CLASS A FLIGHT MISHAPS
Manned Aircraft Only

Class A Mishaps/Mishap Rate FY Comparison:
- FY18 Mishaps/Mishap Rate: 10/1.20
- 10-Year Average (FY09-18) Mishaps/Mishap Rate: 9.00/1.02

28-Nov-18  3/2.16
28-Nov-17  2/1.41

*see last slide for definition of UCI/LCI
CLASS A AVIATION MISHAPS

CLASS A MISHAPS/MISHAP RATE FY COMPARISON:

FY18 MISHAPS/MISHAP RATE: 15/1.80
10-YEAR AVERAGE (FY09-18) MISHAPS/MISHAP RATE: 11.70/1.33

*see last slide for definition of UCI/LCI
CLASS A AFLOAT MISHAPS

CLASS A MISHAPS/MISHAP RATE FY COMPARISON:

<table>
<thead>
<tr>
<th>Year</th>
<th>Mishap Numbers</th>
<th>Mishap Rate</th>
<th>Rate UCI*</th>
<th>Rate LCI*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>10</td>
<td>1/2.00</td>
<td>5.50/1.78</td>
<td>0/0.00</td>
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<tr>
<td>2010</td>
<td>5</td>
<td>4/1.29</td>
<td>1.00/1.00</td>
<td>0/0.00</td>
</tr>
<tr>
<td>2011</td>
<td>5</td>
<td>5/1.50</td>
<td>1.00/1.00</td>
<td>0/0.00</td>
</tr>
<tr>
<td>2012</td>
<td>5</td>
<td>5/1.50</td>
<td>1.00/1.00</td>
<td>0/0.00</td>
</tr>
<tr>
<td>2013</td>
<td>6</td>
<td>4/1.29</td>
<td>1.00/1.00</td>
<td>0/0.00</td>
</tr>
<tr>
<td>2014</td>
<td>1</td>
<td>0/0.00</td>
<td>0.00/0.00</td>
<td>0/0.00</td>
</tr>
<tr>
<td>2015</td>
<td>5</td>
<td>5/1.50</td>
<td>1.00/1.00</td>
<td>0/0.00</td>
</tr>
<tr>
<td>2016</td>
<td>4</td>
<td>4/1.29</td>
<td>1.00/1.00</td>
<td>0/0.00</td>
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<tr>
<td>2017</td>
<td>4</td>
<td>4/1.29</td>
<td>1.00/1.00</td>
<td>0/0.00</td>
</tr>
<tr>
<td>2018</td>
<td>1</td>
<td>0/0.00</td>
<td>0.00/0.00</td>
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</tr>
</tbody>
</table>

CLASS A MISHAPS/MISHAP RATE 10-YEAR AVERAGE (FY09-18):

| 10-YEAR AVERAGE | 5.50/1.78 |

28-Nov-18 1/2.00 28-Nov-17 0/0.00

*see last slide for definition of UCI/LCI
CLASS A SHORE ON-DUTY MISHAPS

CLASS A MISHAPS/MISHAP RATE FY COMPARISON:

<table>
<thead>
<tr>
<th>Year</th>
<th>Mishaps</th>
<th>Rate UCI*</th>
<th>Rate LCI*</th>
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<tbody>
<tr>
<td>2009</td>
<td>9</td>
<td></td>
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</tr>
<tr>
<td>2010</td>
<td>1</td>
<td>2/3.51</td>
<td>1/1.76</td>
</tr>
<tr>
<td>2011</td>
<td>3</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2012</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>2013</td>
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<td>2018</td>
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<td>2</td>
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</tr>
<tr>
<td>2019</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

FY18 MISHAPS/MISHAP RATE: 2/0.57
10-YEAR AVERAGE (FY09-18) MISHAPS/MISHAP RATE: 3.60/1.03

*see last slide for definition of UCI/LCI
PHYSICAL TRAINING FATALITIES

FATALITIES/FATALITY RATE FY COMPARISON:
FY18 FATALITIES/FATALITY RATE: 2/0.57
10-YEAR AVERAGE (FY09-18) FATALITIES/FATALITY RATE: 3.10/0.88

28-Nov-18 28-Nov-17
0/0.00 0/0.00

*see last slide for definition of UCI/LCI
CLASS A ON-DUTY MV MISHAPS

CLASS A MISHAPS/MISHAP RATE FY COMPARISON:

