

**NPP-41 AW Topic of the Quarter  
FY2019 – 4<sup>th</sup> Quarter  
The Buck Stops with Me  
2019/02-15-156(I)PP**

**Abstract:** Lasting (20) minutes, this presentation acquaints the audience with: **Dr. Johnson's course, The Buck Stops with Me**

**Format:** Information Briefing - Power Point presentation

Required Personnel – FAAS Team Program Manager or designated FAAS Team Rep (s)

Optional Personnel – CFIs and DPEs who can speak on:

**AFS 920 Support:**

In addition to this guidance document, a Power Point presentation that supports the program is provided. FPMs and presenters are encouraged to customize this presentation to reflect each individual program.


**Appendix I – Equipment and Staging**



**Equipment:**



- Projection Screen & Video Projector suitable for expected audience
  - Remote computer/projector control available at lectern or presenter location
    - In lieu of remote – detail a Rep to computer/projector control.
- Presentation Computer
  - **Note:** It is strongly suggested that the entire program reside on this computer.
- Back up Projector/Computer/Media as available.
- PA system suitable for expected audience
  - Microphones for Moderator and Panel
    - Optional Microphone (s) for audience
- Lectern (optional)






**Staging:**





- Arrange the projection screen for maximum visibility from the audience.
- Equip with PA microphones
- Place Lectern to one side of screen. This will be used by presenters and moderator




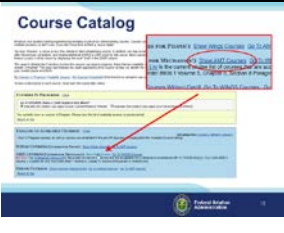


Slides	Script
	<p><b>Slide 1</b></p> <p><b>2019/02-15-156(I)PP</b> Original Author: (Bill Johnson) (01/31/2019); POC (Guy Minor), AFS-920 (A/W Lead), Office (707-704-3530); revised by; Original, 06/14/2019</p> <p><b>Presentation Note:</b> <i>This is the title slide for <b>The Buck Stops with Me</b></i></p> <p><i>Presentation notes (stage direction and presentation suggestions) will be preceded by a <b>Bold header</b>: the notes themselves will be in <i>Italic fonts</i>.</i></p> <p><b>Program control instructions</b> will be in bold fonts and look like this: (Click) for building information within a slide; or this: (Next Slide) for slide advance.</p> <p><i>Some slides may contain background information that supports the concepts presented in the program.</i></p> <p><i>Background information will always appear last and will be preceded by a bold <b>Background:</b> identification.</i></p> <p><i>We have included a script of suggested dialog with each slide. Presenters may read the script or modify it to suit their own presentation style.</i></p> <p><i>The production team hope you and your audience will enjoy the show. Break a leg!</i></p> <p><b>(Next Slide)</b></p>

<p>Welcome</p> <ul style="list-style-type: none"><li>• Exits</li><li>• Restrooms</li><li>• Emergency Evacuation</li><li>• Breaks</li><li>• Sponsor Acknowledgment</li><li>• Other information</li></ul> 	<p><b>Slide 2</b></p> <p><b>Presentation Note:</b> <i>Here is where you can discuss venue logistics, acknowledge sponsors, and deliver other information you want your audience to know in the beginning.</i></p> <p><i>You can add slides after this one to fit your situation.</i></p> <p><b>(Next Slide)</b></p>
<p>Have you heard these words...</p> <p>There is not enough time! You don't need that! We have a better way to do it.</p> <ul style="list-style-type: none"><li>Quicker</li><li>Cheaper</li><li>Easier</li><li>Smarter</li></ul> <p>This is how we have always done it!</p> 	<p><b>Slide 3</b></p> <p><b>Presentation Note:</b> <i>When pressure increases so does temperature. Pressure to produce can be brutal! When you experience it, you hear words like these.</i></p> <p><b>(Click)</b></p> <p><b>(Click)</b></p> <p><b>(Click)</b></p> <p><b>(Click)</b></p> <p><b>(Next Slide)</b></p>

