

Decorating Tips for Your

Boat

The Basics

DECORATIONS:

o Both sides of the boat must be decorated the same

• THEME:

- The 2018 Parade Theme is "Best of the 80s"
- Get your friends and family together to discuss theme ideas and remember music, props and skits – everyone is a star in the Parade

• DECORATING TIP:

- Use a pattern / coroplast / foam board / bead board /corrugated plastic sheets/Styrofoam, etc. for your designs
 - draw on coroplast your designs, paint and outline in rope lighting



Figure 1: Photo Courtesy of Deco Productions

HELPFUL HITS:

- o (HINT): DO NOT USE SPRAY PAINT on foam. It will dissolve
- Acrylic Paint is best or vinyl
- If you work with a sign company they can help create your designs (SAMPLE using a projector to help outline characters, images for your boards)

How to Set Up Your Lights

Tip: Punch holes for placing lights or staple rope lighting. You will have to figure out the placement of the lights...A 50 light string or 100 light string. Space them so you have enough to go around the figure as desired. You can always tie up the extra in the back... just make sure you are not short. You can use a screw driver to punch holes in the foam.

- TEST THE LIGHTS AND HOW VISIBLE THE LIGHTS ARE AT NIGHT
- ATTACHING THE DECORATIONS TO THE BOAT:
 - Use plastic tie wraps for the figures and lights.
- ATTACHING THE FIGURES AND LIGHTS TO THE BOAT
 - Tie the corners and anywhere else it matches a rail to secure it. Be careful remember wind can move objects – use the plastic tie wraps in all corners of the foam board.
- VIDEO TIPS: Winterfest's own decorating playlist can be found on YouTube. Click the black box below to watch our video



Figure 3: Decorating Seminar at Sixth Star



Figure 2: Diana Reed's Tips from WSVN



Figure 4: Two Men and a Truck Entry 2014

Please remember costumes, fabrics and spotlights to enhance your decorations! And Don't forget your hull – use glittery mylar curtains.

Tips from Award Winning Winterfest Decorators & Boaters

• Rob Kornahrens:

Have a checklist. A sample list for the parade would include:

- ✓ Meet with friends and family to discuss theme ideas make sure music can be incorporated into your theme.
- ✓ Plan your design with your boat in mind. A sailboat and a powerboat need two different designs.
- ✓ List your materials: Rope lighting, coroplast, and zip ties
- ✓ Schedule your time

Britt Lanier:

"I feel the most important and the hardest part is in the planning. Each year depending on the theme of the Parade, we come up with a concept. Usually, a vision 'pops' in my head quickly, but I find it really develops when it's laid out on paper. Sometimes, this may only be a quick sketch. This past year, we were working with a new boat, so I worked with the help of a few JPEGS and a PowerPoint. Once the concept is laid out, it's just a matter of finding materials and hundreds of 'Zip Ties'. Then we gather a group of family, friends and employees put in a few days of work and concentrate on having a lot of fun."

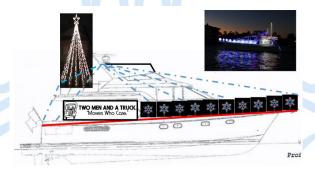


Figure 5: Photo Courtesy of Two Men and a Truck

Scott McIlvaine:

First thin	ng starts	with a	Winter	fest	theme.	Take	that	idea	and	build	from	it	to	come	up
with your	own them	e withir	n the t	heme.											

- \Box Get ideas from your family and friends, google for more ideas, but make sure that whatever you come up with you have the resources to pull it off.
- ☐ Keep in mind that the lighting, sound and any decorations need to be clearly visible from 100 feet away at night. They need to be able to withstand possible rain and high winds.
- □ Safety should be a main concern as you develop your ideas and your decorations. Envision yourself at the helm, navigating at night with possible rain and wind. You must have clear visibility and maneuverability during the course of the parade.

□ Plan early and allow yourself several weeks to get all that together so that you're not rushing at the last minute. This process takes time to do it right, start early and you'll be very pleased with the outcome.

Katie Walters, DECO Productions, Inc.:

"Make your designs are as large as can fit your boat so that it can be seen clearly from the shore."

