

# **Marine Firefighting Concepts – A Local Perspective**

Prevention First

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# Disclaimers

- Following comments are my own and do not necessarily represent policy for LBFD
- My experience is limited to one department in SoCal, however do have some national experience with US&R and have worked with other local agencies and USCG on this topic.
- Believe I can make some general observations on other Fire Agencies

# Assumptions

- Basic premise is that land based units will be the primary resource.
- Today's audience is primarily from the Maritime Industry
- Much of this prompted by new VRP standards.

# Today's Program

- What we have.
- What we need.
- How to get it.

**What we would bring to an  
event.**

- 7/24 response with a lot of well-trained experienced crews from a land based perspective
- Multiple specialized resources such as Paramedics, large capacity Fire Boats, Foam Rigs, Air Ops, HazMat and US&R, IMT's, etc.





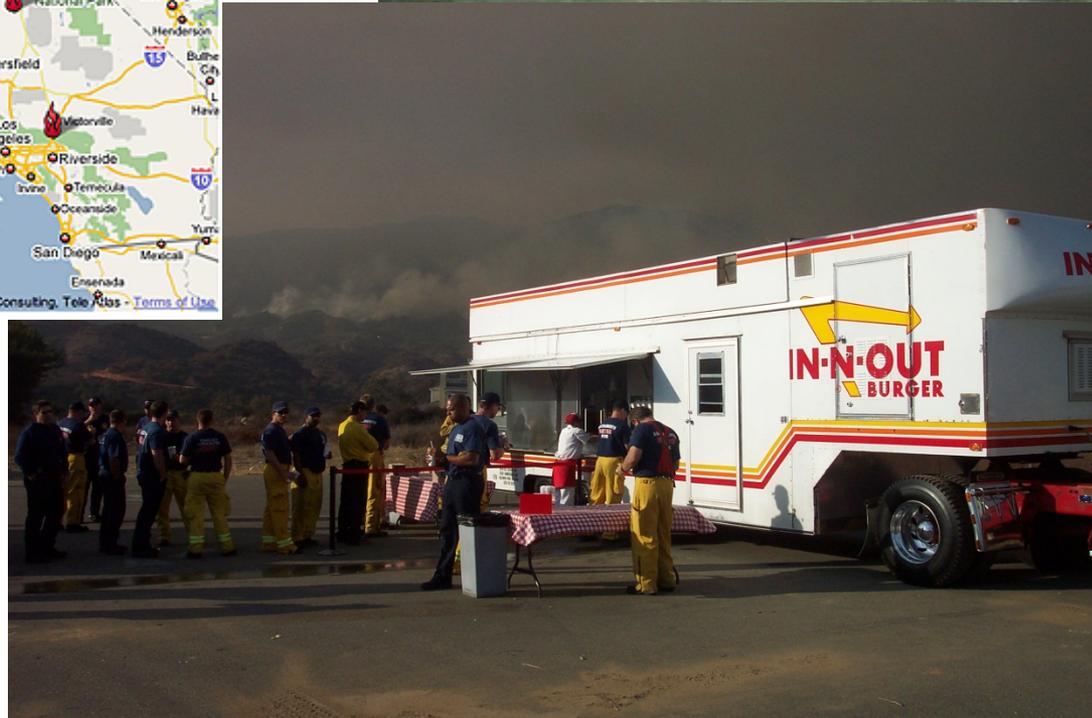
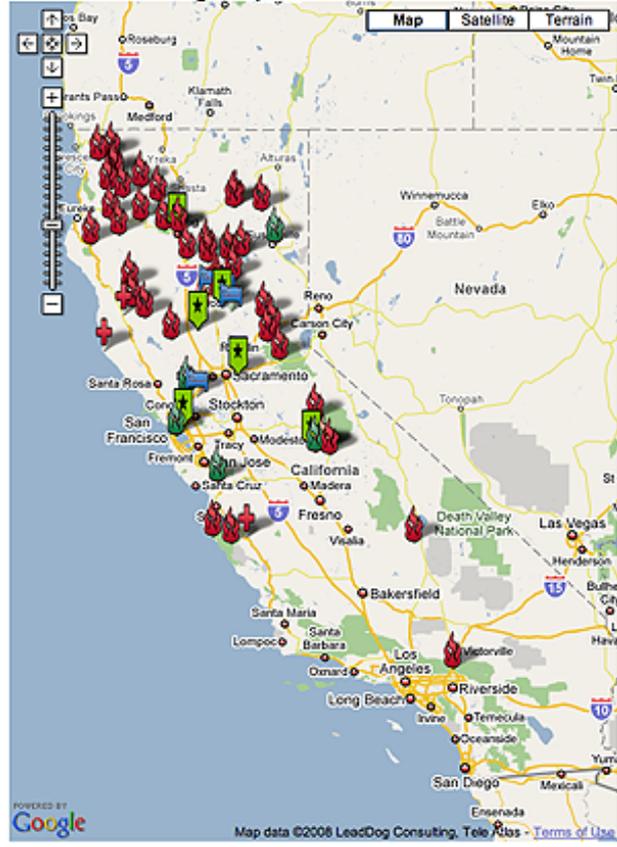


