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WISCONSIN WING CIVIL AIR PATROL

WISCONSIN DEPARTMENT OF TRANSPORTATION



MUTUAL AID RADIO CHANNEL (MARC)

OPR: WIDC
DATE: 10 Oct 2001

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Request for information should be directed to Wisconsin Wing Director of Communications.**

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Wisconsin Mutual Aid Radio Channel (MARC) VHF State Wide System Operations

Transmit	TX Tone	Receive	PL Tone	Designator	Notes
153.8450	136.5 (4Z)	151.2800	136.5 (4Z)	MARC 1	2
151.2800	136.5 (4Z)	151.2800	136.5 (4Z)	MARC 2	1

Note 1: The MARC system is primarily a short range system, this is the simplex (Primary) channel

Note 2: This is the extended range channel (repeater), channel 1 should be used first for short range communications. This will avoid interference between isolated ICS incidents on the state wide system.

Mutual Aid Radio Channel (MARC) is a mutual aid channel for use by all public safety and local government agencies involved in any incident requiring a multi-discipline response where no other common frequency exists between responding agencies. This channel is for on scene command and coordination. It is intended that this channel will facilitate communications when the Incident Command System (ICS) is used. As always, emergency traffic has priority.

Civil Air Patrol use of this channel **requires competent authority**, normally this authorization is granted from the Civil Air Patrol Incident Commander (IC). The channel will only be used for Inter-Agency Incident Command System (ICS) purposes only. The Incident Commander (IC) and the Communications Unit Leader (CUL) will document their respective mission log(s) if MARC utilization occurs. Notification will be forwarded to the Director of Communications (WIDC) for utilization tracking and conflict resolution should they arise. All other communications will take place on normal CAP frequencies.

The Incident Command System (ICS) requires plain language communications in order to work effectively, no code words or 10 codes. Example “wheels up from MKE mission base at 10 past Zulu” should be said “Our search aircraft has departed from the Milwaukee mission base at 3:10 PM local time”.

Civil Air Patrol **will identify** with their **agency name**, their **unit number**, followed by the FCC statewide callsign **WNPG-812** after each conversation.

Example: Civil Air Patrol, Bluemound 123, WNPG 812, out.

Any questions or concerns about the MARC system, or its operations, will be addressed directly to the wing Director of Communications. This document was developed to encourage utilization of the system in a professional manner and having a valid need.

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 STATE OF WISCONSIN
Mutual Aid Radio Channel Plan
"M.A.R.C."



DESCRIPTION

The Wisconsin Mutual Aid Radio Channel (M.A.R.C.) was established to provide a common radio frequency to be used statewide by state and local public safety agencies during periods of man-made or natural disasters and other emergencies where inter-agency coordination is required.

It operates under appropriate Federal Communications Commission Rules and Regulations and is administered by the State of Wisconsin through the State Patrol Bureau of Communications. The Wisconsin Chapter of the Associated Public Safety Communications Officers Interagency Communications Committee (M.A.R.C. Committee) exercises general supervision and disciplinary control.

ELIGIBILITY

Participation in M.A.R.C. is open to all public safety and local government agencies, including law enforcement, fire, EMS, DPW, highway maintenance, emergency government, forestry and other state agencies.

APPLICATION PROCEDURES

Requests for authorization on M.A.R.C. will be addressed to the Dept. of Transportation, State Patrol Bureau of Communications, PO Box 7912, Madison WI 53707. All mobiles will be operated under the State held license. Requests for mobile authorizations should include the number of units to be authorized. Mobile authorizations will be processed immediately.

All base and repeater stations will be licensed by the local agency. These agencies must be eligible for licensing in the Local Government Radio Service. Requests for base, repeater, portable repeater, and control station operations must include the completed APCO frequency coordination form and the FCC license application form. These requests will be forwarded to the MARC Committee for approval.

USAGE

M.A.R.C. is a mutual aid channel for use by all public safety and local government agencies involved in any incident requiring a multi-discipline response where no other common frequency exists between responding agencies. This channel is for on-scene command and coordination. It is intended that this channel will facilitate communications when the Incident Command System is used.