Doug Jones, from Sixth Star Entertainment, Inc., Wants to Ensure that You:

Ш	Measure your boat to determine where your signage, lights, and props will fit.
	Note that props and signs that are not lit will not be seen.
	Use LED lights whenever possible.
	Make sure to overdo it if you are planning on overdoing it with lights.
	Identify your "hang points" on the sides of boats
	Make Signs
	Can use twinkle lights or C7 lights then pop them thru corrugated plastic (See Pictures)
	 It is a quick, easy and cost-effective way to create signage
	Trace or print letters or images onto corrugated plastic and then outline them with rope light (See
	Pictures)
	Understand that it is best to use a drill and small zip ties
	Know that corrugated plastic is available at Home Depot and in larger quantizes locally from E&T
	Plastics
	 https://shop.e-tplastics.com/landing/florida-lauderdale-branch.aspx
	Know that mylar floral sheeting can be used to enhanceit is available online from several
	different vendors
	o https://www.victorycorps.com/
	 Party City, Shindigz, and Wal-Mart also offer this online
	For added support, you can use PVC piping or wood to enhance the stability of your signs.
	Attach your wires and extension cords to the railingnever lying on the deck
	Use sandwich bags to protect plugs and connections
	Always have the opening of the plastic bag down and zip tied closed
	Understand that a good sound system and handpicked music is a detail that makes a big difference!
	Always include Costumes and Propsmake sure to light the area!









Photos Courtesy of Sixth Star Entertainment, Inc.

See Last Page of Manual for Decorating Videos

Additional decorating tips from a story on Boat US website:

Look at your boat and build on its strengths," says Pete Chambliss, Chief Elf (yes, really) of the Eastport Yacht Club Lights Parade in Annapolis, Maryland. While displays can be as simple as a strand of lights run along the toe rails, or as elaborate as Santa and the Abominable Snowman cage fighting on the bow while the elves look on, each one starts with a design. A powerboat is longer than it is tall, so it supports horizontal designs well. A sailboat works better with designs with some height.

Decide how you want onlookers to view the display. Inflatables on the foredeck can be viewed equally well from all sides of the boat, while words written in lights may be seen best from the port or starboard side. Now is the time to figure out what decorations to use, how to power them, and how to attach them securely to the boat. Outdoor-rated LED lights approved by Underwriters Laboratory (UL) last a long time, use little energy, and produce less heat, avoiding fire hazards. Many yard decorations can do double duty on a boat, too, because their size makes them easy to see and they're already graded for outdoor use.

Keeping Your Decorations Safe When Powering Up

Adding extra lights to a boat increases the risk of fire and electrical shock, so deciding how to power the display has important safety implications. Before hanging them on the boat, check the lights for frayed wires and loose bulb-base connections. Wrap plug connections tightly between strands with high-quality electrical tape, and don't overload circuits. The number of strands that can be connected together depends on the type of lights, size of the wiring in the set, and power source being used on the boat.

AC-powered lights can be plugged into an inverter running off a boat battery; you'll want to use LEDs to minimize the current draw. You can also power up using a properly installed marine genset (be sure to fuel up during the day), but don't use a portable generator. Not only is there a risk of carbon-monoxide poisoning with a portable, they could tip over if you get hit by a wake and the hot exhaust could cause burns or start fires. If using AC power, use an amp meter to balance your circuit load, and make sure to use a pigtail with a ground-fault circuit interrupter (GFCI) as close to the source as possible. This will shut the power down if anything goes wrong in the circuit. AA battery-operated lights and 12-volt lights plugged into a 12-volt outlet are other options. If 12-volt outlets are used, the wiring and outlets must be protected by fuses or breakers properly sized to protect the wires supplying power to the outlet from carrying more current than they can safely handle. Any wiring connections should be clean and free from corrosion.

To check the ABYC allowable ampacity of conductors, **download the rating table from Blue Sea Systems** or check a reference guide such as *Boatowner's Mechanical and Electrical Manual* by Nigel Calder. Look at the specs of the lights you want to use, and consult the manufacturer's instructions, or an electrician. Test all the decorations and their power source on land during the day. It's easier to replace faulty bulbs, correct overloaded circuits, and add more lights to a sparse display before you hang them on the boat. To further minimize risk of fire or neon Rudolph going up with a bang, have no flames aboard, keep the bilge clean, and have fire extinguishers and flashlights operational and easily accessible. It's a great idea for each crewmember to have a small safety light or beacon attached to their clothing, should they need it. Just make sure your crew knows not to use lights in a manner that will interfere with the vision of others. Have safety personnel/spotters with a whistle to notify the captain if an issue arises.