FY18 MISHAPS/MISHAP RATE: 0/0.00
10-YEAR AVERAGE (FY09-18) MISHAPS/MISHAP RATE: 1.30/0.37

*see last slide for definition of UCI/LCI
### Class A Mishaps/Mishap Rate FY Comparison:

- **2019**
  - 7 Mishaps
  - Rate: 12.30

- **2018**
  - 36 Mishaps
  - Rate: 6.53

- **2017**
  - 26 Mishaps
  - Rate: 7.20

- **2016**
  - 17 Mishaps
  - Rate: 7.20

- **2015**
  - 23 Mishaps
  - Rate: 5.27

- **2014**
  - 36 Mishaps
  - Rate: 3/5.27

- **2013**
  - 23 Mishaps
  - Rate: 23/6.53

- **2012**
  - 28 Mishaps
  - Rate: 28/7.20

- **2011**
  - 23 Mishaps
  - Rate: 7/12.30

- **2010**
  - 18 Mishaps
  - Rate: 7/12.30

- **2009**
  - 35 Mishaps
  - Rate: 35/12.30

---

**2009-2018 Mishap Numbers**

<table>
<thead>
<tr>
<th>Year</th>
<th>Mishaps</th>
<th>Rate UCI</th>
<th>Rate LCI</th>
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</thead>
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<tr>
<td>2018</td>
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<tr>
<td>2009</td>
<td>35</td>
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</tbody>
</table>

---

*see last slide for definition of UCI/LCI
ON-DUTY FATALITIES

CLASS A FATALITIES/FATALITY RATE FY COMPARISON:
FY18 FATALITIES/FATALITY RATE: 15/4.26
10-YEAR AVERAGE (FY09-18) FATALITIES/FATALITY RATE: 12.60/3.60

*see last slide for definition of UCI/LCI
PMV FATALITIES

CLASS A FATALITIES/FATALITY RATE FY COMPARISON:
FY18 FATALITIES/FATALITY RATE: 30/8.52
10-YEAR AVERAGE (FY09-18) FATALITIES/FATALITY RATE: 32.50/9.29

*see last slide for definition of UCI/LCI
4-WHEEL PMV FATALITIES

CLASS A FATALITIES/FATALITY RATE FY COMPARISON:
FY18 FATALITIES/FATALITY RATE: 15/4.26
10-YEAR AVERAGE (FY09-18) FATALITIES/FATALITY RATE: 13.80/3.94

pedestrian fatalities not included

*see last slide for definition of UCI/LCI
MOTORCYCLE PMV FATALITIES

CLASS A FATALITIES/FATALITY RATE FY COMPARISON:

FY18 FATALITIES/FATALITY RATE: 14/3.98
10-YEAR AVERAGE (FY09-18) FATALITIES/FATALITY RATE: 15.90/4.55

28-Nov-18 4/7.03  28-Nov-17 1/1.76

*see last slide for definition of UCI/LCI
OFF-DUTY/REC FATALITIES

CLASS A FATALITIES/FATALITY RATE FY COMPARISON:
FY18 FATALITIES/FATALITY RATE: 10/2.84
10-YEAR AVERAGE (FY09-18) FATALITIES/FATALITY RATE: 9.30/2.65

28-Nov-18  28-Nov-17
0/0.00       1/1.76

*see last slide for definition of UCI/LCI
**CIVILIAN LOST WORK DAY**

<table>
<thead>
<tr>
<th>Year</th>
<th>Lost Days</th>
<th>Lost Day Rate</th>
<th>Rate UCI*</th>
<th>Rate LCI*</th>
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<td>50411</td>
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**29 Sep 18**

<table>
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<tr>
<td>FY17 LOST WORK DAY RATE:</td>
<td>24.50</td>
</tr>
<tr>
<td>5-YEAR AVERAGE (FY13-17) LOST WORK DAY RATE:</td>
<td>25.67</td>
</tr>
</tbody>
</table>

*see last slide for definition of UCI/LCI*
MILITARY LOST TIME CASE RATE

Lost Work Time Case Rate: 2.18
FY17 Lost Time Case Rate: 2.45
5-Year Average (FY13-17) Lost Time Case Rate: 2.18

*see last slide for definition of UCI/LCI
CLASS A FLIGHT MISHAPS
Manned Aircraft Only

CLASS A FM/FM RATE FY COMPARISON:
FY18 MISHAPS/MISHAP RATE: 5/2.08
10-YEAR AVERAGE (FY09-18) MISHAPS/MISHAP RATE: 6.50/2.49

