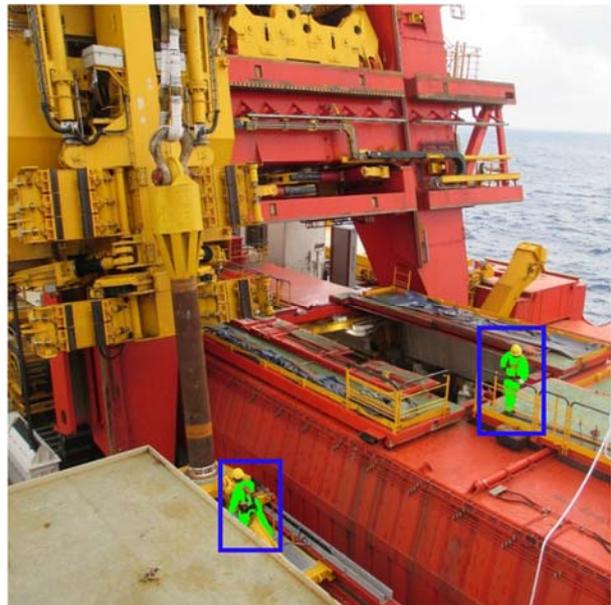
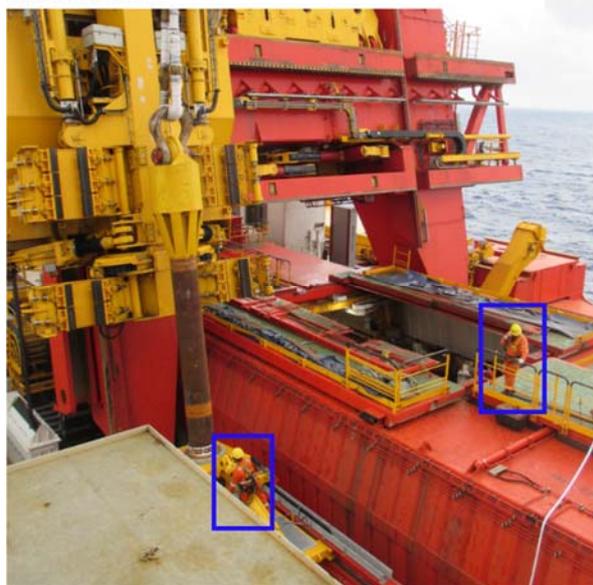


### Web application for testing effectiveness of safety colors.

1. 40 sets of worksite photographs are stored in a folder for the validation tests. Each set has the original image and an identical processed image. On the processed image we change the color of personnel cloths in order to increase conspicuous. In total we will have 80 photos. See example set below.
2. The areas occupied by the workers is mapped (e.g. rectangular with coordinates...). Those shall be the targets that the user will be asked to find during validation test. Targets shall be numbered A, B, C etc. Note: the mapped area is the same for each set of photos.
3. Application will randomly present images to the user. One image from each set, either the original or the processed image. Show both will destroy the test as the person has prior knowledge of the location and the search task becomes extremely simple. A total 40 images will be shown.
4. Each test cycle starts with an empty start screen having a start button. On button click the image is shown and the counter (stopwatch) starts. On each click on the picture an event is registered. The events to register are: Target name and time located, Wrong target located and at what time.
5. At the top right the number of remaining workers to be found shall be shown.
6. The search process is terminated once all workers are located.
7. On completion of a search task, the start screen with the button reappears. Once the user is ready, he/she clicks the start button to initiate the next search task.
8. Events are registered on a database (or a variable) as follows:
9. ???
10. Validation test will be conducted with the help of 40 volunteers (total 40 tests)

**Tools to be used:** Python, Django Framework

Safety color selection Scheme



### Result Analysis.

Validation test will be conducted with the help of 40 volunteers.

For each target on each image we will have 40 registered search times.

For each image we have 40 total search times. Also, average search time per target =

Table

Target Name	1	2	3	4	5	....	40	Average Search time for target
Image 1-T1	5.22							
Image-1-proc-T1		3.2						
Image 1-T2	3.2							
Image-1-proc-T2		2.1						
Image 1-T3	2.5							
Image 1-proc T3		1.3						
<b>Total Search Time Image-1</b>	<b>5.22</b>							
<b>Total Search Time Image-1-PROC</b>		<b>3.2</b>						