

Welcome to the CARMA Guide to the 2009 Chicago Air and Water Show

Mayor's Office Official Web Page:

http://www.explorechicago.org/city/en/things_see_do/event_landing/special_events/mose/chicago_air_water.html

Official show dates are Saturday and Sunday, August 15th and 16th, 2009. 10 AM to 4PM. There is also an un-official, dress rehearsal show on Friday. Time schedule for the Friday event is highly variable. Show center all three days is just east of the North Avenue beach house - it looks like a big boat run aground. It's at 1600 North Lake Shore Drive, east of the North Avenue underpass at lake Shore Drive. The show is free.

Performers include:

U.S. Air Force Thunderbirds	P-51 Mustang
U.S. Army Parachute Team Golden Knights	Chicago Fire Department Air/Sea Rescue
U.S. Navy Parachute Team Leap Frogs	C-130
Aeroshell Aerobatic Team	F-15
Sean D. Tucker & Team Oracle	F-16
Lime Lima Flight Team	A-10 Demo
Chicago Fire Department Air/Sea Rescue	B-1B
Lima Lima Flight Crew	Apache Helicopter
Sean D. Tucker & Team Oracle	Black Hawk Helicopter
The Firebirds Delta Team	KC-135
Red Bull Choppers	KC-10
Ed Hamill - Air Force Reserve Bi-Plane	C-17
Red Bull Mig	U.S. Coast Guard Air/Sea Recsue
Red Bull Helicopter	Announcer Herb Hunter
Pilot - Chuck Aaron	

This is still billed as the largest free spectator event in North America, so plan on large crowds. Arrive early, stay late and take public transportation. Parking downtown is very limited and very expensive. You won't like the traffic, anyway. About one million people show up along the lakefront on Saturday and Sunday. Food and crowd support facilities are fairly limited, so consider bringing your own. As a pedestrian in the area watch for motor vehicle and especially bicycle and roller blader traffic. The show is highly weather dependent. Under good summer conditions the lakefront is hot, sunny place - but Chicago's weather is notoriously variable. This is a LOUD show, no infants or dogs.

Check the CTA, RTA and Metra for public transportation. CTA will operate several special routes and shuttle busses.

This year practice flying by various teams is likely to start as early as the preceding Monday and continue at various times during the week. Watch for fly-bys and parachute jumps at area sporting events this week, as well. CARMA members will be scouting the lakefront to gather for you hot frequencies, photos and reports. Most of our reports are posted to a Yahoo e-mail list server at: <http://groups.yahoo.com/group/carmachicago/>

At the show site we try to keep an ear on the CARMA amateur radio event simplex frequency - 145.770, CTCSS - 151.4 Hz. We don't operate a formal net here but we try to monitor the frequency for amateur radio licensees.

Friday:

We attend the Friday practice show. We will be at the North Avenue beach house - show center. We are pretty easy to find, just look for the guys with all the radios and cameras. This is a great opportunity for airshow photography. We tend to hang out on the ramp on the east side of the building in front of the park district concessions area. Good photo spots include right there, along the fence line leading to the water and at the water's edge - but beware of sand in your gear! Wear sunscreen and stay hydrated.

Saturday:

We set up a picnic area and field monitoring station under the last few trees out on the Fullerton point. We are there all day, almost from dawn to dusk. Walk east through the Fullerton Avenue underpass for Lake Shore Drive and enter the lakefront by continuing to walk east. Watch for bikes! Either continue east-north-east walking through the trees until you come to us, or walk east on the bike / pedestrian sidewalk until just before it turns left (north). Climb up to the grass between the park benches, face north and you'll be right in front of us. Say Hi! Our picnic is bring you own.

Sunday:

This is a more casual event day for us. We try to get some web audio feeds going from our home locations and several of us roam the lakefront between North Avenue and Fullerton doing photo work. Should we get rained out on Saturday we'll try to setup our picnic spot at the Fullerton point as an alternate day (no promises!).

Anyone in a good mood seeking airshow, radio and city fun is welcome to come join us. Come on down to the show and say "Hello!". Its always a great time.