<p>...or these?</p> <p>"I am tired of the FAA and their stupid rules. I have customers to please!" What's your problem? Just do your job! You really need to be a team player!</p> <p><b>Where is my back up?</b></p> 	<p><b>Slide 4</b></p> <p><b>Presentation Note:</b> <i>And like these!</i></p> <p><i>Has anyone ever said things like this to you?</i></p> <p><b>(Click)</b></p> <p><i>Yep, it is in quotes because...it's a quote.</i></p> <p><b>(Click)</b></p> <p><b>(Click)</b></p> <p><b>(Click)</b></p> <p><i>The team player thing is subtle and deadly. It means, during the summer, when we are busy, we hire extra people. When winter comes and there is less to do, we do the best we can to keep everyone, but if you are not a team player, we may not have work for you...Sorry. It is isolating and demoralizing. Words like these are meant to undermine your integrity and conform you to a company culture that is inappropriate. So, yes... sometimes the buck does stop with you.</i></p> <p><b>(Click)</b></p> <p><i>It leaves you asking, "Where is my back up"? Who will stand with me?</i></p> <p><b>(Next Slide)</b></p>
<p>The Buck Stops with Me</p> 	<p><b>Slide 5</b></p> <p><b>Presentation Note:</b> <i>Dr. Bill Johnson, The FAA's Chief Scientist for Maintenance Human Factors, has developed a course designed to foster a positive safety climate. If your company will implement his Safety Champion program, it will increase pressure to do the right thing. We encourage you to take the training and ask your company to implement his program.</i></p> <p><b>(Next Slide)</b></p>

<p>Three Case Studies</p> 	<p><b>Slide 6</b></p> <p><b>Presentation Note:</b> <i>His course has three case studies where aspects of rule breaking caused less than optimum outcomes. They cover a large airline, a small airline, and a rotorcraft tour operator.</i></p> <p><b>(Next Slide)</b></p>
<p>Large Airline</p> 	<p><b>Slide 7</b></p> <p><b>Presentation Note:</b> <i>The first case study is about cowl latches, or more precisely, improperly latching cowl latches on a large aircraft. A passenger took the picture of the fire. Fortunately, the scenario ends with an emergency landing and an evacuation. No injuries, but it still does not look good.</i></p> <p><b>(Next Slide)</b></p>
<p>Small Airline</p> 	<p><b>Slide 8</b></p> <p><b>Presentation Note:</b> <i>The small airline case study covers the installation of chip detectors without “O” ring seals. The issue caused the crew to shut down three of four engines in flight. Fortunately, the emergency landing ended well.</i></p> <p><b>(Next Slide)</b></p>
<p>Rotorcraft</p> 	<p><b>Slide 9</b></p> <p><b>Presentation Note:</b> <i>The rotorcraft case study involved reusing locking nuts. It caused a control rod to disconnect in flight. This resulted in 5 fatalities.</i></p> <p><b>(Next Slide)</b></p>
<p>Safety Champion Skills in Action</p> 	<p><b>Slide 10</b></p> <p><b>Presentation Note:</b> <i>The training includes three video depictions of safety champion skills in action.</i></p> <p><b>(Next Slide)</b></p>

<p>Why do Good People Break Rules?</p>  <p>Federal Aviation Administration</p>	<p><b>Slide 11</b></p> <p><b>Presentation Note:</b> <i>Rule Breaking is a symptom, not a cause. Human error, rule breaking is certainly an error, is the result of trouble deeper inside the system. To do something about rule breaking, we must turn to the system in which people work: the design of equipment, the usefulness of procedures, the existence of goal conflicts and production pressure. This course is designed to reduce the pressure to break rules.</i></p> <p><b>(Next Slide)</b></p>
<p>The Organizational Aspect</p>  <p>Federal Aviation Administration</p>	<p><b>Slide 12</b></p> <p><b>Presentation Note:</b> <i>The course explains that in an organizational mishap, in this case rule breaking, there is plenty of blame to spread around. Mechanics, inspectors, managers, the manufacturer, procedure writers, lawyers, and regulators all contribute to our culture. If we all contribute to the culture then we all should work together to make sure it is a positive culture.</i></p> <p><b>(Next Slide)</b></p>
<p>Tools</p>  <p>Federal Aviation Administration</p>	<p><b>Slide 13</b></p> <p><b>Presentation Note:</b> <i>This course will provide the tools to champion a commitment to reduce pressure to break rules.</i></p> <p><b>(Next Slide)</b></p>
<p>Attributes of a Safety Champion</p>  <p>Federal Aviation Administration</p>	<p><b>Slide 14</b></p> <p><b>Presentation Note:</b> <i>It includes the eleven attributes of a safety champion...</i></p> <p><b>(Next Slide)</b></p>

