



EVENT TIPS

Helpful tips for event managers and race directors to provide the best possible event experience.

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EVENT PLANNING

Tip 1: Order Radios ASAP

Many event managers and race directors wait until the very last minute - sometimes even a day or two before their event - to order radios and communications infrastructure. This can often leave you in limbo since you're subject to whatever your vendor has on hand for equipment.

In the busy season, entire rental fleets can be booked out, leaving you with little options or even forcing your vendor to turn you away.

Let's face it - if you don't have a way to communicate with your staff, there's no way that your event can run the way you want it to.

We recommend ordering your radio equipment as soon as possible to make sure that you have communications for your event. Once you have an idea of how many radios you're going to need, you should place order and let your vendor know you may need to make adjustments to the quantities later on.

By doing so, it will allow them to adequately plan for your communications needs.

Tip 2: Know Your Location

Whether you're running a festival or a marathon, you need to know how much distance your event is going to cover.

Distance factors into your infrastructure and programming requirements, which can be determined by your radio provider. Inadequate planning can lead to issues such as communications dead spots or intermittent call dropping. This can lead to your team not being able to communicate with each other in every area of your event.

The best way to prevent this is to let your provider know where your event is taking place and the area that your radios need to cover.

Tip 3: Geography Matters

Along with location, natural topography such as mountains and valleys can impact the effectiveness of your communications. It's important for your communications provider to take these factors into account when setting up your infrastructure.

It is also important to note any weather that may potentially damage the equipment. A good example of this is desert sandstorms. Because sand can get into fine grooves in the equipment, it can be difficult to clean and maintain radios from events in these locations.

If you make your communications provider aware of this prior to your event, they can plan to have extra equipment available for you in case of damage.

Tip 4: Advanced Site Visits

For larger events, the best way to know your location inside and out is to have your vendor do a site visit. By being able to assess the location completely, they can factor in location, topography and trouble spots into the design and engineering of your communications package to make your event run smoothly.

During a site visit, vendors normally test areas of your location for any potential communications issues and assess the best location to store any on-site equipment.

Tip 5: Control Your Infrastructure

When you're running a large event, you need your own dedicated communications network and infrastructure.

With your own system, your event becomes the one and only priority. Avoid using radios that use everyday cellular networks. Though it sounds great, this can actually lead to some serious problems. By being on the same network as everyone else, your communications can be subject to delays, dropped calls or even no communications at all due to system overload, especially during the event time.

In reality, your event operations and emergencies are competing with selfies, texts, phone calls, streaming, etc.

The best way to prevent your communications from becoming interrupted is to have your own dedicated network for your event.

Tip 6: Chose A Vendor With An In-House CAD Design Team

Computer Aided Design (CAD) software allows communications providers to design a complete radio system by inputting a variety of factors such as longitude, latitude, and equipment specs into the system to assist with transmitter and receiver locations for optimal coverage.

With an in-house CAD design team, your communications provider can use software prior to testing your site to help ensure full coverage for your event and make adjustments in house if any necessary changes needed to be made.

Tip 7: Include Your Communication Vendor In Key Event Meetings

Planning an event can be a crazy, hectic time. To ensure that all of your communications run smoothly during your event, keep your vendor in the loop by bringing them into your event meetings. In doing this, your provider will be aware of any changes made to your event and be able to adjust your equipment and infrastructure accordingly.

Tip 8: Equipment Grounding

Communications infrastructure can involve a lot of metal situated in high locations. Subsequently, this opens up the possibility that equipment can be struck by lightning during a storm.

Though you can't necessarily prevent lightning from hitting your equipment, you can ensure that it is protected in the unlikely event it does happen. If you have on-site infrastructure, your vendor should have someone who is R56 certified, which shows that they know how to properly ground equipment to prevent or limit electrical damage to equipment and/or personal injury. The best way to know is to ask to see a current certification.

Tip 9: Have Base Stations At Key Points

At key communication points such as command centers or trailers, you should have a base station radio. Base stations offer more power and range than portable radios.