- Integration with LA Co. **EMS** System (Trauma), Public Health and Disaster Management
- Integration with private sector petroleum firefighting resources (SCIMO)

- Ability to field and sustain a complex organization quickly
  - Wildland based
  - Well institutionalized Mutual Aid
  - Intuitive understanding of ICS (FIRESCOPE leads NIMS)



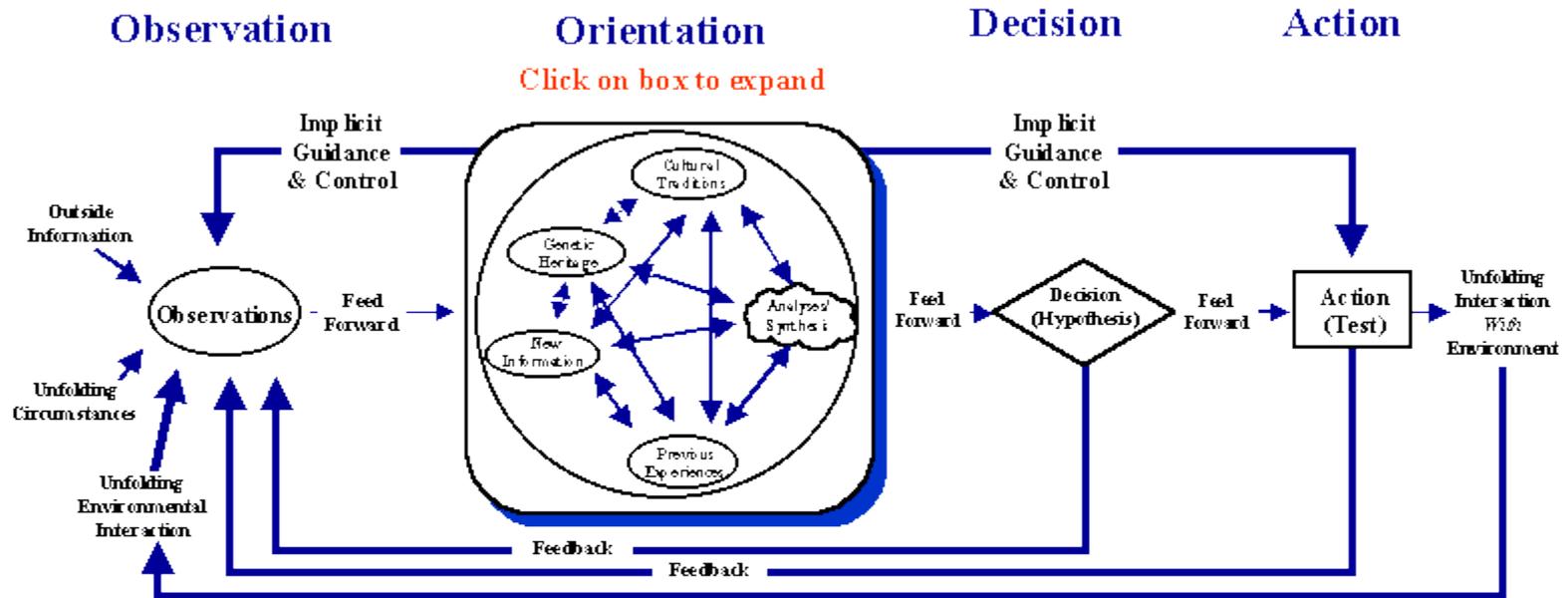
OES Interactive Google Map



- Well practiced emergency decision making process

- Recognition Primed Decision Making
  - Well referenced and generally works well
  - Not deliberative
    - Picture the problem - visualize a solution similar to previous event - then act and test.
- Most not aware of OODA Loop, but good commanders utilize it. (*Observe, Orientation, Decide, Act* → *Loop*)

# The OODA "Loop" Sketch



## Insights:

Note how orientation shapes observation, shapes decision, shapes action, and, in turn, is shaped by the feedback and other phenomena coming into our sensing or observation window.

Also note how the entire "loop" (not just orientation) is an ongoing many-sided implicit cross-referencing process of projection, empathy, correlation, and rejection.

- Requires some contextual consistency that may not be present in MFF environment

# Institutionalized Emphasis on Business Continuity

- Fire Service has their own definition of “Salvage”.
- Initial actions at a commercial fire are to “protect the office”.

# **Needs / Unknowns**

- Our concept of UC generally limited to working with other Fire Agencies
  - I count this as one of the major potential problems

*“Who are you and why do you think you need to be at the CP?. This is my fire.”*

- Tactical comparisons to High Rise, Airport, Confined Space and other typical events may provide false sense of knowledge when on board a burning ship.
  - Forcible Entry and Ventilation are two key ones
- Little understanding of ship systems and stability issues.

- Local Fire Agencies have little control over Fire Prevention measures.
  - Distrust ship systems.
- Language and cultural differences with crew.

