

MSRC 
Marine Spill Response Corporation[®]

2021 YEAR IN REVIEW



MSRC maintained response readiness in our response force and equipment availability throughout the COVID-19 pandemic

- 95% Average MSRC Response Force Readiness
- 11.56% COVID-19 case rate for the full year
 - All Covid cases were non-work related
- 97% equipment reliability factor
- 98% Monthly deployment exercise schedule completion rate

| Internal QA/QC Program | 2019 | 2020 | 2021 |
|-----------------------------------------------|------|------|------|
| QA Drills Testing Personnel Readiness Posture | 181 | 45 | 27 |
| QC Drills Testing Equipment Readiness | 120 | 7 | 16 |
| HSE Drills | 79 | 39 | 57 |
| NTVRP Drills on MSRC Vessels | 285 | 291 | 290 |
| MTSA Security Audits | 36 | 30 | 30 |



MSRC Dedicated Equipment Availability

MSRC maintained 100% WCD OSRO coverage in all operating areas throughout 2021.

| | | |
|-----------------------------------------------------|--------------------------------------------|------------------------------------------------------------------------------|
| Dispersant Aircraft 2 x C-130s 99.3% | OSRVs 98.8% | Temporary Storage (OSRVs, Barges, Tanks, Bladders) 748,790 BBLs |
| Dispersant Stockpile 131,000 Gals 100% | Barges 97.7% | Atlantic EDRC 356,700 BBLs 99.8% |
| Surveillance Equipment 99% | Gulf Boom 74,290 ft 100% | Gulf EDRC 494,200 BBLs 99.9% |
| Communications Equipment 100% | Pacific Boom 410,460 ft 99.9% | Pacific EDRC 603,700 BBLs 99.9% |
| | Atlantic Boom 19,780 ft 100% | |

*includes planned and unplanned outages

Expanded Capability

| | |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Comms Upgrades | Introduced the FirstNet Compact Rapid Deployable unit (CRD) into communications portfolio in Everett, with Band 14 cellular coverage up to 1 mile and WIFI coverage up to 1000 ft. Approved plan for gradual replacement of 3 ECPs with CRDs. |
| Asset Optimization | Re-allocated OSRB 320 to Port Hueneme, Ocean Keeper OSRB to Richmond, and the Pelican OSRB to LA/LB. Deactivated the Pacific and California Responders and arranged for sale. |
| Remote Sensing Improvements | Upgraded aircraft mounted imaging system with the Overwatch TK-7 Earthwatch sensor, providing enhanced surveillance capabilities and real-time data access. Purchased additional drone for a total of 11 drones in MSRC portfolio, and certified two additional drone pilots for a total ten licensed drone pilots. |
| Master Equipment Database | Launched new equipment database on website in spreadsheet format, sortable by equipment type, MSRC Region, state or city. Summarizes and tallies critical equipment specifications and capabilities like EDRC, storage capacity, etc. and includes accurate Lat/Long coordinates for GIS download. |

Customer Experience

| | |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| OSRO Certificates | New compliance documentation issued to MSRC customers with current MPA membership to serve as evidence of contract in current year to satisfy USCG and PHMSA expectations during drills. |
| GIS-Enabled Response Resource Report | Prototype developed for Response Resource dashboard in ArcGIS. Data inputs for dedicated MSRC equipment in MED are finalized, ongoing collection of STARs equipment is 66% complete. |
| Environmental Stewardship | Southern Responder carried out two rescue missions in South Padre Island and Corpus Christi to return over 3,000 sea turtles to warmer waters during the February arctic storm. MSRC Responders in California rescued over 2,000 Elegant Tern chicks from an unsafe nesting area and relocated them using MSRC equipment to a safer nesting ground after evaluation and rehabilitation onshore by International Bird Rescue. |
| COVID Mitigation | Completed mandatory COVID vaccination program by November 2021, with 96% of MSRC employees vaccinated. |

Overall Customer Satisfaction with MSRC Service:

Exercise and Drill Support: **4.0 / 4.0 VERY SATISFIED**
Response: **3.87 / 4.0 VERY SATISFIED**