In designing your communications systems, you want to make sure that you have redundancy at key points. If one piece of equipment fails in the infrastructure, another can easily pick up the slack for a seamless transition.

Tip 10: Make Sure Radio Equipment Is Kept In A Secure Location

The number one reason you want your communications equipment kept in a secure location is to avoid tampering or theft. This is your line of communication to your event staff and that needs to be intact 100%. If any changes have been made to key infrastructure (especially without alerting key personnel), that can really cause communications havoc.

Not to mention if any of the infrastructure goes missing, it's going to cost you a significant amount of money.

Some pieces of equipment can range into the tens of thousands of dollars.

With all that being said, it's really important to have your equipment under lock and key.

Tip 11: Ask For Event Support

In terms of communications, there's nothing worse than your radios not working on event day - maybe other than having no idea how to fix it. We recommend all events have a way to contact your vendor during your event in case something goes wrong with your communications. Ask your vendor if they have a support line that you can call or distribute to your event staff in case they need to troubleshoot.

For larger events with infrastructure, we recommend having someone on-site event day to be able to handle any issue that may arise.

Tip 12: Vendor Reliability

Your event only happens once. It's so important that every piece falls into place so you can provide an incredible experience for your attendees.

In choosing a communications vendor, you want someone who understands that and demonstrates it through a proven track record of success. If you're using someone new, ask for references before your event.

Communicating with your team is one of the most critical aspects of running an event and you need to have someone who is reliable, experienced and knowledgeable.

Tip 13: Don't Always Go With The Lowest Bid

Since radios are often the last purchase, for event managers and race directors this can often lead to budgetary constraints and force you to go with the lowest bidder.

We just want to throw a word of caution out there that the vendor with the lowest price is not necessarily the best value for you. We've had a couple of instances where we've bailed out events simply because they had a ton of communications problems trying to save money and at the end of the day their radios just did not work.

What we recommend when looking at quotes is to focus on the history and institutional knowledge of the company, not the dollar amount. For smaller events just ordering radios and accessories, this will be much more straightforward.

For larger events requiring on-site infrastructure, this is a much more complex process. We recommend having a system description section where the vendors detail the features of their system and how it solves any issues you're concerned about.

Tip 14: Contingency Plans

When you're running an event, you have a backup plan- often times two, three or even four. So should your communications. There are so many different things that can happen during the course

of an event, it can be difficult to make sure that you're prepared for anything. No matter what happens, your communications should always be up and running.

At a minimum, your system should have either battery backup or generators in place to last at least 8 hours. For some events, we've also handed out satellite phones to key personnel as a supplemental means of communications to be used in dire circumstances.

Tip 15: Have Licensed Frequencies

One often overlooked, yet very important event prep necessity is to have licensed frequencies for your event. It is actually illegal to operate without them, and you're opening yourself up to FCC fines of up to \$50,000.

If you're operating on a frequency that is has a pre-existing license, then not only are your communications subject to interference, but so are theirs.

Ultimately, it is your responsibility to make sure that you have all the proper licenses and documentation. Your radio provider can help you apply for the frequencies needed for your event or may also allow you to use theirs.

Tip 16: Order Spare Radios

Accidents happen - often at the most inopportune times. To help your event run smoothly, make sure your vendor provides you with spare radios, accessories and batteries in case they go missing, break, or get run over (it's happened).

Think you're super careful or it won't happen to you? We actually had a customer lose one of our radios in a port-a-potty. Like we said - s**t happens.

Tip 17: Ask For Options

All radios are not created equal. Many vendors now carry radios from different manufacturers, or at the very least different model types.

Depending on the type of your event or event group (medical, traffic, security) that you're in,

different features, size, weight, battery life, may be advantageous to have. We recommend asking your radio vendor what they recommend for your event.

Tip 18: Industry Standards

For particular industries, we've found that there are some makes and models that are actually preferred and have become a standard for that particular type of event. Usually, these radios have a unique feature that supports event operations really well.