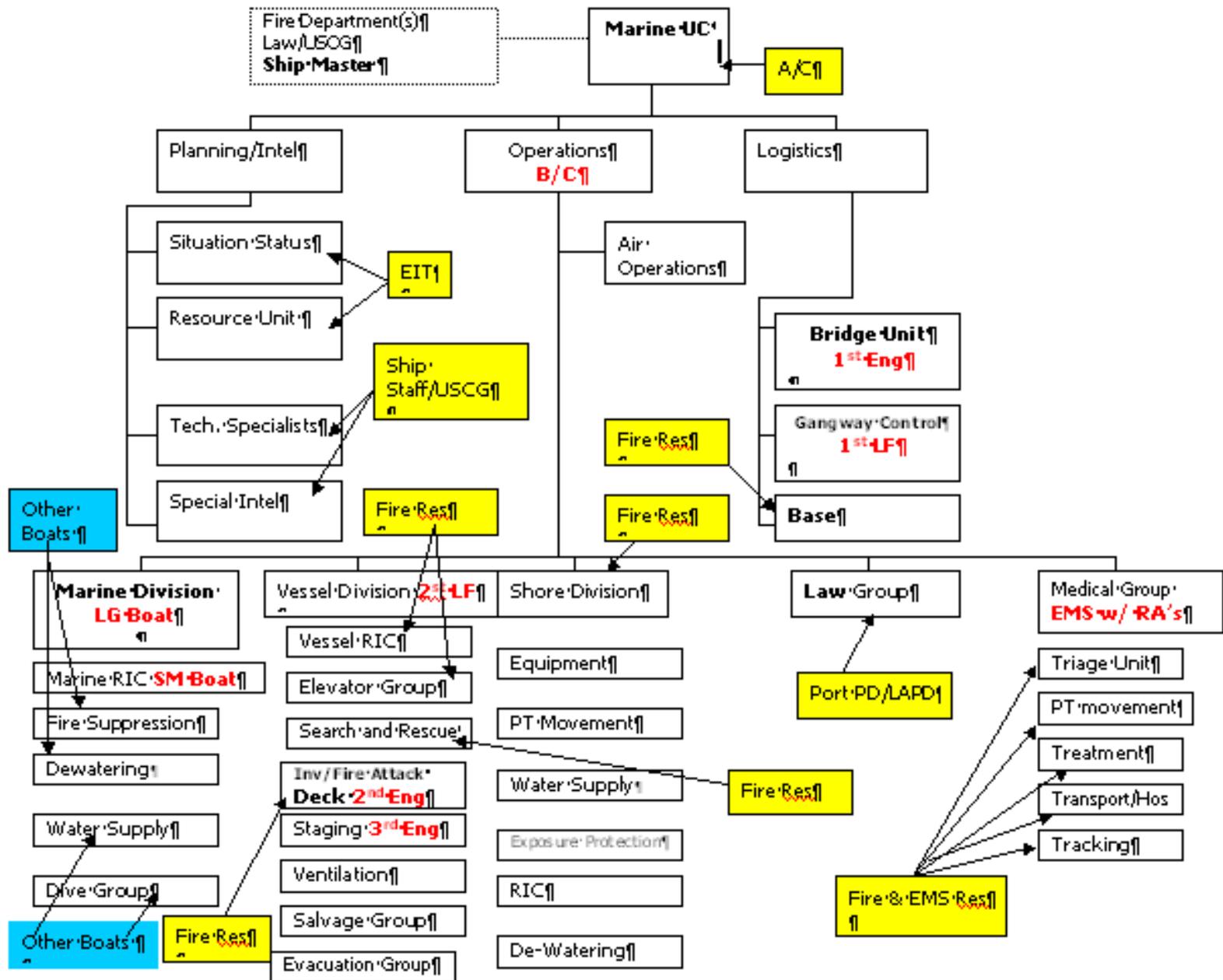
- Poor understanding on ship registry limitations and Master's role.
  - *“You are in a foreign country”*
- Poor understanding that our initial actions may be best to augment crew's efforts.

