Carnival 2005 Radio Guide

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I.   Introduction

This guide is intended to help understand how to use the radios that Spring Carnival Committee will use starting during move-on for Spring Carnival. It includes information on basic radio information, technical tips, and a listing of the channels in each of the radios that you might be using. The last section provides a high level of detail into how the move-on net will be operated. If you aren't specifically involved in the move-on net (and you'll know if you are), then you can safely skip that section.

II.   General radio usage

This section will talk briefly about radio usage, protocols, and etiquette, and lastly some rules about radio usage.

General information:

1. The Spring Carnival Committee uses mobile and portable radios to communicate during Carnival. These frequencies we are using have be licensed to us by the Federal Communications Commission for the purposes of Carnival business. There are some rules the FCC lays down that we must follow or we risk getting heavily fined. These radios will go a considerable distance and can be heard by **anyone** with the proper equipment, which is why it is important to follow the rules.
2. If you aren't sure whether or not you should be transmitting on a specific frequency then please ask.

Frequencies:

The Spring Carnival Committee has a license to operate on several frequencies. A complete frequency listing is below, but the basic layout is as follows.

1. Channel 1 is called the "Midway" channel. This channel should be used by the Midway Watch teams to coordinate their operations. The watch teams should not be transmitting on other frequencies unless there is a reasonable reason to. If you catch them transmitting on other frequencies please ask them to return to their channel.
2. Channel 2 is called the "Committee" channel. This channel is for general committee usage. This channel is rebroadcast through a repeater which is located on the top of Wean Hall. This channel has a much wider range than the other channels.
3. Channel 3 is the short range or "Talk-around committee" channel. If you need to have a lengthy conversation with someone then please switch the conversation to this channel so the entire Committee does not need to hear it. If you are on this channel you will still be able to hear channel 2, however in order to transmit to channel 2 you must switch back there.
4. Channels 4 and 5 are not intended for general committee use and will be utilized by other groups on campus.

5. Channel 8 is a "Scan" channel. On the general committee radios this channel will scan channels 1 and 2 and default transmit to channel 2. The one radio that is different is the "Coordinator" radio which will default transmit to channel 1. This will be explained in detail later.

As a general rule if you do not know whether or not you should be transmitting on a specific channel please ask before you do.

Radio Usage:
1. The radios you will be using will be one of two types. The first type is the Motorola GP300 (committee owned radios). The second type is the Motorola HT1000 (rental radios). The radios operate in nearly the same manner. If you have questions about the specific operation of the radios please ask. All of the radios and batteries are very expensive, so take good care of them.
2. In order to turn the radios on you must turn the volume knob from off until you hear it click. Once the knob clicks this knob will now be the volume control. To turn up the volume rotate the knob clockwise, and to turn down the volume rotate it counter clockwise. To turn the radio back off turn the knob all the way counter clockwise until you hear it click again.
3. The second knob on the top of the radio selects the channel of operation (or mode of operation in the case of scanning). To select a channel listed above simply turn the knob to that number.
4. Once you have turned on the radio and selected your channel your radio will now be receiving transmissions on the selected channel (or channels if it is scanning).
1. To transmit on the radios you must depress the large button on the side of the radio. Once you have the button depressed wait a second for the transmitter to warm up, then begin speaking into the radio. When you have concluded your transmission wait a second and then release the button. The radios operate in a simplex mode. This means that you cannot talk and listen at the same time. This is why it is important to ensure that no one else is talking when you depress the transmit button. Remember to speak clearly just like you would on the phone.
5. If you attempt to transmit and the radio beeps twice this means that the battery is low. You should return this radio to the charger or swap out for a good battery.

Protocol/Etiquette:
In order to use the radios effectively there is a general protocol we use as well as some general rules of the road.

1. If you wish to call another "station" (person) you should first give them call them to ensure they are ready to listen to you. This is done by first sending the message "XXXX from YYYY". The party being called will respond with "XXXX, go ahead". After that you may begin your

conversation. For example if the advisor wanted to contact the chair you would hear "Chair from Advisor" … then … "Chair, go ahead" … then the message. Use your committee position as your call sign when calling another station or responding.

2. When transmitting your message keep your transmission brief and to the point. Remember that when you are using the channel no one else can so try not to tie up the channel for length periods of time. Also speak in normal English and do not try to code or encrypt your transmissions.

3. If you need to have an extended conversation request that the other party go to the talk around channel. One way to do this would be as follows. "XXXX from YYYY go to three". XXXX would respond with "XXXX, switching to three"… XXXX and YYYY would now both change to channel 3 (Talk Around). Then after about a second XXXX would say "XXXX from YYYY"…. XXXX would then respond with "XXXX, go ahead". Then you can transmit as you normally would. At the end of this conversation the party closing the conversation they might say something along the lines of "Thanks. XXXX switching to two".