If you're unhappy with your current radios or want to know what others in your industry are using, ask your communications provider.

Tip 19: Test Communications Prior To Your Event

One of the worst things that can happen is your communications not working on event day. When no one can communicate, things can quickly become chaotic and take your focus away from the most important thing - running your event and keeping your guests safe.

Always test your communications prior to your event to make sure that everything works properly. Ideally, this is something that your communications provider should be doing so they can fix any technical issues before event day.

Tip 20: Train Your Volunteers

No matter the scale of your event, you should train your staff or volunteers how to use a radio. How can you communicate with your staff if they have no idea how to respond back?

Not knowing how to use a radio can cause a lot of frustration and even miscommunication the day of your event.

You can ask your communication provider for a training session or quick reference cards for the radios that you'll be using.

You can also check out our training video to learn some basics: <https://dcrentals.net/training-videos>

Tip 21: Lost Equipment Protection Can Save You Big

Accidents can happen at any time during an event. Radios can get lost, stolen, run over, dropped into port-a-potties, etc. For every piece of equipment that is not returned or turned in broken, not due to normal wear and tear, can be classified as lost equipment.

In some cases, lost equipment can actually add up to more than your cost to actually rent the radios and accessories.

If your communications provider offers it, you should consider lost equipment protection. It may only cover a portion of your lost equipment, but it can certainly help in reducing overall costs.

Tip 22: Get A Bird's Eye View With An EPT

If you're running a large event, having an Event Production Trailer (EPT) can really be advantageous. Not only can it be a central meeting location for you and your staff, but it allows you to have a birds eye view of your event using CCTV cameras and the ability to dispatch your staff to necessary locations.

Tip 23: Give Out Channel/Zone Cards To Staff

A common problem that we see all the time is that someone ends up on the wrong channel and they're not getting the information they need to the right people. Not only that, they're occupying the channel that they're transmitting on with irrelevant information - like someone transmitting parking information on the medical channel.

This can definitely create a lot of chaos in your communications, but it has a really easy fix. By making the list of channels (and zones for larger events) available to staff, it gives them a portable guide to which channel they should be on.

Tip 24: If You're A Large Event, Go With A Trunking System

Not all radio systems are created equal.

Designed for larger capacities, a trunking system can give you advantages that smaller infrastructure can't. Features like the ability to broadcast over all channels (all-call) and sophisticated reporting software advantages tracking communication data, which is now required by some larger events.

Tip 25: For Large Events, Get A Dispatch Console

Dispatch consoles aren't just for public safety. For a large event that has an Event Production Trailer (EPT) or Command Center, a dispatch console can be really helpful for event staff and personnel working with multiple-agencies. Rather than having multiple radios to communicate, a dispatch console can be used to communicate over event operations channels, public and government entities (where applicable) with a touch of a button.

Tip 26: Have A Tracking/Barcoding System Or Choose A Vendor With One

If you're running an event, you already have enough to keep track of. One of the easiest ways of making sure that you're being accountable for your communications equipment is to have a barcoding or tracking system in place - or use a vendor who does.

In tracking all of your communications equipment (accessories as well), you can know exactly who is responsible for each piece of equipment. This helps tremendously in cutting down lost equipment costs.

Tip 27: Keep Your Rental Equipment Organized

Keeping equipment organized during distribution can be a huge help. We recommend cataloging radios and sorting by group to make sure that the right radios go to the right people, especially if they're set to specific channels. We use a numbering system and a barcode on each of our radios and accessories to assist in this process.

Tip 28: Make Sure Your Accessories Match Your Radio

Just like phone chargers, all radio accessories are not universal. Different accessories are compatible with different makes and models of radios. If your event is using multiple types of radios, we recommend sorting and labeling bins by accessory model to make sure that it will work with the radio you're using. Using the same radio throughout your event is preferred.

Tip 29: Make Sure Your Accessories Work Before Your Event

As part of your event preparations, you or your radio communications vendor should make sure that all accessories are fully functional. If you find you have a "bad" accessory, it can be anything from a minor annoyance to wreaking havoc on event day if you can't talk to essentially personnel.

