Advanced Resource Centers (ARCs)

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The La Honda Fire Brigade is Proud to Announce the Coming of the ARC

Advanced Resource Centers Strengthening Disaster Resilience for South Coast Communities

Introduction

The La Honda & Kings Mountain Fire Brigades are proud to introduce the **Advanced Resource Centers (ARCs)**—fully self-contained disaster response units strategically positioned to serve our South Coast communities. These innovative facilities represent a significant advancement in local emergency preparedness, designed to support community resilience during the critical first 72 hours following a disaster.

Funded by The County of San Mateo through measure K funds, ARCs serve five communities across San Mateo County's foothill region: **La Honda, Loma Mar, Kings Mountain, Middleton Tract, and Pescadero**. Each unit is equipped identically to ensure consistency, reliability, and ease of operation during high-stress emergency situations. A special thanks goes to the San Mateo County Board of Supervisors for supporting the project through measure K, The La Honda & Kings Mountain Fire Brigade Board of Directors and Firefighters and the technical team of Peter Chupity, Casey Dunn and Ari Delay Fire Chief from the La Honda Fire Brigade who have designed and built the ARCs with the dedicated support of the volunteer workforce who tirelessly worked on the project.

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What is an ARC?

An Advanced Resource Center is a fully self-contained unit housing critical disaster supplies, emergency communications systems, and operational equipment necessary for a CERT (Community Emergency Response Team) to support a community during extended emergencies. Each ARC is designed as a known, reliable location where residents can access help, make emergency communications, and connect with trained responders—even when traditional infrastructure fails.

Key ARC capabilities include:

- Internal backup power through solar panels and Battery Energy Storage Systems (BESS)
- Advanced emergency communications: Starlink internet, WiFi, Ham Radio, and APRS
- Weather monitoring station and Air Quality Index (AQI) sensors
- Disaster medical supplies including AEDs, Stop the Bleed kits, and PPE
- Light search and rescue equipment
- Fire control supplies and equipment

Why Do We Need ARCs?

Our rural communities face unique challenges during disasters. Remote locations, limited road access, and the potential for communication failures make it essential to have local resources immediately available. The ARCs address these challenges by:

- Providing reliable emergency communications through redundant communication paths when traditional systems fail
- Storing essential tools and equipment locally, reducing the need to gather and transport life-saving equipment into communities during critical first hours
- Establishing a known location where residents can go for help and emergency communications
- Enabling remote activation and monitoring when public safety officials are task-saturated with emergency response

Inside the ARC: Three Operational Areas

Each ARC is organized into three distinct operational areas, each designed to support specific emergency response functions. Community members and volunteers will have opportunities to receive training in all three areas.

The Technical Room: Power & Communications Infrastructure

The Technical Room serves as the heart of the ARC's power generation and monitoring systems. This area houses the technology that enables the ARC to operate independently of the grid for extended periods.

Power Systems:

- Roof-mounted solar panels for renewable energy generation
- Battery Energy Storage System (BESS) for reliable backup power
- Generator backup for extended outage scenarios
- DC and AC power distribution systems
- Inverter technology for power conversion and management

Monitoring & Communications:

- Ham Radio base station for amateur radio communications
- APRS (Automatic Packet Reporting System) for location and status tracking
- Weather station providing real-time local conditions
- Air Quality Index (AQI) monitoring—critical during wildfire events

Remote control and monitoring capabilities for equipment management The Equipment Room houses the advanced networking and connectivity infrastructure that enables the ARC to maintain communications with the outside world and support secure operations.

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Connectivity Systems:

- **Starlink Satellite Internet:** High-speed internet connectivity independent of terrestrial infrastructure
- **WiFi Network:** Local wireless network for responders and community access
- **Network Infrastructure:** Enterprise-grade networking equipment for reliable communications

Technical Infrastructure:

- **MQTT Integration:** Message queuing protocol for efficient sensor data communication and IoT device management
- **Door Access Control:** Secure access systems for controlled entry and monitoring

The Incident Command Post Room (ICP): Operations & Community Interface

The Incident Command Post (ICP) Room serves as the operational center during emergency activations. This space is designed to support coordinated response efforts between CERT teams, Ham radio operators, fire personnel, and community members.

Operational Functions:

- Coordination hub for CERT, Ham radio, and fire operations
- Community interface point for residents seeking assistance
- Public information station for emergency updates and guidance
- Local leadership coordination during disaster response

Emergency Supplies & Equipment Caches:

- **Disaster Medical Supplies:** Automated External Defibrillators (AEDs), Stop the Bleed kits, Personal Protective Equipment (PPE)

- **Search and Rescue Equipment:** Light search and rescue tools for immediate response operations
- **Fire Control Equipment:** Essential supplies for initial fire response and containment

The Equipment Room: Advanced Connectivity & Security

Community Engagement & Training

The ARCs represent more than infrastructure—they embody our commitment to community resilience. We encourage all community members to familiarize themselves with their local ARC and consider participating in training opportunities after becoming trained in CERT.

Orientation training sessions are organized in 20-minute rotations covering each of the three operational areas, ensuring that every participant gains comprehensive knowledge of ARC capabilities and operations. Whether you're interested in technical systems, emergency operations, or community coordination, there's a role for everyone in our disaster preparedness efforts.

Looking Ahead

The Advanced Resource Centers represent a significant investment in our communities' safety and resilience. As we continue to develop and refine these facilities, we remain committed to ensuring that La Honda, Loma Mar, Kings Mountain, Middleton Tract, and Pescadero are prepared to face whatever challenges may come.

For more information about the ARCs or to get involved with emergency preparedness efforts in your community, please contact the La Honda Fire Brigade.

Together, we build resilient communities.