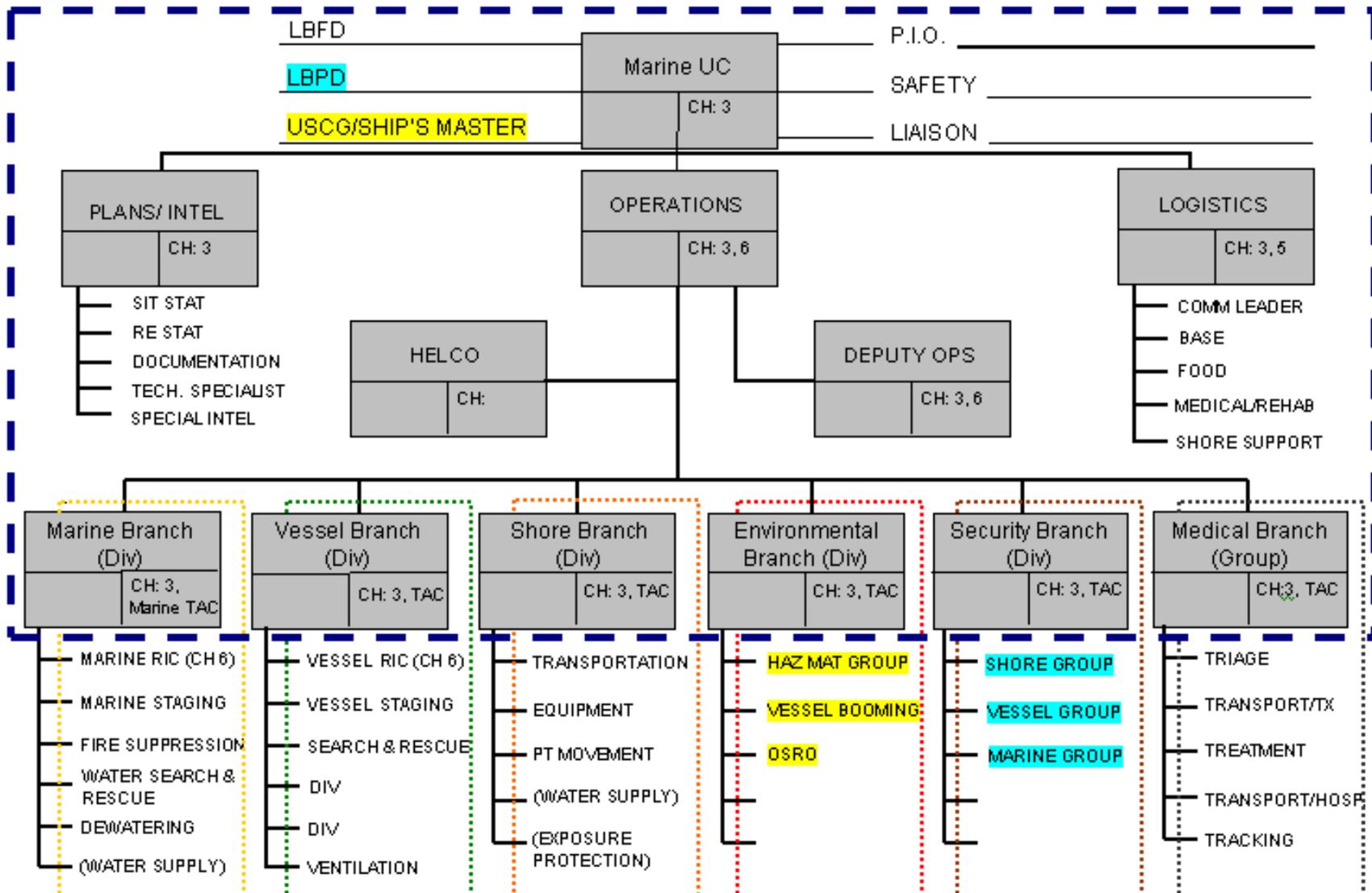
- Our application of ICS will be different than Privates and USCG
  - Ours is arguably much more organic and flexible.

*“Each org chart only represents one slice  
in time”*

# Prescriptions

- Develop generally available training compliant to NFPA 1405 and 1005
  - Two local efforts underway now
    - Fixed facility and remote learning programs pending soon.
  - Cal EMA, Cal Fire and Cal Maritime have work in progress
  - Mature ICS concepts in place now



