

## OPERATIONAL RISK ASSESSMENT (ORA)

| Severity          | Likelihood |               |               |                  |                     | Risk rating  |
|-------------------|------------|---------------|---------------|------------------|---------------------|--|
|                   | 1<br>Rare  | 2<br>Unlikely | 3<br>Possible | 4<br>Very likely | 5<br>Almost certain |  |
| 1<br>No injury    | 1          | 2             | 3             | 4                | 5                   | Low risk<br>1-8  |
| 2<br>First aid    | 2          | 4             | 6             | 8                | 10                  |  |
| 3<br>7 day injury | 3          | 6             | 9             | 12               | 15                  | Medium risk<br>9-15                                    |
| 4<br>Major injury | 4          | 8             | 12            | 16               | 20                  | High risk<br>16-25                                     |
| 5<br>Fatality     | 5          | 10            | 15            | 20               | 25                  |  |
|                   |            |               |               |                  |                     | No further action required                             |
|                   |            |               |               |                  |                     | Control measures must be implemented before proceeding |
|                   |            |               |               |                  |                     | Consider alternative means of achieving task           |

| REF                      | Activity  | Hazard                          | Risk  | Person at Risk |                |        | Control Measure Tactics  | Risk Evaluation |          | Further Control Measures | Risk Evaluation |        |
|--------------------------|---|---------------------------------|---|----------------|----------------|--------|--|-----------------|----------|--------------------------|-----------------|--------|
|                          |   |                                 |   | Staff          | Other agencies | Public |  | L               | X S = RR |                          | L               | S = RR |
| <a href="#">1.2.0.01</a> | Operating in rural environments and open spaces | Scene of operations and terrain | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> <li>Contamination</li> </ul> | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Refer to any available operational information</li> <li>Liaise with responsible person or range officer</li> <li>Identify and monitor access, egress and escape routes</li> <li>Brief teams with information on access, egress and escape routes</li> <li>Identify and control hazard areas</li> <li>Establish and maintain cordons</li> <li>Implement safe system of work</li> <li>Consider utilising Argocat/4x4 vehicles</li> <li>Operate at safe distances from live electrical equipment</li> </ul> | 1               | 5        | 5                        | 1               | 5      |
| <a href="#">1.2.0.02</a> | Firefighting operations at wildfires            | Fire Behaviour                  | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> </ul>  | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> </ul>  | 1               | 5        | 5                        | 1               | 5      |

| REF                      | Activity                             | Hazard                 | Risk   | Person at Risk |                |        | Control Measure Tactics   | Risk Evaluation |          | Further Control Measures | Risk Evaluation |        |
|--------------------------|--------------------------------------|------------------------|--|----------------|----------------|--------|---|-----------------|----------|--------------------------|-----------------|--------|
|                          |                                      |                        |  | Staff          | Other agencies | Public |   | L               | X S = RR |                          | L               | S = RR |
|                          |                                      |                        | <ul style="list-style-type: none"> <li>Thermal injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> </ul>   |                |                |        | <ul style="list-style-type: none"> <li>Refer to any available operational information</li> <li>Utilise anchor point positions to commence firefighting</li> <li>Use Wildfire Prediction System (WPS)</li> <li>Request weather information and consider the effect</li> <li>Identify safe access and egress routes</li> <li>Utilise appropriate firefighting media and techniques</li> <li>Consider evacuation of surrounding properties</li> <li>Request attendance of Police</li> <li>Don appropriate PPE/RPE; consider eye protection</li> <li>Consider using aerial observation to gain situational awareness</li> </ul> |                 |          |                          |                 |        |
| <a href="#">1.2.0.03</a> | Firefighting operations at wildfires | Extreme fire behaviour | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> <li>Thermal injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> </ul> | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Refer to any available operational information</li> <li>Identify fuel type and arrangement</li> <li>Request weather information and consider the effect</li> <li>Assess likelihood for extreme fire behaviour</li> <li>Utilise Wildfire Prediction System (WPS)</li> <li>Identify safe access and egress routes</li> <li>Utilise anchor point positions to commence firefighting</li> <li>Consider evacuation of</li> </ul>   | 1               | 5        | 5                        |                 |        |