Where we will be (and you should, too!):



Radio Notes:

This is downtown Chicago, one of the most challenging radio monitoring environments in the world. Thousands of high power transmitters are adjacent to the site and radio / scanner front-end overload is the norm. The more selective your radio is - the happier you'll be.

Triple-conversion (or better) receivers usually perform fairly well, but you'll find yourself wanting to attenuate the radio environment. This can be done by using your radio's built-in attenuator functions (if it has them), an in-line attenuator module or filters and less antenna - not more. If you are going to monitor FM land-mobile frequencies we suggest employing CTCSS/DCS receive where ever possible. Earphones are also a big help. Don't forget spare batteries and a carry case for your gear. My best performing radios at the show sites have been; PRO-2004, PRO-2006, PRO-43, PRO-2045, PRO-97, Icom R2 and especially my Yupiteru MVT-7100 - but every one of these otherwise great performing radios suffers some degree of intermod interference and overloading here.

Signal Stalkers, Close Call, frequency counters, Scouts, X-Sweepers, Xplorers, spectrum analyzers and even the AOR 2000AB have all been used at the show. All work to some degree, but again - all are challenged by the incredibly high level of background radio frequency interference at the show site. Band filters, preselectors and attenuators all help with these devices. So do band-appropriate antennas and especially - getting as physically close to your target as possible, even a few feet (inches?) can make a difference. And consider AM Vs. FM modes.

The primary sources of interference are FM and Television VHF/UHF broadcast, VHF/UHF and 900 MHz paging, 800 MHz Cellular and trunked radio systems, PCS cell phones and UHF business band repeaters. Add 162.550 NOAA Weather Radio to the mix and 163.250 hospital paging. Then add the site specific transmissions like U.S. Coast Guard, amateur radio and Family Radio Service. It's quite the signal-bath at North Avenue!

There is some degree of show-related activity on almost any type of radio service or band you can imagine. Aeronautical, Military, Federal, Marine, Police, Fire, Park District, Medical, Transportation, Amateur, FRS, Media, even some HF all play their roles. Show staff uses rented UHF low power handhelds in the 461 - 465 MHz band.

Aeronautical operations are controlled by FAA staff, both from a platform located just south of the North Avenue beach house and at Gary, O'Hare, the Elgin TRACON and Chicago Center. The show center platform will have primary and alternate VHF / UHF pairs for both show control and approach and departure. We won't know what those frequencies are until Friday and they sometimes change during the show depending on local signal quality. The FAA communicates amongst their staff locations primarily via Nextel. Airspace is reserved for show operations during the week and it pays to check the FAA web sites for updated Notices to Airmen.

Most performers fly in and out of the show site to and from the Gary, Indiana airport. They traverse a bit of Midway airspace in that process. Some of the larger aircraft will fly to and from O'Hare. Other performers (mostly military heavies) will fly in and out directly from their home fields and will be in contact with Chicago Center and their command posts en-route - often in the UHF Milair band - 225.000 to 400 MHz.

Some performers also deploy their own ground spotter and support networks and operate on their own discrete frequencies. Discreet air to air and air ground audio relay channels are often found in the 122.000 - 124.000 MHz band, 25 KHz steps in AM Mode. Most military performer discrete channels will be found in the 225.000 - 400.000 Mhz or 138.000 - 144.000 MHz bands, 25 KHz steps in AM Mode. Keep your search features handy.

It's a water show too! Marine operations are controlled by the U.S. Coast Guard, mostly using their usual VHF Marine Band channels, but the Park District lifeguard service handles the actual shoreline. The un-official water show consists of hundreds of pleasure craft based show attendees, kept at a safe distance boat line off shore. Its maintained by the Coast Guard, Chicago Police Marine Unit (on the 800 MHz trunked system) and other patrol craft resources drawn as mutual aid. All of the Marine Band channels will be very busy and worth monitoring.