Getting It All Up There

Attaching decorations when you don't have walls to tack things to is tricky. A simple method involves attaching lights with wire ties or duct tape. To make words or pictures from lights, use chicken wire. String the lights to the wire, and then staple it to wooden frames, easily mounted using properly-sized electrical conduit clamps, which are then secured to the boat using halyards, lines, blocks, and integral boat structures such as outriggers, masts, booms, and spinnaker poles.

String lights above the deck level, inside boat lifelines, in case docking or assistance is needed. Keep connections between strands close to the deck for easy access but high enough that seawater from waves or wake can't reach them. Make sure to keep connections away from metal rigging and metal support structures.

Be careful not to obscure your navigation lights. Don't decorate so bright lights fall within the skipper's line of sight, as that will destroy his or her night vision, and designate someone to stay out of the glare who can keep watch for obstructions and help navigate (see "**How To Protect Your Night Vision**").

Don't Let Your Boat (Or Crew) Get Tied Up In Knots

Decorators should also consider how displays affect the boat's performance and overall stability, especially because the extra weight of the structure can upset the balance of the boat. Hoisting a large chicken-wire frame is like hoisting a sail that can't be reefed or released. If the weather is too windy, or the frame too big, it can dangerously destabilize the boat. Keep in mind the crew will still need to get to dock lines and cleats at the slip. Remember, crew will have to be able to move about and perform jobs, some perhaps on an emergency basis. Don't decorate in a way that interferes with safe boat operation. Double check the weather forecast before leaving the dock so that you can ensure that your boat and your decorations will weather the elements well. Prepare for the worst; if possible, have a line standing by at the cleat to prevent the crew from running around.

Float Your Art in Winterfest -

For over 1 million people in South Florida, the Seminole Hard Rock Winterfest Boat Parade is the kickoff to the holiday season. In place of those first snowflakes up north, Winterfest is especially magical for both local and visitors to this area. It affords them the opportunity to celebrate the holidays in a memorable and unparalleled way that is also quintessentially Greater Fort Lauderdale.

"There is nothing more spectacular than to see a child's eyes shine with the beauty of the Parade," says Lisa Scott-Founds, President & CEO of Winterfest, Inc. "This is such a wonderful community event during the holiday season which reaches millions more on television and the internet." Her tip to boaters in the Parade: "The Parade touches the hearts of so many each year, children especially, so it is important to have fun with your designs and make sure your decorations have maximum impact."

Note: From the sidelines, actor characters need good lighting on their faces and bodies to be seen and should wear simple and bright costumes rather than costumes with small details. Remember that they are 200 feet – 500 feet tall.

Lighting Guidelines

The more the lights, the better your boat will be visually! Remember, this is a nighttime parade and people on the shore need to see you. Unfortunately, we do not have a formula for LED lighting.

• IF YOU ARE USING C-7, C-9 LIGHTS – this is the minimum guideline:

- Depending upon the display and type of lighting being used, a chart has been formulated to provide minimum guidelines.
- These figures are traditional Christmas tree string lights and are listed per deck (i.e. a two deck, 40' vessel will be required to have a minimum of 12,000 miniature lights or 3,000 C-7 & C-9 lights).
- o Please remember, these are **MINIMUM guidelines** and Winterfest reserves the right to disqualify any entry if these guidelines are not met! This is an application only; no entry is granted by submission.

Boat Size in Feet	Miniature Lights	<u>C-7 & C-9 Lights</u>
20-29	5,000	1,000
30-39	6,500	1,500
40-49	8,000	2,000
50-59	9,500	4,000
60-69	12,000	6,000
70 Plus	17,000	8,000

Check the ABYC allowable ampacity of conductors below or check a reference guide such as *Boatowner's Mechanical and Electrical Manual* by Nigel Calder.