Tip 30: If Using Mobile Radios, Make Sure You Have Enough Outlets

One issue that we've seen happen in the past when using mobile radios is not having enough plugs for all pieces of in-vehicle equipment. Like many in vehicle accessories, they're designed to work through the cigarette lighter. It's important to sit down and plan with all equipment going into your vehicles what exactly they need for power requirements and the fuse rating of the outlet. When possible, hard wire the unit to the vehicle battery. This should only be done by a licensed radio technician duly authorized to do so.

EVENT DAY

Tip 31: Make Sure Your Batteries Are Fully Charged

On event day, it's essentially that you start with a fully charged battery. Prior to your event, you or your radio communications company should make sure that all radios have a fully charged battery.

In general, batteries can last from 8 hours to about 16 hours depending on how much you are using the radio.

We've seen them go in as little as 4 hours during heavy use. We recommend that all date codes are within 2 years and batteries maintain no less than 80% of their original 100% capacity when fully charged.

Tip 32: Request Extra Batteries

Things can get a little hectic on event day and it's good to have some extra batteries on hand. For more active users, we recommend that you carry an extra battery with you. If you have a central location, it's worth having rack chargers with batteries charging in case someone needs to swing by and pick some up.

Tip 33: Right Radio, Right Channel

Radio distribution can be a chaotic time, especially if you do not have an organized system with tracking. In the past, we've seen people get the wrong radio and not be on the right channel, and also don't know what channel they should be on.

To help prevent this problem, assign a radio or group of radios to a specific person or group (ex. parking, medical, etc.). Make sure that the radios going out to this group are on the right channel and zone if applicable.

Tip 34: Stay In Your Zone

Unless you're an active, experienced radio user that needs to be on channels in multiple zones, we recommend not changing zones unless it's absolutely necessary. Often cases, this can cause some confusion when the user doesn't know how to get back to the channel in the zone they need to be on.

Multiple zones are usually for larger events that need an excess amount of channels or serious coverage. Smaller events usually have one zone.

POST EVENT

Tip 35: Ask For Analytics Reports

Just like you review other operational areas after your event, it's also important for you to review your communications as well. For larger events, ask your vendor if they can provide analytics reports after your event. These reports can tell you exactly how your radios performed prior to and during your event. Included in these reports are things like traffic per channel (PTTs), average length of transmissions, system overload such as busy or not able to access channels or talk groups. This type of data is useful for your event next year in identifying areas that can or need to be addressed such as system capacity.

Tip 36: Clean Your Radio Equipment Properly

It's really important after an event that you or your communications vendor cleans the equipment properly to ensure that the equipment remains in good working order. This includes wiping down the radios and removing any prior labeling. To clean the grooves of the radio, we recommend using a small air compressor to remove dirt.

Tip 37: Recondition Your Batteries

Overtime, the ability of your batteries to hold a charge will degrade. The process of reconditioning can help maintain the life of your batteries for a longer period of time.

The life of your battery can determine how long your radio will remain powered during an event without needing to swap batteries. A good standard to have is 80% of original life.

Tip 38 : Clean Your Accessories

Just like radio equipment, accessories need to be cleaned and in some cases replaced as well. It's important that you clean out the grooves of speaker mics and get any gunk of the equipment that could potentially damage the pieces.

A really great way to do this is by using an air compressor.

If you're using an outside vendor, make sure that the equipment your getting has been cleaned recently. You definitely don't want to be sharing unsanitized surveillance or headset pieces!

RADIO USAGE

Tip 39: Don't Talk Until You Hear The Beep

With digital radios, the number one common mistake we see when it comes to event radio use is someone talking before they hear the beep. This leads to half or the majority of your sentence being cut off. For the best results, wait until after the beep to begin speaking and keep sentences as short as possible.

Tip 40: Hold The Radio Upright

When it comes to event communications, most staff and volunteers only use radios once or twice a year. It's very normal for them to not be able to use a radio confidently, which is one reason we recommend training them prior to the event.

