten your top leg and sickle your foot so that it temporarily blocks on the rope. Square your hips to the ceiling. You won’t necessarily stay there, but try to keep as much of this rotation as you proceed. Keep the posted arm straight and externally rotated. Keep your hand in front of your hips. (Don’t let it slide under or behind you). The rope should remain low on the back, at the sacrum.

Spotters: The spotter can hold the tail up towards the ceiling as the student makes her initial attempts to get a feel for the position.

Step 4: Gradually let the top leg off the rope. Think of this leg as being heavy towards the wall behind you as it releases. Both legs should be extending back through the glute and hamstring engagement. (Some students will tend to keep the bottom leg externally rotated which will make the body want to topple out.)

Steps 5-7: Gradually release the grip of the top hand and slide it down the rope. Slide it down the rope to your hips and then let go until you have just one finger on and feel comfortable to proceed. Press the top shoulder down and back. Reach overhead. The top arm is rotated internally, palm away from the face. Reach through the shoulder, making the arm as long as possible to counterweight the legs. This about the spinal rotation to turn the sternum to the ceiling and look up.

“I have found that, in addition to the top leg heavy, also making sure that the weight of the head is also heavy and back (without just hanging back) is also important. For non-back-flexible aerialists, extending a bit through the upper back and letting the head, arm, and leg help pull into balance. Depending on the body proportions and flexibility factors, just letting the leg be heavy will pull the student upright. So it’s a balance of head, arm, leg.”

- Aerial Coach Amanda Goble

“I find that students have an easier time with a straight supporting arm but some people don’t have the strength to hold that and it buckles. The other option is to keep the arm bent at the elbow and block the hand on the hip bone ASIS.”

-Alex Allan
Single Star Wrap for Back Balance Training

**Step 1:** Wrap for a single star (covered in Volume 1).

**Step 2:** Place the sickled foot of the inside leg up on the pole. Work on keeping the hips square to the ceiling and having the body remain horizontal for the duration of the exercise.

**Step 3:** Gradually release the top leg as you maintain the position of the hips. The hips will rotate in the transverse plane (see pg 83), but fight to keep the outside hip lifting upwards. Press on the pole with the top hand. This can help assist you to keep the legs lifted. Aim for having the top leg in line with the torso.

**Step 4:** Gradually slide the hand down the pole and bring it up overhead.

Other Exercises

1) In Vol1, we practiced a similar exercise from a same-side (SS) wrap where the leg was wrapped three times. You can practice finding your back balance position from that wrap.

2) Another exercise that Molly Graves suggests for training back balance is to hold a light weight in the free hand that is extended long towards the horizon. This helps find and practice the upwards rotation of the body.

Notice all the key points of technique demonstrated in photo 4 above: The top armpit is open to the ceiling. The palm faces up as the rotation of the body is that of desiring to roll up. The hips are open as much as possible and the top leg is in line/balanced with the opposite shoulder. The rope is at the sacrum and head is looking up.
Common Mistakes to Avoid

Mistake #1: Piking too early.
Students try to anticipate the pike by throwing their feet up and their head back. This is why it's good to teach the lower body habits before adding on too much with the upper half. The key to training momentum in the early stages is to let the hips drop to their lowest point and let the legs do most of the swinging. Another reason that students may enter this bad habit is due to lack of flexibility in the hamstrings. Make sure to stretch those bad boys and keep them supple to allow for an easy swing into pike.

Technique Tips: During the back-beat, reach for full extension of the body that does not require over-bending of the spine, nor bending of the legs. The shoulders and hips are open. The legs are straight and nearly parallel to the ground. Molly Graves likes to use the cue "nose to the rope" to prevent students from pushing back through the shoulders too much.
Acknowledgments

Some of the earlier video and photography for this book were taken at Circus Building, owned by Jordan Anderson and Clayton Woodson. We filmed Allie Cooper and Rain Anya at their studio in Charleston, South Carolina.

Then my family (husband, two kids) moved to Castle Rock, Colorado. We settled down here and opened our first full-time aerial training facility. Of course, we placed a set-up just for photography at the studio. That way, we can continue to make more books like this. If you have ever purchased a book prior to 2016, you have contributed to the finances that helped open our local studio, and I am very grateful! We love our studio.

Constance Echo Palmer of The Space in Atlanta, GA contacted me last summer and said, “Hey, I’m coming to visit you. Let’s work on the next rope book, shall we?” I had set aside the rope book because I haven’t been in the best shape after kid number two came into my life, but I was excited to have someone to help, so I responded with a resounding, “Sure! Let’s do it!” At the same time, Alex Allan was planning a tour across the country and decided to make a stop at AerialWorks (my studio) as well. Between him and Connie, my motivation were sky-high and that’s why this project turned into the creation of three rope books instead of just the original two that were planned. And why this book is coming out years earlier than I had anticipated. And why I’m actually in decent shape now.

I am also grateful to a host of other aerialists who also contributed to lending their time to review this book. Among those who helped edit and contribute ideas to this book are: Alex Allan, Lorraine Bruce-Allen, Constance Echo Palmer, Amanda Goble, and Molly Graves.

