Accidents and Incidents Reporting
Overview

- FY 2019 Accidents & Incidents stats
- Accidents & Incidents review process
- Accidents & Incidents reporting process
- Reporting distribution
- Comprehensive incident reporting
- Case studies:
  - Case study 1: Lithium Ion hazards
  - Case study 2: R/V Manta fire
  - Case study 3: Whale contact
FY 19 Small Boat Accidents & Incidents

- 450 Boats
- ~ 5,500 days underway
- ~ 20,000 persons carried
- 27 incidents & accidents

FY19 Equipment Damage Cost ($)

- Improper gear handling, $74,834.00
- Equipment Failure, $1,000
- Grounding, $4,000
- Fire, $4,030.00
- Boat Handling, $2,070.88

FY19 Accidents & Incidents by Injurie Type

- Incidents with no injuries, 52%
- Struck against, 18%
- Punctured, Lacerated, 4%
- Caught between, 7%
- Exertion, 4%
- slip, trip, fall, 15%

NOAA Small Boat Program
Small Boat Accidents & Incidents Trends

FY2015 - 2019
Reported Small Boat Incidents and Accidents

FY2015 - 2019
Reported Small Boat Incidents & Accidents shown by quarter
Accidents & Incidents Review Process

LOSBO/ VOC report back to SBSB
SBSB categorizes incident
SBSB reviews report
LOSBO/ VOC develop findings, root cause & corrective actions as needed
 LOSBO/ VOC investigate as needed

NOAA Small Boat Program
### Accidents and Lessons Learned

#### Google Spreadsheet

**2015+ NOAA Cumulative Safety Incidents Small Boats: Sheet!**

<table>
<thead>
<tr>
<th>Incident Date</th>
<th>Type Activity</th>
<th>OWCP Type Cause</th>
<th>Cause (No Injuries)</th>
<th>Nature of Injury</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/27/2019</td>
<td>Test / Study / Experiment</td>
<td>N/A</td>
<td>Cause Unknown</td>
<td>N/A</td>
<td>The cable for a science equipment carousel (CTD) snapped and the CTD with equipment used had a known issue of not reading the depth properly when holding station.</td>
</tr>
<tr>
<td>9/25/2019</td>
<td>Ship Crew Duff</td>
<td>Handling Vehicular Equipment</td>
<td>N/A</td>
<td>Back Sprain / Back Pain, Back Fatigue, Subluxation</td>
<td>During deployment of inflatable rigid hull inflatable boat got hung up as the front eye bolt got stuck in the trailer tongue to lift the boat box. Employee injured lower back while lifting.</td>
</tr>
<tr>
<td>9/20/2019</td>
<td>Human Movement</td>
<td>Fed, Slipped, Tripped</td>
<td>N/A</td>
<td>Contusion, Bruise, Abrasion</td>
<td>Employee fell down stairs on a small boat causing injury to his head.</td>
</tr>
<tr>
<td>8/30/2019</td>
<td>Handling (Material) Passenger</td>
<td>Punctured, Lacerated</td>
<td>N/A</td>
<td>Laceration, Cut</td>
<td>Store camp refrigerator (approximately 6 feet above the small boat) from boat to ship. Slipped out of one set of steps and fell approximately 3 feet down on the corner of the boat.</td>
</tr>
<tr>
<td>8/23/2019</td>
<td>Fisheries Field Research / Observation</td>
<td>Stressed by</td>
<td>N/A</td>
<td>Fracture</td>
<td>Injured her foot while conducting fieldwork.</td>
</tr>
<tr>
<td>8/8/2019</td>
<td>Operating Aircraft, Vehicle or Marine Vessel</td>
<td>N/A</td>
<td>Fire</td>
<td>N/A</td>
<td>Burning smoke detected in bilge. Inspect for source.</td>
</tr>
<tr>
<td>8/2/2019</td>
<td>Field Research</td>
<td>Caught between</td>
<td>N/A</td>
<td>Contusion: Bruise, Abrasion</td>
<td>Propeller struck unknown object somewhere in the vicinity of Galveston Bay. Noticeably affected steering performance. Uniform damage across all 4 prop blades was discovered at corrosion inspection time.</td>
</tr>
<tr>
<td>8/2/2019</td>
<td>Operating Aircraft, Vehicle or Marine Vessel</td>
<td>N/A</td>
<td>Grounding</td>
<td>N/A</td>
<td>While transporting small boat the trailer wheel sheared off the axle frame. No injuries reported.</td>
</tr>
<tr>
<td>7/18/2019</td>
<td>Operating Aircraft, Vehicle or Marine Vessel</td>
<td>N/A</td>
<td>Equipment Failure</td>
<td>N/A</td>
<td>Bilge monitoring system sounded a “high water” alarm. Upon inspection, the engine compartment due to a displaced zinc block. Upon closer inspection, plug appeared to have been incorrectly or to vibrate free.</td>
</tr>
<tr>
<td>7/12/2019</td>
<td>Field Research</td>
<td>N/A</td>
<td>Equipment Failure</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>

---

**NOAA Small Boat Program**
NOAA Incident Reporting Process (CY2020)
Report Distribution (Old)

Employee/Supervisor → NOAA SECO → NOAA Senior Leadership → LO Environmental and Safety Compliance Officer → Supervisor
Report Distribution (New)

Employee

↓

Supervisor

↓

LO Safety Personnel

↓

LO Environmental and Safety Compliance Officer

↓

NOAA SECO
Comprehensive Incident Reporting

Incidents

Unwanted - Unplanned

Proper Planning        Job Hazard Analysis

Risk Assessment        Procedure Compliance
Comprehensive Incident Reporting

- “Reporting accidents, incidents and near misses to proper authority”
- Know your responsibilities for reporting within your organization
- Know your reporting chain of command
- Timely Reporting Requires Timely Communication
- Follow-up
Comprehensive Incident Reporting

- Write the report as if you were the audience
- No detail is too small if it has relevance to the incident
- Capture all the facts and timeline as soon as it is practicable and operationally safe to do so
- Causal Factors: Immediate – Root Cause – The 5 Whys!

“Loss of Situational Awareness is NOT a root cause”
Comprehensive Timely Reporting:

- Produces realistic corrective actions for:
  - immediate recommendations to the reporting program, lab etc…
  - broader application to the small boat community-lessons learned
  - Small Boat Program impacts as policy/requirement revisions
- Lowers operational risk and increases overall efficiency

*Reporting is Good*
Questions?