State of California CALIFORNIA EMERGENCY MANAGEMENT AGENCY

Fire and Rescue Division

OPERATIONS BULLETIN # 28

Subject: VFIRE Frequencies (Formerly White Fire Frequencies) - Radio Communications

1. Introduction

The Federal Communications Commission (FCC) has designated frequencies for nationwide public safety interoperability. Within the public safety frequency pool, certain frequencies have been specifically designated for Fire Intersystem communications.

In California, 3 of the six Fire Intersystem frequencies have <u>previously</u> been known as the "WHITE" channels. The California Statewide Interoperable Executive Committee (CalSIEC), in cooperation with the California Fire and Rescue Mutual Aid System, is responsible for determining policies and usage of these channels. The CalEMA Fire and Rescue Division serves as the focal point for daily coordination of these efforts, supported by the CalEMA Telecommunications Division.

As required by the FCC, "White 1" (154.2800) was narrowbanded January 1, 2013. The "White 1" channel name shall now be referred to as VFIRE21. In addition to this change, two additional VFIRE channels are now available for all incidents in California; VFIRE24 (154.2725) and VFIRE25 (154.2875).

"White 2" and "White 3" were narrowbanded on January 1, 2012 and were renamed to conform with the National Interoperability Channel Naming Standards, VFIRE22 and VFIRE23. VFIRE26 was also added to the available pool of Fire Intersystem frequencies at the same time.

ALL VHF and UHF radios **MUST** be narrowband compliant as of January 1, 2013. Any non-compliant radio equipment used on narrowband channels may present a *life-safety hazard*. All radios that are <u>not</u> capable of narrowband technology **shall be** taken out-of-service and not placed into service by another fire service agency (e.g. donations, personal or volunteer use, etc.) Any radios returned to the vendor or disposed of as surplus should have all programming deleted or crystals removed.

2. Policy

The VFIRE channels are to be used to provide for radio communications between two or more fire agencies for coordinating fire response activities during mutual aid incidents.

Portable repeater use on VFIRE channels is not authorized. Portable repeater use for mutual aid operations can only be coordinated on VTAC34 through VTAC38.

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The VFIRE and CALCORD channels maximum radiated power and authorized types of units are:

Name	Frequency	Maximum Radiated Power*	CTCSS	Base	Mobile	Portable
VFIRE21	154.2800	110 Watts	RX/TX 156.7	Yes	Yes	Yes
VFIRE22	154.2650	10 Watts**	RX/TX 156.7	No	Yes	Yes
VFIRE23	154.2950	10 Watts**	RX/TX 156.7	No	Yes	Yes
VFIRE24	154.2725	10 Watts**	RX/TX 156.7	No	Yes	Yes
VFIRE25	154.2875	10 Watts**	RX/TX 156.7	No	Yes	Yes
VFIRE26	154.3025	10 Watts**	RX/TX 156.7	No	Yes	Yes
CALCORD	156.0750	100 Watts	CSQ RX/TX 156.7	No	Yes	Yes
*	By FCC Regulations, operations in aircraft are limited to 10 Watts Max. Radiated Power.					
**	Operations on VFIRE22 through VFIRE 26 shall be at 10 watts or the lowest power setting above 10 watts available to the radio.					

VFIRE21, VFIRE22 and VFIRE23 are designated by the Federal Communications Commission as "Intersystem" channels, and are intended solely for interagency fire operations, i.e. mutual aid. VFIRE22 and VFIRE23 are intended for on-scene use and mobile only.

The State of California and Local Government entities eligible to hold authorizations in the Public Safety Radio Services are directly responsible for the FCC licensing of the VFIRE channels. Industrial fire departments wishing to use the VFIRE channels must be sponsored by a Local Government entity with jurisdiction for their facility.

The State of California holds the FCC license for mobiles operating on VFIRE22, VFIRE23, VFIRE24, VFIRE25, VFIRE26 and CALCORD. Long-term operations by State of California and Local Government entities must be coordinated through CalEMA Fire and Rescue Division.

Permitted Uses

VFIRE21 may be utilized by fire department resources (including Strike Teams) to contact a fire dispatch center:

- when outside of their normal response area
- when their own dispatch center suffers a communication failure

Announcements of special weather alerts or other emergency related information is acceptable.

VFIRE21 can be used as the initial contact channel for resources reporting to a staging area.

VFIRE21 is reserved for field unit-to-dispatch center communications, incident staging and dispatch center-to-dispatch center contact.

VFIRE22, 23, 24, 25 and 26 can be used for tactical operations on incidents involving more than one fire agency.

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The VFIRE channels may be used for multi-agency training exercises as long as the use does not interfere with other emergency operations.

Prohibited Uses

The VFIRE channels are not to be utilized as a travel channel. The only acceptable VHF channel to be utilized statewide as a travel channel is the California Emergency Services Radio System (CESRS) channel, 153.7550 MHz

On scene tactical operations shall not be coordinated on VFIRE21.

Announcements of a non-emergency nature (e.g. funerals, drills, etc.) are prohibited.

The use of Digital Coded Squelch (DCS) or Digital PL (DPL) is prohibited on all VFIRE channels. VFIRE21, 22, 23, 24, 25 and 26 utilize analog PL/CTCSS of 156.7 Hz on Tx and Rx.

The use of digital emissions (e.g. P25) is prohibited. All transmissions shall use analog conventional emissions.

The use of the VFIRE channels for paging or dispatch alerting notifications is prohibited. Exception: Dispatch center to dispatch center notifications of an incident response is authorized.

The use of PTT ID signaling (MDC 1200) is prohibited.

The use of fixed or portable repeaters, including cross-band links (e.g. JPS ACU-1000/2000) from other bands such as 800 MHz systems on VFIRE21 is prohibited.

Tactical Audio Switches (e.g. JPS ACU-1000/2000) and/or mobile relay equipment (extenders) are prohibited on VFIRE21.

Tactical Audio Switches (e.g. JPS ACU-1000/2000) are permitted on VFIRE22 through VFIRE26.

VFIRE channel use by a single entity for <u>intra</u>-agency communications except as part of a multi-agency operation is prohibited.

Non-fire activities (e.g. air-to-ground contact with non-fire-based air ambulances helicopters), non-fire-based ambulances, law enforcement or other inter-discipline use is prohibited on any VFIRE channel. The California On-Scene Emergency Coordination Channel ("CALCORD," 156.0750 MHz) is specifically designated for inter-discipline use, and its use for such activities is encouraged. To obtain authorization to operate on or for more information regarding CALCORD, contact the Cal-EMA Telecommunications Division at (916) 845-8602.

For additional information or questions regarding Operations Bulletin 28, contact the CalEMA Fire and Rescue Division at 916-845-8711.

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