	<p><b>Slide 15</b></p> <p><b>Presentation Note:</b> ...a safety pledge, an email signature badge, and an email banner.</p> <p><b>(Next Slide)</b></p>
	<p><b>Slide 16</b></p> <p><b>Presentation Note:</b> The course includes three, printable; badge sized, before and after task, checklists. The checklists are designed for three categories of teammates, AMT's, Managers, and procedure writers.</p> <p><b>(Next Slide)</b></p>
	<p><b>Slide 17</b></p> <p><b>Presentation Note:</b> The FAASafetyTeam hosts the course on FAASafety.gov. Go to the website, on the home page mouse over the Activities, Courses, Seminars and Webinars tab, select "Courses" from the drop down menu.</p> <p><b>(Next Slide)</b></p>
	<p><b>Slide 18</b></p> <p><b>Presentation Note:</b> Once in the course catalog select "Show AMT Courses".</p> <p><b>(Next Slide)</b></p>
	<p><b>Slide 19</b></p> <p><b>Presentation Note:</b> Scroll the list until you see, "The Buck Stops with Me". Select enroll.</p> <p><b>(Next Slide)</b></p>
	<p><b>Slide 20</b></p> <p><b>Presentation Note:</b> Follow the prompts to begin the course.</p> <p><b>(Next Slide)</b></p>

## Why do we Focus on Procedures?

Violation + Error = Disaster

**Slide 21****Presentation Note:** *Here are Some parting thoughts.**Violation + Error = Death/Doom/Disaster**It is possible to violate for an entire career without being caught or hurting someone. Violations are generally harmless until they are accompanied by an error.**The question is, “whose error is going to kill you, maim you, or cause a crash? Your own, or your teammate’s”?*

**Background:** *The business of a shunter (or brakeman in the US) is to join up railway wagons (see Figure 4.3). In Britain, the rules prohibit shunters from remaining between the wagons during the easing up process that is, when the shunting engine is pushing the wagons together. The shunters are expected to use a long pole to make the linkage. But sometimes the connecting shackle is too short to make the coupling when the buffers are at full extension. In order to do the job, the shunter has to get between the wagons and hook on the shackle at the moment of contact when the buffers compress. For many, though, this isolated knowledge-based act can become a skill-based or routine way of working. It cuts down on effort and simply being between the wagons seems safe enough, since the buffers are three to four feet apart. Accidents happen when the shunter makes an error while violating he may slip or become distracted. In the past, there have been a relatively large number of fatalities associated with shunting. In a large proportion of cases, the shunters have died as the result of being crushed between the buffers or falling under the wagon wheels clearly, these are errors made whilst violating (a violation + error disaster). (Managing Maintenance Error, Reason, Hobbs, 2006)*

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**Rule Breaking is More Dangerous**

- Rule Breakers actions are forbidden, so they don't tell anyone what they are doing
- Rule Breakers assume everyone else is following the rules and procedures
- Errors (slips, lapses, mistakes) are not intended

**Slide 22**

**Presentation Note:** *Rule breaking is more dangerous than mistake making. If an accident is caused by violation, it is four times as likely to be fatal as an accident caused by human error. Here are two reasons rule breaking is more dangerous than making a mistake. Rule Breakers actively hide their actions. This makes it difficult for team members to anticipate the person's behavior. It makes for the occasional nasty surprise for the team.*

*Rule Breakers assume everyone else is following the rules and procedures, so they operate in the safety margin meant to be protecting their team members.*



*Errors are much different than violations. People want their mistakes to be revealed before they cause trouble. They ask for help preventing their error.*

**Background:**

*Violators assume everyone else is compliant, but a mistake committed by someone else can be their undoing. (Managing Maintenance Error, Reason, Hobbs, 2006)*

*...the proportion of accidents associated with violations was considerably higher for fatal than non-fatal accidents. In fact, using a common estimate of risk (known as the odds ratio), fatal accidents were greater than four times more likely to be associated with violations than non-fatal accidents (odds ratio = 4.547; 95% confidence interval = 4.11 to 5.021, Mantel-Haenszel test for homogeneity = 1002.358,  $p < .001$ ). Put simply, if a violation of the rules results in an accident, the pilot is more likely to die or kill someone else than to get up and walk away. (HFACS, Human Error and General Aviation Accidents, Wiegmann, Shappell, et al. May 2005 )*

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	<p><b>Slide 23</b></p> <p><b>Presentation Note:</b> <i>If you find these ideas to be interesting, take Dr. Johnson's course. Take the Safety Champion pledge. Talk about the program with your co-workers. Revisit past events that did not end well. Were there aspects of rule breaking causing some of the events? Give procedure writers feedback when procedures do not work. Bottom line; speak up when you see rule breaking.</i></p> <p><i>If you are interested in digging deeper into why people behave the way we do, then Dr. Johnson also has a Human Factors page on faa.gov. It has an excellent set of human factors publications.</i></p> <p><b>(Next Slide)</b></p>
	<p><b>Slide 24</b></p> <p><b>(The End)</b></p>