As always, emergency traffic has priority.

MOBILE AND PORTABLE

M.A.R.C. is designed primarily for short range mobile to mobile use. Authorized mobiles are required to be equipped with M.A.R.C. 2 and are encouraged to have M.A.R.C. 1 capability also. Mobiles will identify with the name of their agency and their unit number.

For example: "Wood County 16"
 "Dodge Sheriff 110"
 "Waupun DPW 30"

All mobile units will identify with the statewide callsign: "WNPG-812" after each conversation.

BASE STATIONS

Base operation is secondary to mobile use. Base Station technical parameters will be limited to that which is necessary to cover the applicant agency's jurisdiction. Patch capability from other channels to/from M.A.R.C. is not permitted without prior authorization. Base authorizations will be restricted in some state border areas.

CONTROL STATIONS

Any agency may operate, with M.A.R.C. Committee and FCC authorization, a low power "20 foot rule" control station for use when an area repeater is activated.

REPEATER

Repeater operation is secondary to mobile use. Each county will be authorized one controlling agency, normally the countywide dispatch center, to provide countywide repeater coverage. This agency must also provide 24 hour monitoring of the channel. Repeaters and the associated communications centers are required to monitor both M.A.R.C. 1 and M.A.R.C. 2. Repeaters will be disabled until requested by an Incident Commander or other mobile. Only one repeater may be turned on in a given area at one time. Patch capability from other channels is not permitted without prior authorization. Repeater authorizations will be restricted in some state border areas. Automatic callsign identifiers are not permitted.

PORTABLE REPEATER

Any agency may operate, with M.A.R.C. Committee and FCC authorizations, a low-power portable repeater for temporary use at a specific incident.

TECHNICAL INFORMATION

Channel Identifier: M.A.R.C. (Mutual Aid Radio Channel)

Service: Local Government

Frequency:	Mobile/control	Mobile/base	Repeater
	"M.A.R.C. 1"	"M.A.R.C. 2"	
TX	153.8450	151.2800	151.2800
RX	151.2800	151.2800	153.8450