The Chicago Police Department deploys an enormous special events detail to handle the show. Two Citywide channels are usually reserved for the show, 5 & 6. There will also be other show related CPD traffic on other Citywide and simplex channels, as well as on the local (downtown) dispatch Zone frequency. The City's Traffic Management Aides will have their hands full on Citywide 7 - 460.300 MHz. The Chicago Park District will also be busy on their VHF channels. Park illegally and you'll get towed away. (Park legally and you'll be broke - again, take the CTA).

The Chicago Fire Department deploys considerable special resources, especially for EMS. They may be trying out their new digital UHF frequencies or using their usual VHF channels.

The Chicago Office of Emergency Communications usually deploys at least one major communications or event monitoring asset at the show. Their technicians operate on a 800 MHz trunked system.

The Chicago Transit Authority will be having one of their busiest days of the year, second only to the 3rd of July. Both their Bus and El-Train UHF operations will be very active. Family Radio Service traffic is non-stop and you sometimes catch a performer or two there, as well. Some vendors may use business itinerant frequencies.

Frequency Notes:

Q: "Do you know the frequency for the airshow?" A: "Yes, once a year!"

The single best (two) frequencies for the show are the airshow platform VHF and UHF primary control pair in the aeronautical bands. Sorry, we don't have those yet for this year. They usually aren't allocated until the preceding Thursday or Friday. If you went to the Gary Airshow earlier this year the pair they used there are sometimes re-used for the show. You can try searching 118.000 - 136.975 and 225.000 - 400.000 Mhz, 25 KHz steps in AM Mode, signal stalker / close call / search at the show site or keep an eye on the CARMA list. Hey, the challenge is part of the fun, no? Ya' gotta come to the show!

Ted's Hot Check-Off List: *(don't burn your fingers!)*

√	Frequency	Mode	User & CTCSS / DCS Information
		AM	Platform VHF Primary
		AM	Platform UHF Primary
		AM	Platform VHF Secondary
		AM	Platform UHF Secondary
		AM	Platform VHF Approach / Departure Primary
		AM	Platform UHF Approach / Departure Primary
		AM	Platform VHF Approach / Departure Secondary
		AM	Platform UHF Approach / Departure Secondary
		AM	Show Discrete Primary
		AM	Show Discrete Secondary

	40.55	FM	Midway Blackhawk helos air tac
	47.00	FM	Midway Blackhawk helos command post
	118.225	AM	Chicago Center Kankakee w/353.550
	118.400	AM	Midway arrival / departure
	118.700	AM	Midway Tower VHF, w/226.300 UHF
	119.450	AM	Midway Radar
	120.125	AM	Chicago Center Kankakee
	120.550	AM	Chicago Radar VHF, paired with 290.200
	120.625	AM	Gary ATIS
	120.750	AM	O'Hare Tower
	121.500	AM	VHF Guard emergency, w/243.000 UHF
	121.900	AM	Gary Ground / O'Hare Ground
	122.750	AM	Common air to air channel
	122.850	AM	Common federal air to air chanel
	122.950	AM	Unicom
	123.025	AM	Chicago helicopter common traffic route advisory
	123.075	AM	Helicopter Multicom
	123.100	AM	FAA channel for airshow and rescue primary
	123.150	AM	Airshow Discreet 2004 & 2006, also Lima-Lima
	123.175	AM	Lima-Lima air to air