4. In order to reduce the amount of feedback (squealing) we produce there are a few simply rules we follow. When you enter the trailer or place a radio into the charger turn off your radio. The only radio that should remain on in the trailer is the base station on the desk. The second rule is that if you are standing next to another committee member that is about to transmit on his/her radio you should cover your speaker with your hand or lower the volume. This will prevent feeding back and making very loud squealing noises on the radio.

5. Another rule we follow is make sure when you are not using your radio you return it to the proper place. The proper place for all of the radios is in an appropriate charger in the radio cabinet in the trailer. **When charging radios, make sure that you have turned them off before placing them into the chargers.**

6. Finally, some of these radios are ours and some are rented. These radios are expensive so please take good care of them. This means try to keep them dry and try not to drop them. If something should happen to a radio please notify Noah Lorang or Eric Faden.

7. **The FCC has rules about what we can and cannot say on the radio. As a rule of thumb, no cursing of *any kind may be transmitted*. This includes and lewd or otherwise vulgar comments. Watch teams and security teams should be notified of this rule as well. If you catch any watch team or security team using the radio inappropriately contact Eric Faden or Noah Lorang and take the radio from them. *If you're caught using inappropriate language over a radio, you will lose the ability to use the radio system immediately.***

Miscellaneous:
1. This year we will keeping track of your radios more carefully then we normally do. Carnival owned radios will have a number on the front. The

numbers range from 1 through 18. The batteries are numbered as well. There are a few "special" radios. The first one is radio 1. This radio is the "Coordinator" radio and has a different scan channel than the normal radios. Please do not take this radio unless you are the coordinator. The other special radios are radios 13 through 17. These radios are the radios that will be given out to the watch teams. As the coordinator it will be your responsibility to log the radios in and out when you give them to teams and when you get them back. We do not have enough of the SP50s (the watch team radios) to cover the watch teams and the security teams. The SP50s should be reserved for the watch teams. Security teams can be given any of the radios we have, but once again which radio they are given should be logged in and out. If someone fails to return a radio, or if it is returned in worse condition than it was signed out, please contact Eric Faden and Noah Lorang immediately. Be sure to make a note of all of the circumstances.

2. When you give out radios they must be signed in and out. The sign in/out sheet will be located on top of the radio cabinet. On this log sheet there is a location for the radio #, battery #, and any speaker mics that they took with the radio.

3. Please keep the radio cabinet locked at all times. Some batteries and chargers may be stored outside of the cabinet, however all radios should remain locked in the cabinet when not in use. The coordinator will have the key to the cabinet. Should the need arise and the coordinator is not available Eric Faden, Noah Lorang, and Heather Andring all have a copy of the key as well.

4. If you have any other questions please contact Eric Faden or Noah Lorang.

Appendix A.   Channel Listing
This appendix has channel listings for all of the radios that Carnival is using:

SP50s: There are five of these radios (numbered 13-15) and several spare batteries. Each radio has two channels.
      Channel 1: Midway
      Channel 2: Midway
These radios should be reserved for watch shifts.

GP300s: Carnival owns 13 of these radios, numbered 1 through 12, and 18. There are also a number of extra batteries. These radios have 8 channels. The full channel listing is below: You should only use channels 1, 2, 3 and 8 unless otherwise notified.
      Channel 1: Midway
      Channel 2: Committee
      Channel 3: Talkaround (you'll hear channel 2, but channel 2 won't hear you)
      Channel 4: Tech
      Channel 5: WRCT

Channel 8: Scan 1 & 2, transmit on 2 (Radio #1 transmits on 1)
Radio #1 is the coordinator radio; it is reserved for the on duty coordinator. Radio #18 is slightly different, so please don't take it without express prior permission.

HT1000s: These are rented radios, **so take care of them!** There are 24 of these radios, and six of those are reserved for use by WRCT and will not be available to general committee usage. Take very good care of these, and make sure that they especially stay locked up at all times. There are also speaker microphones for these, and they need to be kept with these radios specifically since they're rented as well.
> Channel 1: Midway
> Channel 2: Committee
> Channel 3: Talkaround
> Channel 4: Tech
> Channel 5: WRCT
> Channel 8: Scan 1 & 2, transmit on 2

Again, these radios are rented and very expensive, so take good care of them.

Base station
As mentioned before, there is a base station radio in the trailer that should be used whenever in the trailer. Turn off and charge your handheld radio in those cases. It is programmed in the same way as the HT1000s.

Unless you know specifically that you are operating in the formal move-on net, you can stop reading here. Again, if you have any telecom questions, ask Eric Faden or Noah Lorang by e-mail or cell phone (efaden@, 412 956 5000 or nlorang@ 919 923 3705).

Appendix B.   Move-on net

This section describes the operation of the move-on net, which coordinates operations on all of campus excluding midway during move-on for Spring Carnival.

Purpose
The move-on net is designed to efficiently and safely facilitate the flow of organizations and their booths onto midway. The primary concern is moving booths in a safe and timely manner from their starting locations to the entrance to midway. A separate group of committee members will take over the booths and communications on midway.