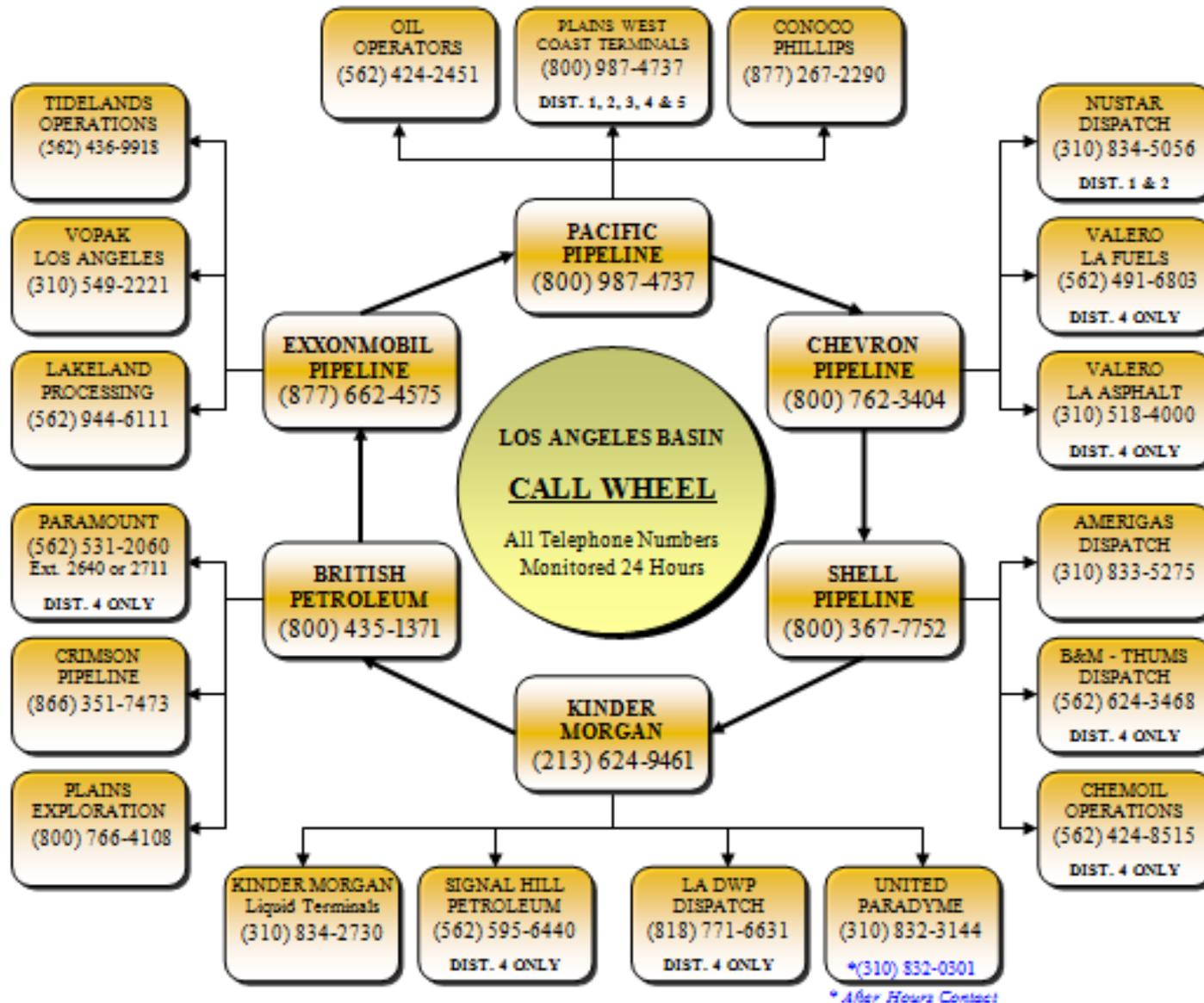


**NOTE:** Vessel Branch should be assigned an Assistant (Tech Specialist from USC) ASAP  
 Marine Branch should have an Assistant (MS Captain) on first alarm assignment

- Continued engagement with USCG
  - *“Practice the plan”*
- Better integration with Privates.
  - Discussions to Green Cells to Functional Exercises
    - Nothing presently in the works.

- Better notification plan
  - Traditional linear methods have key limitations.
  - Pipeline “Leakwheel” better model