MSRC's Customer Exercise Support Activity

| REGION | TTX 2019 | TTX 2020 | TTX 2021 | FTX 2019 | FTX 2020* | FTX 2021 | TOTAL 2019 | TOTAL 2020 | TOTAL 2021 |
|----------------|------------|------------|------------|------------|-----------|-----------|------------|------------|------------|
| Interior | 52 | 51 | 56 | 15 | 5 | 13 | 67 | 56 | 69 |
| Atlantic | 33 | 23 | 21 | 8 | - | 1 | 41 | 23 | 22 |
| Gulf | 29 | 31 | 35 | 10 | - | 3 | 39 | 31 | 38 |
| Pacific* | 96 | 58 | 78 | 98 | 31 | 34 | 194 | 89 | 112 |
| Communications | | 1 | 1 | 15 | | 2 | 15 | 1 | 3 |
| TOTAL | 210 | 164 | 193 | 146 | 36 | 51 | 356 | 200 | 244 |

- FTX = Field Deployment Exercises
- TTX = Table Top Exercises

*COVID-19 Restrictions significantly impacted field deployment exercises in 2020

MSRC maintained pace and performance with regulatory verification programs with 100% pass rate

MSRC Verification Program Activity Across U.S. 2015-2021



EXPANDED RESPONSE FORCE



MSRC Dedicated Response Force

320

Response Managers, Supervisors, Field Technicians, Logistics, Safety

MSRC Reservists

140

Located on the East Coast, Cascade within 36 hours, Paid Annual Retainer, Trained Annually, HAZWOPER Certifications Current, Medical Surveillance Current

MSRC STARs Contractors

2,000+

Response Force Augmentation, Environmental Monitoring, Waste Disposal, HAZMAT Response, Non-floating Oils



General Contractors

200+

ICS Staffing, Providers of Aircraft, VOOs, Barges, Drones, Remote Sensing

INTERIOR STARS CONTRACTOR TRAINING

MSRC's Interior Capability continues to grow, supported by a rigorous training program for STARs Contractors



2021 Changes to Interior STARs Program

Additions: 16 new STARs locations across 9 different states

Removals: 9 STARs locations across 8 different states

| Interior Training Topic | # of Contractor Locations Trained in 2021 | ...in 2020 |
|---------------------------------|-------------------------------------------|------------|
| Safety Expectations & Standards | 86 | 80 |
| Traffic Control | 79 | 72 |
| Site Control and Staging Areas | 76 | 77 |
| Boom Deployment & Anchoring | 77 | 74 |
| Small Boat Handling | 48 | 49 |
| Skimming / Recovery & Storage | 84 | 77 |
| Shallow Water Barge Systems | 31 | 31 |
| Dikes / Berms / Dams & | 49 | 37 |
| Pits / Trenches / Slots | 6 | NA |
| Industrial Equipment | 42 | 44 |
| In Situ Burning | 31 | 35 |
| Communications | 86 | 76 |

50 MSRC ACTIVATIONS IN 2021



Significant Responses in 2021

- ◆ **A** Non Tank Vessel
- ◆ **B** Subsea Pipeline Leak
- ◆ **C** Subsea Pipeline Leak
- ◆ **D** Inland Terminal (Post Storm)
- ◆ **E** Coastal Refinery (Post Storm)
- ◆ **F** Coastal Refinery (Post Storm)

| Incident Type | Number of Activations |
|----------------------------------------|-----------------------|
| Offshore E&P | 7 |
| Coastal Pipeline / Terminal / Refinery | 15 |
| Tank Barge | 2 |
| Inland Pipeline / Terminal / Refinery | 10 |
| Non Tank | 3 |
| Standby | 10 |
| Communications | 3 |
| Tank Vessel | 0 |
| Total | 50 |

KEY 2021 RESPONSE LESSONS LEARNED

- Logistics support during customer cybersecurity disruption leveraged MSRC's national contractor network to provide critical fuel resources.
- Drone surveillance replaced overflights producing comparable imaging with significant cost savings.
- Early MSRC involvement through 24 Hour Free Advisory Support provided tangible benefits for MSRC Customers including response strategies employing nontraditional recovery equipment configurations to overcome spill scenario challenges.
- Assuming greater roles in contractor management and decontamination oversight alleviated administrative burden on customers to focus on other spill management and business priorities.
- MSRC's bench strength and cascade model ensured readiness and availability of experienced responders as the Covid-19 pandemic continued.

MSRC Provides OSRO Coverage Across the U.S. Oil and Gas Supply Chain