| REF                      | Activity                             | Hazard   | Risk   | Person at Risk |                |        | Control Measure Tactics   | Risk Evaluation |          | Further Control Measures | Risk Evaluation |        |
|--------------------------|--------------------------------------|--|--|----------------|----------------|--------|---|-----------------|----------|--------------------------|-----------------|--------|
|                          |                                      |  |  | Staff          | Other agencies | Public |   | L               | X S = RR |                          | L               | S = RR |
|                          |                                      |  |  |                |                |        | <ul style="list-style-type: none"> <li>surrounding properties</li> <li>Request attendance of Police</li> <li>Utilise appropriate firefighting media and techniques</li> <li>Consider appropriate PPE/RPE, consider eye protection</li> </ul>  |                 |          |                          |                 |        |
| <a href="#">1.2.0.04</a> | Firefighting operations at wildfires | Undetected fire spread                           | <ul style="list-style-type: none"> <li>Major injury</li> <li>Thermal injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> </ul>                       | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Conduct direct observation</li> <li>Utilise a TIC</li> <li>Consider utilising aerial observation</li> <li>Conduct damping down and turning over</li> </ul>  | 2               | 4        |                          | 8               |        |
| <a href="#">1.2.0.05</a> | Operating at wildfire incidents      | Moving, using and entrapment of vehicles         | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> <li>Thermal injury</li> <li>Musculoskeletal injury</li> <li>Respiratory injury</li> </ul> | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Refer to any available operational information</li> <li>Anticipate the effects of fire development and thermal radiation</li> <li>Implement LACES protocol</li> <li>Consider routes for access, egress and escape of vehicles</li> <li>Position vehicles appropriately</li> <li>Consider the impact of firefighting activities on access, egress and escape routes of vehicles</li> </ul> | 1               | 5        |                          | 5               |        |
| <a href="#">1.2.0.06</a> | Operating at wildfire incidents      | Other agencies vehicles, equipment and personnel | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> <li>Thermal injury</li> <li>Musculoskeletal injury</li> <li>Respiratory injury</li> </ul> | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Consider requesting additional resources</li> <li>Ensure all personnel are closely supervised when operating in the inner cordon</li> <li>Share information about the</li> </ul>  | 1               | 5        |                          | 5               |        |

| REF                      | Activity                        | Hazard                                  | Risk   | Person at Risk |                |        | Control Measure Tactics  | Risk Evaluation |          | Further Control Measures | Risk Evaluation |        |
|--------------------------|---------------------------------|---|--|----------------|----------------|--------|--|-----------------|----------|--------------------------|-----------------|--------|
|                          |                                 |   |  | Staff          | Other agencies | Public |  | L               | X S = RR |                          | L               | S = RR |
|                          |                                 |   |  |                |                |        | FRS command structure and incident ground safety protocols with other organisations present<br>Establish communications with other agencies<br>Deliver clear briefings to personnel from other organisations before deployment<br>Implement the LACES safety protocol<br>Declare the activity and appropriate system of work, including appropriate PPE/RPE<br>Utilise pre-determined emergency evacuation or withdrawal signals<br>Complete a roll call following an emergency evacuation<br>Conduct regular multi agency meetings with JESIP protocols |                 |          |                          |                 |        |
| <a href="#">1.2.0.07</a> | Operating at wildfire incidents | Reduced visibility and working at night | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> <li>Thermal injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> </ul> | ✓              | ✓              |        | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Assess requirement to operate at night</li> <li>Pre-plan route using maps</li> <li>Utilise torches and scene lighting</li> <li>Avoid lone working</li> </ul>   | 1               | 5        |                          | 5               |        |
| <a href="#">1.2.0.08</a> | Operating at wildfire incidents | Presence of people                      | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> <li>Thermal injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> </ul> | ✓              |                | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Direct members of the public away from the scene of operations</li> <li>Consider the need to evacuate surrounding area including property</li> <li>Request attendance of Police</li> </ul>   | 1               | 5        |                          | 5               |        |