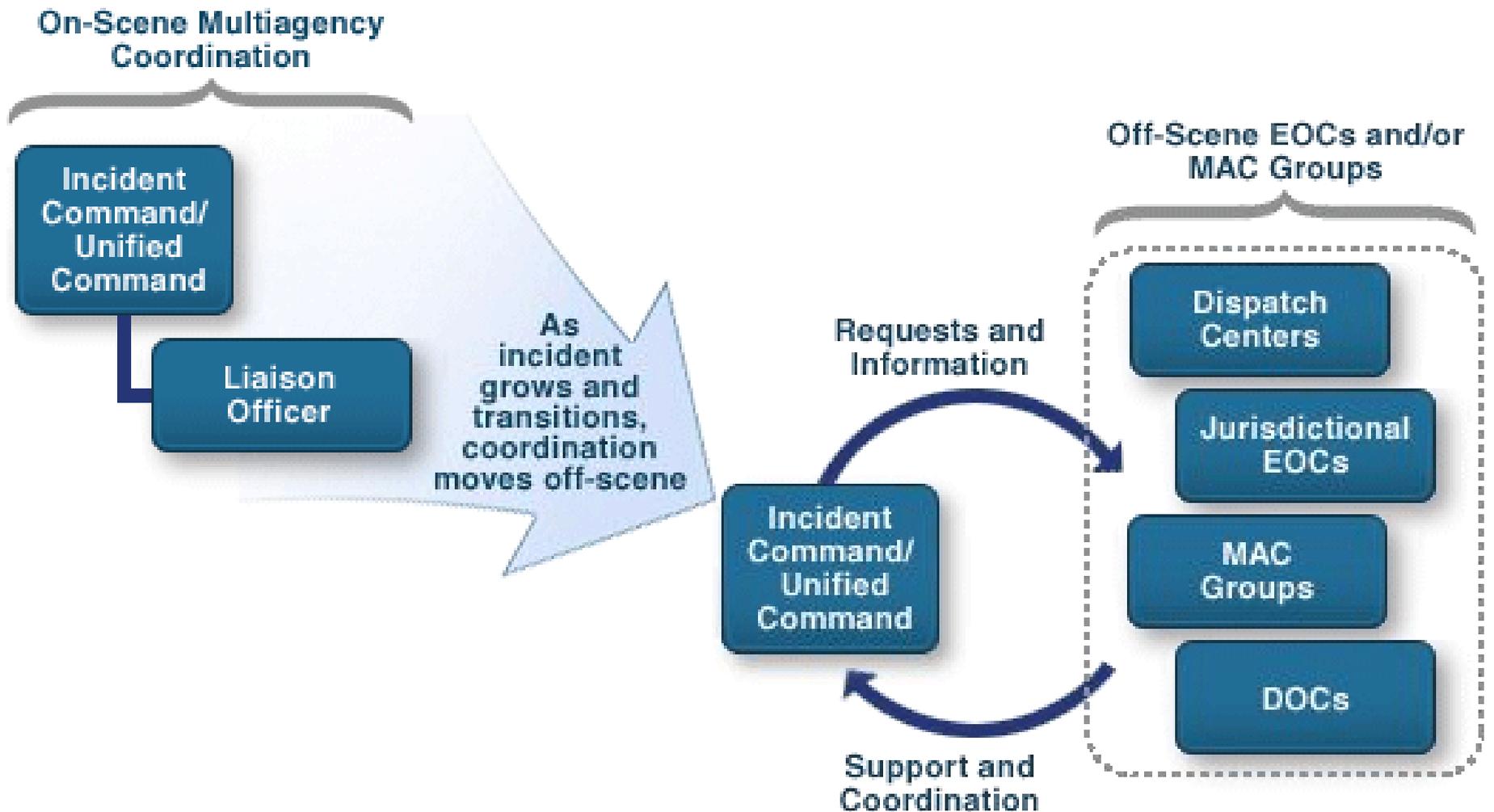
# LOS ANGELES BASIN – EMERGENCY CALL WHEEL



- Develop objective legal counsel for Fire Service
- Pre-establish non-operational elements of ICS such as Finance and Logs

- Pre-establish MACS
  - Multi-Agency Coordination System
  - Parallel and supportive to ICS
  - Achievable goal because of limited number of jurisdictions and responders in a specific locale.

- *“MACS provides the basic architecture for facilitating the allocation of resources, incident prioritization, coordination and integration of multiple agencies for large-scale incidents and emergencies”.*



**Close**

- Very different cultures between Municipal Firefighting and the Salvage Industry, however....

Quote from USN Salvage Engineer's Handbook Vol.1 ,pg. vi  
(S0300-A8-HBK-010)

*“Ship salvage is a science of vague assumptions based on debatable figures from inconclusive instruments, performed with equipment of problematical accuracy by persons of doubtful reliability and of questionable mentality.”*

# Questions?

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