ABYC Ampacity Rating Table at 30°C

US	Metric	75°C		90°C		105°C		75°C		90°C	Š.	105°C			Ohms	Ohms
AWG	mm^2		EngRm		EngRm		EngRm		EngRm		EngRm		EngRm	mm dia	/1000ft	/1000m
	0.75	9.5	7	19	15.5	19	16	6.6	5.0	13	11	13	11	0.98	7.29	23.92
18	0.82	10	8	20	16	20	17	7	5	14	12	14	12	1.02	6.67	21.88
	1.0	13	10	21	17	21	18	9	7	15	12	15	13	1.13	5.47	17.94
16	1.3	15	11	25	21	25	21	11	8	18	14	18	15	1.29	4.17	13.70
	1.5	16	12	24	20	29	24	11	9	17	14	20	17	1.38	3.65	11.96
14	2.1	20	15	30	25	35	30	14	11	21	17	25	21	1.63	2.63	8.63
	2.5	21	16	34	28	38	32	15	11	23	19	26	22	1.78	2.19	7.18
12	3.3	25	19	40	33	45	38	18	13	28	23	32	27	2.05	1.65	5.42
	4.0	34	25	46	38	51	43	24	18	32	27	35	30	2.26	1.37	4.49
10	5.3	40	30	55	45	60	51	28	21	39	32	42	36	2.59	1.04	3.41
	6.0	53	40	57	47	65	55	37	28	40	33	45	39	2.76	0.91	2.99
8	8.4	65	49	70	57	80	68	46	34	49	40	56	48	3.27	0.65	2.14
	10.0	79	60	84	69	100	85	56	42	59	48	70	60	3.6	0.55	1.79
6	13.3	95	71	100	82	120	102	67	50	70	57	84	71	4.1	0.41	1.35
	16.0	105	79	113	93	134	114	73	55	79	65	94	80	4.5	0.34	1.12
4	21	125	94	135	111	160	136	88	66	95	78	112	95	5.2	0.26	0.85
	25	141	106	150	123	175	148	99	74	105	86	122	104	5.6	0.22	0.72
3	27	145	109	155	127	180	153	102	76	109	89	126	107	5.8	0.21	0.67
2	34	170	128	180	148	210	179	119	89	126	103	147	125	6.5	0.16	0.53
	35	173	130	186	153	217	185	121	91	130	107	152	129	6.7	0.16	0.51
1	42	195	146	210	172	245	208	137	102	147	121	172	146	7.3	0.13	0.42
	50	220	165	235	193	273	232	154	116	164	135	191	163	8.0	0.109	0.36
0	54	230	173	245	201	285	242	161	121	172	141	200	170	8.3	0.102	0.34
00	68	265	199	285	234	330	281	186	139	200	164	231	196	9.3	0.081	0.27
	70	274	206	292	239	341	289	192	144	204	168	238	203	9.4	0.078	0.26
000	85	310	233	330	271	385	327	217	163	231	189	270	229	10.4	0.064	0.21
	95	334	251	357	293	413	351	234	175	250	205	289	246	11.0	0.058	0.19
0000	107	360	270	385	316	445	378	252	189	270	221	312	265	11.7	0.051	0.17
	120	387	290	414	339	478	406	271	203	290	237	335	284	12.4	0.046	0.15
	150	445	333	476	390	550	467	311	233	333	273	385	327	13.8	0.036	0.12

Data based on E-11 Table VI-A (Single Conductors in Free Air) Data based on E-11 Table VI-B (Up to three conductors in a sheath, conduit or bundle)

- · For bundles of 4 to 6 conductors multiply by 0.857
- · For bundles of 7 to 24 conductors multiply by 0.714
- · For bundles of 25 or more, conductors multiply by 0.571

SAE conductors are smaller than equivalent AWG by 5% to 12% with current capacity typically less by 7%. ISO Ratings for metric wire are slightly less than these values derived from ABYC VI-A ratings.

Wires counted in bundles need not include:

- Wires carrying intermittent currents no more than rating per VI-A and for less than one minute per mm of diameter, and not repeating more often than a delay of 5 times active duration.
- 2. Wires carrying load currents at less than 50% of the wire rating per table VI-B.



3/

Figure 6: Diagram Courtesy of Blue Sea Systems

Also, find out how to calculate power usage from Christmas Lights Etc.:

So, how much electricity do Christmas lights use?

Your display size and choice of bulbs, whether incandescent or LED, will influence your energy bill the most. For example, a 100-count string of incandescent mini lights runs at 40 watts, while a 70 count of 5mm Wide Angle LEDs is approximately 4.8 watts total. In fact, because incandescent wattage is 80-90% more than LED wattage, the cost to power an incandescent can be up to 90x greater than powering an LED.

According to EnergyStar.gov, the average price of electricity is 11.3 cents per kilo-watt hour. For the power calculations below, we will use this figure per EnergyStar.gov, but you may choose to pull out your electric bill to use your actual price.