Last but not least, I must always mention my amazingly supportive husband, Matthew Leach. He helped contribute the equations to the section on the physics of momentum and wrote half of that section. He also works daily on shipping out books, making sure everyone gets the downloads they ordered, squaring away accounts on AerialDancing.com, working with our awesome affiliates who also sell our manuals, and more. He has helped this book arrive in your hands in one way or another. :)

Reminder: Access Video Content Through AerialDancing.com

Some of the moves in this book can be hard to follow through pictures and words alone. If seeing live action would help you understand the dynamics of the movement, consider a membership to AerialDancing.com. There, you will find all of the moves from this book (and others!) in video form. Ask questions, take part in a discussion, browse articles, find resources, and be a part of a supportive environment to encourage you along your aerial journey. See you there!
About the Author

**Rebekah Jean Leach** has been dancing for over three decades now. Dancing led to aerial while Rebekah was studying Mathematics at Cal Poly San Luis Obispo. She was discovered through MySpace (I know, times have changed, right?!) by Aerial Experience to perform on numerous shows and tours across the country. She also worked with Daughter of Zion Aerial Dance Theater. Her experiences led her to teaching, which led to the opening of her first studio in Ojai, California in 2008. It was a small studio out of her home; it was a place to grow, learn and explore the new world of aerial (before the rise of YouTube, Instagram, Life as We Know It, etc).

Rebekah’s life took twists and turns, including service in the United States Navy from 2010-2018, where she was a Master Training Specialist in the area of Nuclear Physics. Now, Rebekah continues her love of puzzles and brain workouts through the study of aerial theory and documenting the findings of her research. She opened AerialWorks in Castle Rock, CO, in 2016. Funds from previous books helped make this dream a reality. This is her tenth book on the aerial arts.

*Rebekah currently resides in Castle Rock, Colorado with husband and two beautiful children. She teaches weekly aerial classes at AerialWorks.*

About the Rope Models

**Rain Anya** holds a degree in “Performance for Social Change.” She has trained extensively in aerial arts and physical theatre, including immersive programs such as Circomedia (Bristol, UK), NECCA (Brattleboro, VT), and Circle in the Square (NYC, NY). Rain is the co-artistic Director of the internationally based aerial company Paper Doll Militia, who’s innovative approach to choreography and poignant use of theatricality have gained the company the reputation of being pioneers in original aerial theatre. With over two decades of experience onstage, Rain’s life’s work is in the integration of circus arts with other performance and movement disciplines. Notable credits include: Fog Fest (San Francisco); London-based Peter Pan, (US tour), This Twisted Tale (U.S. Tour and Edinburgh Fringe Festival), Chicago Contemporary Circus Festival, New Orleans Fringe Festival, Moisture Festival (Seattle), Manipulate Visual Theatre Festival (Edinburgh, UK), Exposed (Atlanta), LoopsEnd (UK Tour), Revolutions Festival (Albuquerque) & Vault Festival (London). Rain travels around the world teaching Paper Doll Militia specialty workshops, teacher trainings, and aerial retreats (Greece & Mexico). When she’s not on the road, Rain is either hanging out with her husband Paul or offering private lessons out of her East LA home studio.
Allie Cooper began learning the fundamentals of aerial work in Santa Cruz, California in 2008. Her style has evolved to utilize momentum and natural pathways and to embrace functionality with her work on aerial rope and fabric. She has worked closely with Kevin O’Connor and she has supplemented her training with a study of the movement theory Axis Syllabus. Allie has performed and taught across the United States, Europe, Central America, and Asia, having had the opportunity to collaborate with the Invisible Circus in Bristol, UK as well as Quixotic Fusion. Allie received a CREATE Grant from the Santa Cruz Arts Council and presented her first full-length dance and circus show, Aurora, in 2014. She co-directed Eos (December 2015) and dis/connected (May 2017) with Rose Calucchia and excerpts have been performed in Atlanta, Costa Rica, and San Francisco. Allie is co-owner of the Radical Movement Factory and an Artistic Director of Aeraflux.

Alex Allan moved from Sydney Australia to San Francisco in 2009 to attend the Circus Center’s Professional Aerial program where he specialized in Corde Lisse and Swinging Trapeze. Since the completion of his training Alex has performed and taught workshops across the U.S.A., Canada, Mexico, Cambodia, Australia, New Zealand and England. With his comprehensive background of dance, circus and theatre creation, Alex has created a unique style of movement and presence on the rope. Whether coaching or onstage, Alex utilizes directionality and momentum-based movement to create choreography that is both fluid and dynamic.

Constance Echo Palmer is a dancer and aerialist that specializes in vertical apparatus, specifically split tissu, corde lisse, and double corde. She is also versed in partnering on bars and vertical apparatus. Born in Germany, Constance Echo Palmer began dancing at a very young age. Upon moving to the United States in 1999 she continued her dance training until she went to University where she obtained a B.S. in Biology from Oglethorpe University. In her time away from dance she began work as a Magician’s assistant at which time she developed her craft of fire performance, beginning with fire eating and eventually moving on to object manipulation and fire breathing. Her love of circus had been sparked forever! In 2008 she discovered pole dancing which led her to explore other apparatuses including silks and rope. In 2014 Constance founded The Space: A Movement Arts Studio, where she teaches dance and aerial arts, as well as hosts workshops and special events.