	123.400	AM	FAA channel for airshow and rescue secondary & chit chat
	123.425	AM	Misc chit chat
	123.450	AM	Misc chit chat
	123.475	AM	Golden Knights
	123.500	AM	Golden Knights alternate
	123.575	AM	Lima-Lima air to air alternate
	123.650	AM	Gary Flight Service Station
	125.175	AM	Past use for show platform
	125.600	AM	Gary Tower VHF, w/256.700 UHF
	126.000	AM	Past use for show arrival / departure
	126.050	AM	Past use for show arrival / departure / Midway Radar
	126.800	AM	Chicago Radar VHF, may be paired with 398.950
	126.900	AM	O'Hare Tower
	127.925	AM	O'Hare Tower
	128.150	AM	O'Hare Tower
	128.800	AM	Past use for show platform
	130.950	AM	Gary Jet Center flight services
	132.300	AM	Past use for show platform
	132.500	AM	Chicago Center Kankakee
	132.700	AM	O'Hare Tower
	133.100	AM	Chicago Radar VHF, w/285.600 for Gary Arv/Dep
	133.500	AM	Chicago Radar
	134.100	AM	Chicago Radar VHF, may be paired w/308.400 & past platform use
	135.200	AM	Midway Radar
	136.575	AM	Past use for Heritage Flights
	138.200	AM	Gary Indiana Air National Guard operations, w/385.700
	138.750	AM	Michigan ANG A-10's Air Tac
	138.875	AM	USAF Thunderbirds air tac reported in 2008
	139.225	AM	USAF Thunderbirds air tac reported in 2008
	139.500	AM	Milwaukee Tanker command network and air tac
	139.800	AM	USAF Thunderbirds VHF air tac possible F2 2009 shows
	140.000	AM	USAF Thunderbirds air tac older reports
	140.400	AM	USAF Thunderbirds cross country chat reported in 2007
	141.075	AM	USAF Thunderbirds VHF air tac F1 2009 shows
	141.150	AM	USAF Thunderbirds air tac reported in 2008
	141.300	AM	USAF Thunderbirds air tac reported in 2007
	141.400	AM	USAF Thunderbirds air tac reported in 2008
	141.850	AM	USAF Thunderbirds air tac former Victor-1
	141.900	AM	Connecticut ANG A-10's Air Tac
	142.800	AM	Golden Knights reported future use
	143.250	AM	USAF Thunderbirds air tac reported in 2008
	143.700	AM	USAF Thunderbirds air tac reported in 2008
	143.850	AM	USAF Thunderbirds air tac former Victor-2
	143.925	AM	USAF Thunderbirds cross country chat reported in 2008
	145.770	FM	(151.4) CARMA Simplex
	148.850	AM	USAF Thunderbirds air tac reported in 2008
	150.250	AM	USAF Thunderbirds air tac reported in 2008

	151.190	FM	(127.3) Chicago Park District
	151.190	FM	(114.8) Lincoln Park Zoo
	151.295	FM	(114.8) Lincoln park Zoo
	151.295	FM	(127.3) Chicago Park District
	151.835	FM	Lincoln Park Zoo Cannon Drive Lots
	151.955	FM	(D065) Lincoln Park Zoo
	154.130	FM	(156.7) CFD Main (northside operations repeater)
	154.220	FM	(156.7) CFD Administrative simplex
	154.295	FM	(91.5) CFD Fireground primary
	156.425	FM	Marine Channel 68 Monroe Harbor & Columbia Yacht Club
	156.450	FM	Marine Channel 9 Lake Michigan Calling Channel
	156.475	FM	Marine Channel 69 Downtown Harbors
	156.575	FM	Marine Channel 71 Burnham Harbor
	156.800	FM	Marine Channel 16 Emergency Calling and USCG
	156.850	FM	Marine Channel 17 State Contrl & Law Enforcement
	157.050	FM	USCG Marine Channel 21A Aeronautical
	157.075	FM	USCG Marine Channel 81A PatCom
	157.100	FM	USCG Marine Channel 22A Broadcasts
	157.125	FM	USCG Marine Channel 82A Rescue
	157.150	FM	USCG Marine Channel 23A Rescue
	157.175	FM	USCG Marine Channel 83A AuxCom
	216.725	FM	USAF Thunderbirds ground cart audio feed
	216.975	FM	USAF Thunderbirds ground cart audio feed
	225.175	AM	USAF Thunderbrids air tac reported in 2008
	226.300	AM	Midway Tower UHF, w/118.700 VHF
	234.500	AM	T-38 Trainers tac air to air
	235.025	AM	USAF Thunderbirds reported alternate UHF
	235.250	AM	USAF Thunderbirds UHF air tac F1 2009 shows
	235.775	AM	Past use for show platform
	237.900	AM	USCG Aero SAR secondary
	242.400	AM	Midway Blackhawk helos air tac
	243.000	AM	UHF Guard emergency, w/121.500 VHF
	252.100	AM	O'Hare ALCP
	256.700	AM	Gary Tower UHF, w/125.600 VHF
	256.800	AM	Chicago Center Kankakee
	257.200	AM	Past use for show platform
	258.100	AM	Chicago Center Kankakee
	269.500	AM	O'Hare Departure South
	270.000	AM	USN Leapfrogs reported use
	277.700	AM	KC-135 Demos
	280.800	AM	Apache Helos air to air
	282.800	AM	USCG Aero swimmers
	284.000	AM	O'Hare Approach West
	285.600	AM	Chicago Radar UHF, w/133.100 for Gary Arv/dep
	290.200	AM	Chicago Radar UHF, paired with 120.550
	307.200	AM	O'Hare Departure West
	308.400	AM	Chicago Radar UHF, may be paired with 134.100