Structure
The following people are a part of the move-on net:
1) Net Control-call "net"-responsible for the flow of information from one operator to another. May be mobile or may be located in the trailer or elsewhere on midway.

2) Midway shadow-call "midway"-shadows the Midway chair during all phases of move-on and acts as the liaison between the activities on midway and those off midway.
3) Police shadow-call "police"-rides in the police car as they escort booths that require traffic to be stopped or altered. The police shadow should be the current security chair, and is responsible for staying with the designated officer.
4) Intersection operator- call "intersection"-is located at the corner of Forbes and Morewood and is responsible for advising the police officer located there when a booth is moving so that the intersection can be shut down and monitoring for any difficulties at the intersection.
5) Organization escorts-call "escort-N"-there are seven of these escorts, designated 1 through 7. The escorts are responsible for moving with the organizations as they move from their home locations to the entrance to midway and providing progress updates.

Flow of the net

Once the net has been opened by a roll call of operators with their call and location, the main function is on calling booths with or without police escort. Below is the flow of the net while in operation. Following is a summary of each operator's communications duties.

Net Flow
Net control will indicate where the escort should go next: *Escort-N from net, proceed to <location>*

When an escort arrives on location: *Escort-N on site at <location>*
Net will acknowledge: *QSL Escort-N*

If the escort discovers that there is need for police escort, they will advise net: *Net from Escort-N, need police escort at <location>*.
Net will acknowledge and direct police: *QSL Escort-N. Police, proceed to <location>* (if police is available-if police unavailable: "*QSL-Escort-N. Stand by for police escort.*")
Police will acknowledge en-route: *Police enroute to <organization>*

When the police arrive, if needed: *Police arrived at <organization>*

When the escort is ready to move the organization (police present if needed): *Escort-N, <Organization> is ready to move.* If police are being used, "*Escort-N, <organization> is ready to move with police.*"
Net will acknowledge: *QSL, Escort-N. Stand by.*

When the midway chair is ready for the organization to move: *Midway. <Organization> clear to move.*

Net will acknowledge and instruct organization to move: *QSL Midway. Escort-N, begin moving.*

When the organization begins moving (no police escort): *Escort-N, <organization> is now moving.*
When the organization beings moving with a police escort-police will call:*Police. <Organization> is now moving with escort.*

When stopping or shifting traffic (police only): *Police. Traffic stopped at <location>*

At ¼, ½, and ¾ of the way to midway: *Escort-n* (or police if using police escort)*, <organization> is now at <location>*.
Net will acknowledge.

When an organization with a police escort needs to pass the Forbes + Morewood intersection: *Police. Permission to call intersection.*
Net control will respond: *Go ahead.*
Police: *Intersection from police. <organization> will be arriving at intersection in <time>* (may be before organization starts moving to allow sufficient time to close intersection).
Intersection will acknowledge request: *QSL police. Intersection police advised.*

When the intersection is closed: *Intersection is closed.*

When the intersection is reopened: *Intersection is open*.

When arriving at midway (no police escort): *Escort-n. <Organization> is arriving on midway.*
When arriving with police: *Police. <Organization> is arriving on midway. Police clear of organization.* (pass communication duties back to escort)
Net will acknowledge: *QSL escort-n* OR *QSL police. Stand by.*

When leaving midway to return to organization: *Escort-n. <Organization> is departing midway enroute to <location>*. (Net operations repeat as before).

When leaving midway to go to the next organization: *Escort-n. <FinishedOrganization> completed. En route to <NextOrganization>* (Net operations repeat as before)

If at any point it is necessary for one station to call another: *Net from <party1> with traffic for <party2>.*
Net will acknowledge and if a wait is needed: *QSL< party1>. Stand by.*
When net is ready for traffic to be passed: *<party1>, call <party2> with your traffic.*
The calling station will call: *<Party2> from <party1>* and the conversation will continue as normal. When done: *<party1> clear. <party2 clear>*.

Operator duties
Escort should call (when not being called by police):
- Arriving on organization location
- Need police escort
- Ready to move
- Rolling
- ¼, ½, ¾ of the way to Midway (specific locations)
- Arriving on Midway
- Leaving Midway
- Finished with organization

Midway should call:
- Ready for next organization.

Police should call:
- Enroute to organization
- Arriving at organization
- Moving with organization
- ¼, ½, ¾ of the way to Midway (specific locations)
- Closing traffic
- Need intersection closed
- Arriving on midway
- Departing midway

Intersection should call:
- Acknowledge intersection close needed
- Intersection closed
- Intersection opened

Closing the net
When all organizations have moved on to midway, net control will ask for permission from the midway chair to close the net. When permission has been granted, net control will close the net as follows:

Net: This concludes the 2005 session of the Spring Carnival move-on net. We will now take one final roll call of all operators involved, beginning with the escorts.

Escort 1: Escort 1, on Midway, organizations completed.
Escort 2:…

When all escorts and shadows have called in:

Net: This net is now closed. Thanks to all operators who participated. This frequency is now returned to normal Spring Carnival Committee use.