How to Calculate Electricity Usage Cost

If you would like to calculate your own power usage, use the following formula with your power bill:

- 1. Know your wattage: Find how many total watts you will be using.
- 2. Multiply times 0.001 to find kilo-watt hour.
- 3. Multiply by 5 hours a day to find kwh/day.
- 4. Multiply by 30 days to find kwh/season.
- 5. Multiply by 11.3 cents, or your cost of power usage found on your electric bill, to calculate cost.

Typical Light Usage Cost

Definition: Children's eyes light up when they pass your house.

When comparing outdoor Christmas decorations, the typical light user will use 1 to 3 wreaths, a garland, and a total of approximately 10 strings to wrap their outdoor trees. After calculating total wattage we can see that electrical usage is minimal.

Items	Incandescent Watts	LED Watts
1 Wreath	21	4
1 Garland	42	4
10 Strings of Light	408	48
2 Outdoor Decorations	164	38
Total	635 = \$10.78	96 = \$1.63

Items	Incandescent Watts	LED Watts
500 ft C9 String on Roof	3,500	480
200 ft C9 String in Yard	1,400	192
15 Strings for Walkway Trees	612	72
30 Strings for Wrapping 2 Trees	1,224	144
1 Wreath	63	14
Total	6,799 = \$115.26	903 = \$15.32

Figure 7: Photo courtesy of Christmas Lights Etc.

Figure 8: Photo courtesy of Christmas Lights Etc.

Items	Incandescent Watts	LED Watts
95 Icicle Lights	6,056	458
800 ft C9 String on Roof	5,600	768
500 ft C9 String in Yard	3,500	480
15 Strings for Walkway Trees	612	72
10 Strings for a Light Tree	408	48
30 Strings for Wrapping 2 Trees	1,224	144
150' Spool of Rope Light	378	120
5 Motifs	554	277
Total	18,332 = \$310.73	2,369 = \$40.15

Figure 9: Photo courtesy of Christmas Lights Etc.

Typical Heavy Usage Cost

Definition: If cars slow as they drive by and neighbors stop to tell you how much they love your display, you're probably outfitting your house with a few more lights and decorations than the typical Christmas home decorator.

Those who decorate heavily at Christmas will often line the roof and drive way with Christmas lights, add a wreath to the front door, outline the walkway with lighted trees, and wrap one to two trees with lights as well. At this stage of decorating, the extra power consumption may affect your overall electricity costs so it is helpful to calculate your power usage ahead of time.

Typical Enthusiastic Usage Cost

Definition: If cars line up outside your house to watch your display, you are classified as "enthusiastic."

The enthusiastic user lines their roof, yard, and driveway as well as wrapping all of their trees. They add lights to every inch of their house and create such spectacular sights as light show trees. They fill spaces in the yard with motifs and walkway trees, oftentimes animated to the sound of music.

Surprises are fun to receive under the Christmas tree, but not on your power bill! For the enthusiastic decorator it is important to calculate power usage and determine the best type of lighting, either LED or Incandescent to use for your holiday display.

LED Lights Power Consumption

Does energy savings on the electric bill support switching to LEDs? Yes! LED lights consume 80-90% less energy than incandescent bulbs, and last up to 100,000 hours, versus 3,000 hours for an incandescent. Combine this with the durable construction of LEDs, and savings extend beyond electricity. Repeat purchases in LED lights are reduced drastically, multiplying savings year after year.

Love the benefits of LEDs? Shop ENERGY STAR approved LED Christmas lights!

Energy Saving Tips

There are additional ways to reduce energy consumption each season. Combine your Christmas lights with the following to increase electricity savings:

- Timers control how long your lights are on, do not mount outside
- Extension cords instead of using light strings to add length to your display, utilize extension cords in less visible areas
- Switch to LED this is especially useful if additional sources of power need to be considered for illuminating large amounts of incandescent lights
- Both timers and extension cords support different amp capacities, so pair with Christmas lights of equal amperage.

LOOKING FOR ROPE LIGHTNG DISCOUNTS? Use Code: **paradise100** for free shipping on orders over **\$100**. Ordering less than \$100? Sign up by clicking this link: http://www.christmaslightsetc.com/

Using a Generator

Hint: You can power almost any amount of lights and decorations, depending on the size of the generator.