28-Nov-18  28-Nov-17
0/0.00     1/2.67
CLASS A AVIATION MISHAPS

CLASS A MISHAPS/MISHAP RATE FY COMPARISON:

FY18 MISHAPST/ MISHAP RATE: 6/2.49
10-YEAR AVERAGE (FY09-18) MISHAPS/MISHAP RATE: 7.90/3.00

28-Nov-18  28-Nov-17

0/0.00  1/2.67
CLASS A GROUND ON-DUTY MISHAPS

CLASS A MISHAPS/MISHAP RATE FY COMPARISON:

FY18 MISHAPS/MISHAP RATE: 4/2.10
10-YEAR AVERAGE (FY09-18) MISHAPS/MISHAP RATE: 6.20/3.05

*see last slide for definition of UCI/LCI
Class A Fatalities/Fatality Rate FY Comparison:

FY18 Fatalities/Fatality Rate: 3/1.57
10-Year Average (FY09-18) Fatalities/Fatality Rate: 1.60/0.80

28-Nov-18  28-Nov-17
0/0.00  1/3.25

*see last slide for definition of UCI/LCI
CLASS A ON-DUTY MV MISHAPS

CLASS A MISHAPS/MISHAP RATE FY COMPARISON:
FY18 MISHAPS/MISHAP RATE: 0/0.00
10-YEAR AVERAGE (FY09-18) MISHAPS/MISHAP RATE: 4.00/1.95

*see last slide for definition of UCI/LCI
TOTAL CLASS A ON-DUTY MISHAPS

CLASS A MISHAPS/MISHAP RATE FY COMPARISON:
- FY18 MISHAPS/MISHAP RATE: 10/5.24
- 10-YEAR AVERAGE (FY09-18) MISHAPS/MISHAP RATE: 18.10/8.94

*see last slide for definition of UCI/LCI
### ON-DUTY FATALITIES

**CLASS A FATALITIES/FATALITY RATE FY COMPARISON:**

- **FY17 FATALITIES/FATALITY RATE:** 9/4.72
- **10-YEAR AVERAGE (FY08-17) FATALITIES/FATALITY RATE:** 18.10/8.96

**28-Nov-18**

- **0/0.00**

**28-Nov-17**

- **1/3.25**

*see last slide for definition of UCI/LCI*
PMV FATALITIES

CLASS A FATALITIES/FATALITY RATE FY COMPARISON:

FY18 FATALITIES/FATALITY RATE: 30/15.73
10-YEAR AVERAGE (FY09-18) FATALITIES/FATALITY RATE: 33.60/16.61

28-Nov-18  5/16.22
28-Nov-17  2/6.49

*see last slide for definition of UCI/LCI
CLASS A FATALITIES/FATALITY RATE FY COMPARISON:
FY18 FATALITIES/FATALITY RATE: 15/7.87
10-YEAR AVERAGE (FY09-18) FATALITIES/FATALITY RATE: 17.00/8.33

pedestrian fatalities not included
### MOTORCYCLE PMV FATALITIES

#### Class A Fatalities/Fatality Rate FY Comparison

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatality Numbers</th>
<th>Fatality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18</td>
<td>14</td>
<td>3/9.73</td>
</tr>
<tr>
<td>FY09-18</td>
<td>13/6.82</td>
<td></td>
</tr>
</tbody>
</table>

#### 10-Year Average (FY09-18) Fatalities/Fatality Rate:

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatality Numbers</th>
<th>Fatality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18</td>
<td>13</td>
<td>13.90/6.92</td>
</tr>
<tr>
<td>FY09-18</td>
<td>13/6.82</td>
<td></td>
</tr>
</tbody>
</table>

---

*see last slide for definition of UCI/LCI*
OFF-DUTY/REC FATALITIES

CLASS A FATALITIES/FATALITY RATE FY COMPARISON:
FY18 FATALITIES/FATALITY RATE: 8/4.20
10-YEAR AVERAGE (FY09-18) FATALITIES/FATALITY RATE: 8.80/4.32

*see last slide for definition of UCI/LCI
LOST WORK DAY FY RATE COMPARISON: 33.10
FY17 LOST WORK DAY RATE: 30.70
5-YEAR AVERAGE (FY13-17) LOST WORK DAY RATE: 24.16

*see last slide for definition of UCI/LCI
MILITARY LOST TIME CASE RATE

Lost Work Time Case Rate: 2.84
FY17 Lost Time Case Rate: 2.92
5-Year Average (FY13-17) Lost Time Case Rate: 2.59