	322.950	AM	USAF Thunderbirds UHF air tac F2 2008 shows
	326.150	AM	USCG Aero working primary
	337.400	AM	O'Hare Departure Northeast
	345.000	AM	USCG Aero primary
	348.000	AM	Past use for show platform
	349.000	AM	O'Hare Radar South
	349.700	AM	B1B Bombers air to air tac
	353.550	AM	Chicago Center Kankakee w/118.225
	376.025	AM	USAF Air Combat Command Demos
	379.050	AM	USCG Aero working secondary
	381.800	AM	USCG Aero former SAR channel
	384.550	AM	USAF Air Combat Command Demo Teams
	385.700	AM	Gary Indiana Air National Guard operations, w/138.200
	388.000	AM	Midway Radar
	390.900	AM	O'Hare Tower
	393.100	AM	O'Hare Approach East
	398.100	AM	Past use for show platform
	398.950	AM	Chicago Radar UHF, may be paired with 126.800
	407.500	FM	(131.8) USN Leapfrogs reported use
	413.000	FM	USAF Thunderbirds ground support
	413.025	FM	USAF Thunderbirds ground support
	413.275	FM	USAF Thunderbirds ground support
	453.775	FM	(107.2) Police Towing
	458.025	FM	(203.5) CFD EMS 5 simplex
	458.075	FM	(210.7) Chicago Park District Lifeguard Service supervisors
	458.075	FM	(210.7) CFD EMS 6 simplex
	458.125	FM	(218.1) CFD EMS 7 simplex
	458.175	FM	(225.7) CFD EMS 8 simplex
	460.125	FM	(173.8) CPD Citywide 1
	460.150	FM	(114.8) CPD Zone 4 1 st & 18 th Districts (downtown dispatch)
	460.175	FM	(123.0) CPD Citywide 2
	460.250	FM	(162.2) CPD Citywide 6
	460.275	FM	(141.3) CPD Citywide 3
	460.300	FM	(131.8) CPD Citywide 7 Traffic Management Aides
	460.325	FM	(192.8) CPD Citywide 4
	460.350	FM	(97.4) CPD Citywide 5
	460.525	FM	(179.9) CPD Channel 5 simplex
	460.5875	FM	CPD Mounted Units reported simplex use
	460.600	FM	(156.7) CFD EMS north repeater primary
	461.1125	FM	Chgo Airshow 2005 Chair Rentals
	461.2750	FM	(D703) Chgo Airshow 2005 Trailers & Foods
	462.8125	FM	(D464) Chgo Airshow 2004 Comm Direct Rentals F06 media
	462.950	FM	(156.7) CFD EMS 3 repeater
	462.975	FM	(156.7) CFD EMS 4 repeater
	463.1125	FM	(136.5) Chgo Airshow 2005 Com Direct Rentals Gates
	464.0375	FM	(D732) Chgo Airshow 2004 Comm Direct Rentals F05
	464.6250	FM	(127.3) Chgo Airshow 2004 Comm Direct Rentals F11