- Disadvantages: While using a generator gives you the advantage of being able to use a greater number of lights and decorations, it does have some drawbacks. Some generators can be loud and can restrict your ability to hear and the limited availability of generators to rent or borrow can be a challenge if your boat isn't already equipped with one.
- OTHER METHOD: Use of an inverter if you have an inboard engine. Inverters invert the power from your engine's DC current to AC. If you have an outboard engine without electric start, an inverter probably will not regenerate the on-board batteries. Inverters can be purchased at local marine suppliers. Make sure to purchase the correct inverter for your vessel. Add up the amount of watts that you intend to power and obtain an inverter with extra wattage.
- Advantages: An inverter is simple to use and uses the power your engine is already generating. It is
 quieter than a generator and boat engine running at the same time. When not using the inverter for
 decorating your vessel, you can use some of your 110-volt items from home providing you have
 purchased the correct size inverter.
- Disadvantages: Inverters range in price depending on how many watts you want to generate. The
 more watts you require, the more money you will have to spend. If you have an underrated inverter,
 you may find you're without lights in 20 30 minutes because the safety feature of the inverter will shut
 it down.

Where to Get Your Generator

• You can find a basic generator at your nearest Home Depot. Below is a basic generator example:



Figure 10: Photo courtesy of The Home Depot, 6/15/18

Figure 12 Photos Courtesy of Rob Kornahrens

Remember, balance your load. Knowing the outlet breakers will make things simpler. Fill the gas tank before you start the parade- do it cold as a splash of gas on hot generators makes for a nice sun burn. Test run the system for one hour and feel the plugs and wires. If you feel heat, change to a heavier gauge wire.

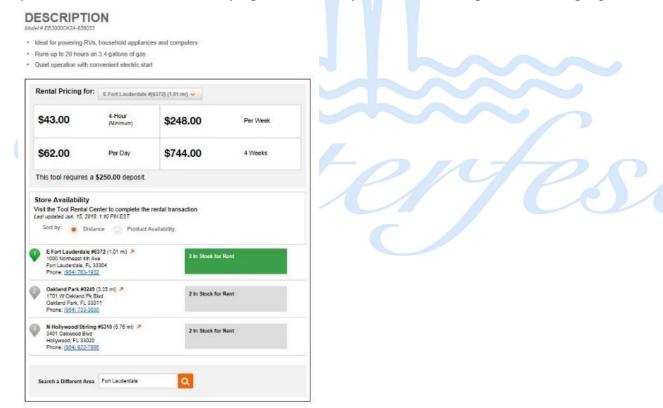


Figure 11: Pricing courtesy of The Home Depot, 6/15/18

Links

Links Within this Manual:

- Decorating Seminar: https://www.youtube.com/watch?v=SMSvA-mBrYo&feature=youtu.be
- WSVN Video: https://www.youtube.com/playlist?list=PLaLr_XHR63WI9OaUGHrJEdLSi0ZZAreZ3
- Two Men and a Truck Entry 2014 https://www.youtube.com/watch?v=j0zIR1-INeg
- Boat Decorating Tips: http://www.boatus.com/magazine/2013/december/designing-a-holiday-lights-display-for-your-boat.asp
- To Check Ampacity of Conductors: http://assets.bluesea.com/files/resources/reference/21731.pdf
- To Calculate Power Usage & Find Rope Lighting Discounts: http://www.christmaslightsetc.com/
- Finding Your Nearest Generator:
 http://www6.homedepot.com/tool-truck-rental/3000 Watt Generator/EB3000CK2A-656033/index.html

Additional Decorating Videos:

- Winterfest Boat Parade 2009 Behind the Scenes: https://www.youtube.com/watch?v=gWulmrFw9Lo
- Assembling this Spooktacular Spectacle: https://www.youtube.com/watch?v=jl9R84jL1-M
- Winterfest 2012 Boat Preparations: https://www.youtube.com/watch?v=TqtUx2LXCHs
- Winterfest Habitat for Humanity Showboat 2012 https://www.youtube.com/watch?v=Bkk8ZD8YJuY
- Decorating of the Patriot National Insurance Group's Entry https://www.youtube.com/watch?v=dTgKmda ZDU
- Behind the Scenes: Seminole Hard Rock Winterfest Boat Parade https://www.youtube.com/watch?v=g2mFoIBg0Ns
- Rob Kornahrens Creates Grease Lightning for 2017 Winterfest: https://youtu.be/E-I8X4_Rh70