*see last slide for definition of UCI/LCI.
Navy Short Narratives

- **USN AVIATION CLASS A MISHAPS** (includes UAS/UAV, FRMs and AGMs not included in the Flight Slide)
  12 Nov 2018: (Philippine Sea) F/A-18F aircraft malfunction resulting in loss of aircraft; aircrew recovered and in stable condition.
  18 Oct 2018: (Pacific Ocean) MH-60R crashed on takeoff onboard CVN.
  09 Oct 2018: (Kadena AFB, Japan) Two HH-60H helicopters taxied into each other on the taxi ramp. No injuries. (AGM)
  04 Oct 2018: (NAS Lemoore, CA) A right engine fire occurred on a F/A-18F during a training flight. Emergency landing with no injuries.

- **USN AFLOAT CLASS A MISHAPS**
  22 Oct 2018: (Off the Coast of Iceland) Landing Craft Units in well deck were damaged during heavy seas.

- **USN SHORE CLASS A MISHAPS**
  02 Nov 2018: (NAS Cecil Field, FL) Hangar fire suppression system activated due to an unknown cause and doused five F/A-18C with agent.
  10 Nov 2018: (Norfolk, VA) Shipboard damage and hospitalization of an E-7 after fire while in shipyard.

- **USN PHYSICAL TRAINING CLASS A MISHAPS**
  No mishap this FY.

- **USN ON-DUTY MOTOR VEHICLE CLASS A MISHAPS**
  No mishap this FY.

- **USN PRIVATE MOTOR VEHICLE FATALITIES**
  16 Nov 2018: (King George, VA) E-2 died when he lost control of the vehicle and hit a tree. E-2 passenger is in stable condition.
  11 Nov 2018: (San Diego, CA) E-5 died in a single-vehicle motorcycle mishap.
Navy Short Narratives

- **USN PRIVATE MOTOR VEHICLE FATALITIES (con’t)**
  10 Nov 2018: (Melbourne, FL) E-3 died in a multi-vehicle motorcycle mishap while on PCS leave.
  10 Nov 2018: (Monterey, CA) O-3 died when he lost control of his motorcycle and hit a guardrail while merging onto a highway.
  10 Nov 2018: (Chesapeake, VA) E-7 when he lost control after passing another motorcycle.
  28 Oct 2018: (Virginia Beach, VA) E-3 passenger died in an automobile mishap after he was ejected.

- **USN OFF-DUTY/RECREATIONAL FATALITIES**
  No mishap this FY.
Marine Corps Short Narratives

- **USMC AVIATION CLASS A MISHAPS** (includes UAS/UAV, FRMs and AGMs not included in the Flight Slide)
  No mishap this FY.

- **USMC GROUND CLASS A MISHAPS**
  06 Nov 2018: (Coolidge, AZ) E-4 suffered a permanent total disability during a training course.

- **USMC PHYSICAL TRAINING CLASS A MISHAPS**
  No mishap this FY.

- **USMC ON-DUTY MOTOR VEHICLE CLASS A MISHAPS**
  No mishap this FY.

- **USMC PRIVATE MOTOR VEHICLE FATALITIES**
  18 Nov 2018: (Julian, CA) E-4 died on 22 Nov from injuries sustained in a single-vehicle motorcycle mishap.
  18 Nov 2018: (Philadelphia, PA) E-8 died when he was hit by a vehicle while crossing the street.
  16 Nov 2018: (Temecula, CA) E-5 motorcyclist died when he collided with another vehicle.
  19 Oct 2018: (Richlands, NC) E-3 died in a motorcycle mishap on his way to work.
  12 Oct 2018: (Snyder, TX) E-1 died in a multi-vehicle automobile mishap.

- **USMC OFF-DUTY/RECREATIONAL FATALITIES**
  20 Oct 2018: (Havelock, NC) E-3 died when his weapon accidently discharged while he was cleaning it.
Mishap Confidence Interval

- UCI = Upper Confidence Interval   LCI = Lower Confidence Interval

- Rate values above the UCI or below the LCI infer a statistically significant change is probable. This is only an indicator. Significance cannot be determined until end-of-year.

- Values between the UCI and LCI infer that nothing significant has occurred to increase or decrease mishap rate.

(Confidence Interval is based on: Poisson Rate related to a Chi Squared Distribution and calculated using FY14-18 data except for the Lost Work Days and Lost Time Case slides which were based on a normal distribution).