| REF                      | Activity                               | Hazard  | Risk   | Person at Risk |                |        | Control Measure Tactics   | Risk Evaluation |          | Further Control Measures | Risk Evaluation<br>L x S = RR |
|--------------------------|--|---|--|----------------|----------------|--------|---|-----------------|----------|--------------------------|-------------------------------|
|                          |  |   |  | Staff          | Other agencies | Public |   | L               | X S = RR |                          |                               |
|                          |  |   |  |                |                |        | <ul style="list-style-type: none"> <li>Utilise corporate communications social media to warn and inform</li> </ul>  |                 |          |                          |                               |
| <a href="#">1.2.0.09</a> | Operating at wildfire incidents        | Presence of animals                           | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> <li>Thermal injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> </ul> | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Refer to NOG SOP 2.1.6 Animal Rescue</li> <li>Refer to any available operational information</li> <li>Liaise with the responsible person or animal owner</li> <li>Establish a tactical plan for animal rescue</li> <li>Avoid or isolate animals</li> <li>Rescue or evacuate animals</li> <li>Consider assistance from animal rescue specialist and RSPCA</li> <li>Maintain communications between FRS personnel and animal owners</li> <li>Consider screening for deceased animals</li> </ul> | 1               | 5        |                          | 5                             |
| <a href="#">1.2.0.10</a> | Operating at wildfire incidents        | Physiological hazards                         | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> <li>Thermal injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> </ul> | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Select appropriate team size for tasks</li> <li>Regular rotation of FRS personnel</li> <li>Establish a welfare sector</li> <li>Consider the relaxation of PPE in rest areas</li> <li>Monitor health of FRS personnel and refer if appropriate to medical professionals</li> </ul>   | 1               | 5        |                          | 5                             |
| <a href="#">1.2.0.11</a> | Use of aircraft at a wildfire incident | Inappropriate or uncontrolled use of aircraft | <ul style="list-style-type: none"> <li>Loss of life</li> <li>Major injury</li> <li>Thermal injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> </ul> | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Refer to NOG SOP 3.3.0 Air</li> <li>Notify the appropriate authorities about potential</li> </ul>   | 1               | 5        |                          | 5                             |

| REF                      | Activity           | Hazard               | Risk   | Person at Risk |                |        | Control Measure Tactics  | Risk Evaluation |          | Further Control Measures | Risk Evaluation |        |
|--------------------------|--------------------|----------------------|--|----------------|----------------|--------|--|-----------------|----------|--------------------------|-----------------|--------|
|                          |                    |                      |  | Staff          | Other agencies | Public |  | L               | X S = RR |                          | L               | S = RR |
|                          |                    |                      |  |                |                |        | <ul style="list-style-type: none"> <li>hazards to aircraft</li> <li>Consider deploying drones or helicopters</li> <li>Establish communications with aircraft</li> <li>Identify suitable areas to use unmanned aircraft</li> <li>Manage the safety and security of take-off and landing areas for aircraft</li> <li>Brief all responders regarding the areas, tasks and duration of aircraft and/or helicopter operations</li> <li>Brief the pilots of all aircraft regarding incident hazards and the locations of personnel</li> <li>Create an aerial sector and appoint an aerial sector commander when aircraft are in use</li> </ul> |                 |          |                          |                 |        |
| <a href="#">1.2.0.12</a> | Wildfire incidents | Environmental impact | <ul style="list-style-type: none"> <li>Thermal injury</li> <li>Musculoskeletal Injury</li> <li>Respiratory injury</li> </ul> | ✓              | ✓              | ✓      | <ul style="list-style-type: none"> <li>Refer to generic control measures</li> <li>Refer to NOG SOP 6.4.0 Environmental Protection</li> <li>Refer to any available operational information</li> <li>Consider the protection of public health</li> <li>Consider the protection of ecological and heritage assets</li> <li>Consider the environmental impact of firefighting</li> <li>Consider establishing exclusion areas within the inner cordon</li> <li>Request the attendance of Environment Agency</li> <li>Consider the impact on areas of outstanding</li> </ul>   | 4               | 2        |                          | 8               |        |

| REF | Activity | Hazard | Risk | Person at Risk |                |        | Control Measure Tactics | Risk Evaluation |          | Further Control Measures | Risk Evaluation |          |
|-----|----------|--------|------|----------------|----------------|--------|-------------------------|-----------------|----------|--------------------------|-----------------|----------|
|     |          |        |      | Staff          | Other agencies | Public |                         | L               | X S = RR |                          | L               | X S = RR |
|     |          |        |      |                |                |        | natural beauty (AONB)   |                 |          |                          |                 |          |