Power Output: 110 Watts Maximum

Equipment: Mobile, portable, base, control and repeaters

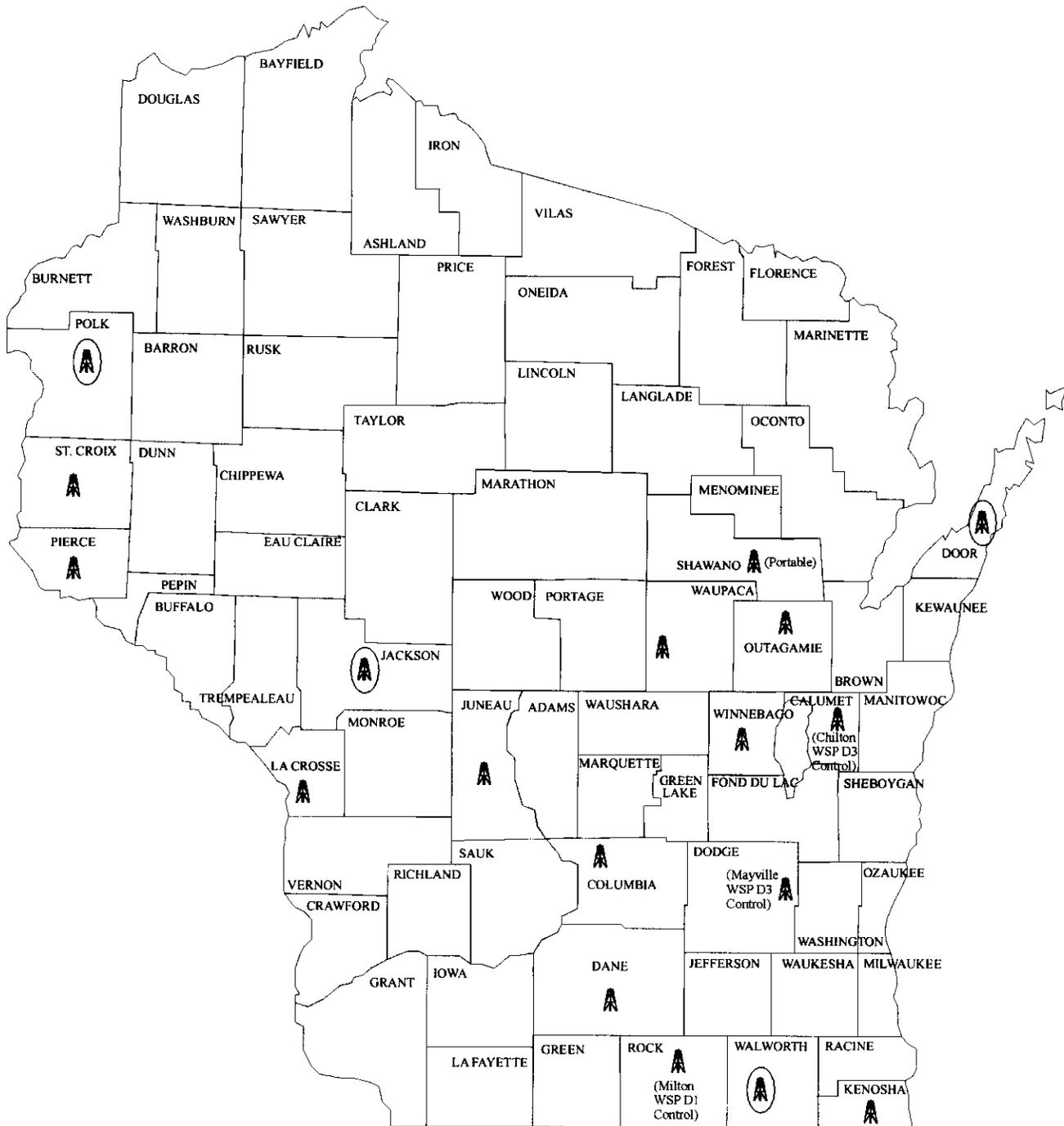
CTCSS: 136.5 TX & RX

Voice Privacy: Not Permitted

Paging / signalling: Not Permitted

For additional information contact the A.P.C.O. M.A.R.C. committee, WI State Patrol Bureau of Communications or A.P.C.O. Frequency Advisor. Revised: 11/92.

State of Wisconsin Mutual Aid Radio Channel MARC Repeater Locations



-  Active Repeaters
-  Future Repeaters



Wisconsin Department of Transportation

www.dot.state.wi.us

Scott McCallum
Governor

Terrence D. Mulcahy, P.E.
Secretary

DIVISION OF STATE PATROL
4802 Sheboygan Ave. Rm. 551
PO Box 7912
Madison, WI 53707-7912

Telephone: 608-266-3212
FAX: 608-267-4495

LETTER OF AUTHORIZATION

TO OPERATE MOBILE RADIOS UNDER THE AUTHORITY OF ANOTHER LICENSE

The State of Wisconsin hereby authorizes WI Wing Civil Air Patrol
to operate mobile radios under the authority of the FCC radio license(s) described in accordance
with these provisions:

Transmit Frequencies:	153.845	151.280
Receive Frequencies:	151.280	151.280
Tone Squelch (PL):	136.5	136.5
Channel Name:	MARC 1	MARC 2
Radios Authorized:	<u> 50 </u>	<u> 50 </u>
Call Sign:	WNPG812	WNPG812
License Expiration:	09/05/04	09/05/04

1. The granting agency is responsible for all operation and control for the radio station and system.
2. This grant of authorization requires operation in strict compliance with FCC Rules and Regulations and any operational requirements of the granting agency.
3. The granting agency reserves the right to withdraw the authority granted by the letter at any time by furnishing written notification.
4. The authority to operate is only for transmissions made to the granting agency or in the furtherance of the granting agency's interests.
5. The license has sufficient capacity for the number of mobile radio units being authorized.
6. This authorization does not extend beyond the authority and parameters of the license(s) cited above.
7. Other: See the MARC plan for information on the use of the MARC channels.

Signed: Carl Guse
Carl Guse, Frequency Specialist
Bureau of Communications

Date: 9/05/01