One common issue we see with inexperienced radio users is that they aren't exactly sure how to hold the radio.

If you hold it upright with the top of the antenna facing the ceiling or sky or whatever happens to be above you, it helps transmit information a lot better.

Tip 41: Only Hold The PTT Button When You Need To Speak

One mistake we often see during events is the push to talk (PTT) button being hit accidentally. Normally, once or twice is not a big deal,

but holding the PTT button down frequently or for prolonged periods of time can tie up communications on that channel.

To help avoid this, we recommend wearing the radio on your hip, particularly on your waistband or belt loop.

Tip 42: Clarity Is Key - Keep Conversations Brief And To The Point

Since only one person can talk on a channel at a time, it's important for conversations to be kept short and to the point, especially during an event. The more precise you can be in your communications, the easier it will be for you to be understood.

Tip 43: Don't Transmit Sensitive Info

It's important to remember that any information you talk about over the radio is going to be heard by not only your event staff, but potentially those around them. Unless all of your staff are wearing an audio accessory like a surveillance kit, information will be broadcasted through the radio and potentially heard by those around them. With all that in mind, it's best to not transmit personal or sensitive information.

ACCESSORIES

Tip 44: Only Use Accessories When Necessary

A lot of people like to use accessories for the aesthetics, but they can actually cut down a significant amount of your radio's transmission functionality and range. We recommend only going with accessories in environments where you absolutely need them or at the minimum testing your radios with accessories prior to your event to avoid coverage issues.

As a side note, anything wireless can potentially limit your radio functionality more than traditional wired accessories. Meaning another battery that can discharge before the radio, rendering the radio useless.

Tip 45: Use Large Antennas

For radio antennas, we recommend that you use the long version instead of the stubby version. Though it looks a little more discreet, it can actually cut down your radios functionality up to 50%.

Tip 46: Don't Use Tools on Accessories

A little known fact to anyone outside the radio industry is that you're not supposed to use tools to tighten accessories onto ports. We've seen a lot of people try to screw on speaker mics and surveillance kits using screwdrivers and it actually can damage the radio to the point that it needs factory repair.

If you're using accessories for your event, make sure that they are hand-tightened.

Tip 47: Protect Accessories From Water

Even though some radios have a form of water resistance, accessories for the most part do not and should be protected from the elements.

This can be a difficult task for events that are held outdoors rain or shine. What's been successful for most events in helping reduce water damage is wearing ponchos.

TROUBLESHOOTING

Tip 48: How To Deal With Feedback

Every so often, the issue of feedback occurs at events. Radio feedback is a loud, echo sound that occurs when radios are too close to each other. This can usually be resolved by distancing yourself from the other radio by a few feet or turning the volume down on the radio feeding back.

Tip 49 :If You're In A Building And Having Trouble Communicating, Go Near A Window

When you're in a building, communications can sometimes be blocked by building materials and glass. To help alleviate this, we recommend going near an open window or stepping outside.

Tip 50: Trouble Hearing Your Radio?

Turn Up The Volume

One common troubleshooting issue that we see happen consistently is that people will think their radio is dead or broken, when really they just need to turn up the volume. Depending on the type of radio you have, the volume knob is located at the top of the radio.

Tip 51: Dead Radio? Make Sure It's Turned On

Along with Tip 50, we actually see people who have their volume turned down so low that they accidentally turned the radio off. By turning the volume knob back up, the radio should turn back up.

Tip 52: Know Your Tones

Is your battery dying? Are you out of range? Are you hitting the PTT button? Your radio should let you know!

Radios have a series of distinct tones that allow you to hear what's going on with your radio and what issues you should be looking for. Before your event, we recommend that you brush up on tones to make troubleshooting easier.

You can ask your radio vendor for training or you can check out our basic training video here: <https://dcrentals.net/training-videos>

If you have more questions or would like more information, visit dcrentals.net or call 1-800-257-2333.