

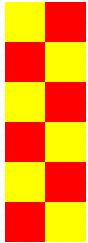


SCDF

The Life Saving Force

... for a safer Singapore

FIRE AND RESCUE MANAGEMENT SYSTEM (FRMS)

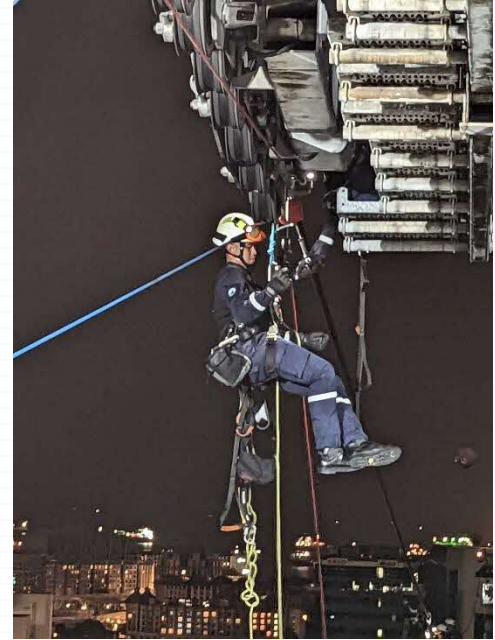


by MAJ Neo Jin Xiang
Senior Staff Officer
Amusement Rides Team



Scope

- Introduction
- What is FRMS?
- Contingency Planning
 - ✓ Emergency Response Plan
 - ✓ Emergency Response Team
 - ✓ Fire & Rescue Coordinator
- Collaboration with stakeholders
- Conclusion



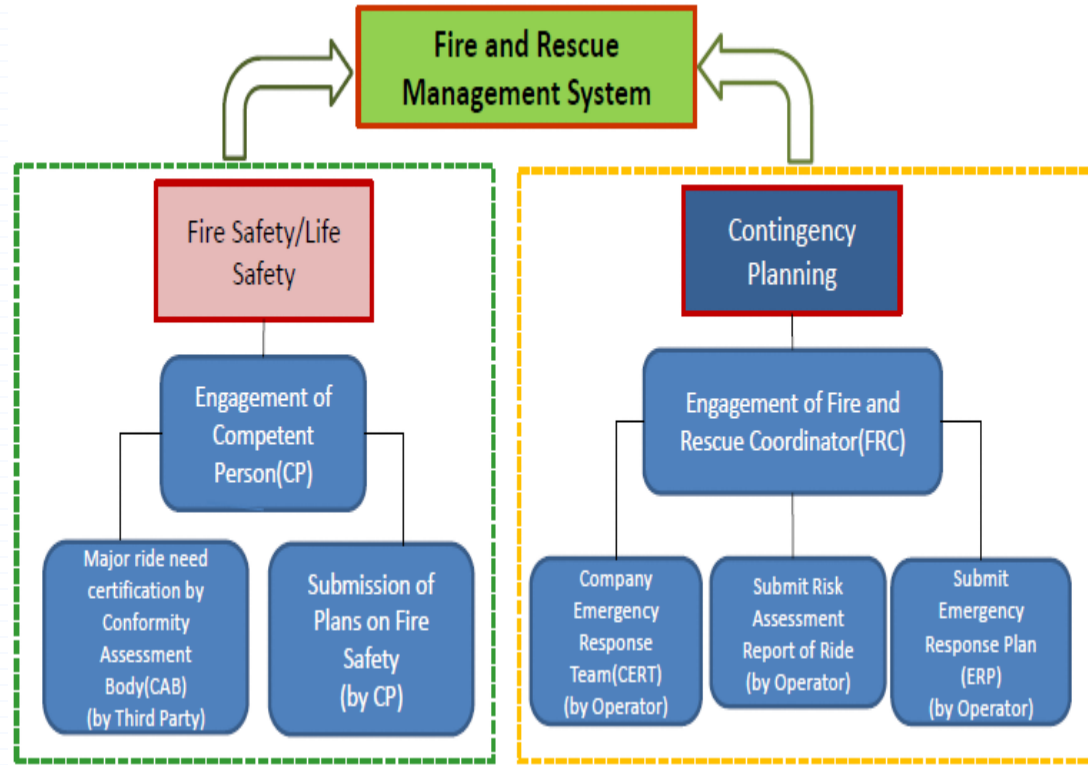
Introduction

- Together with BCA, SCDF governs the operations of amusement rides (including cableways) in Singapore
- Focuses on the fire safety aspect and contingency planning in the event of an adverse incident
- When required, SCDF will deploy its resources to attend to emergencies

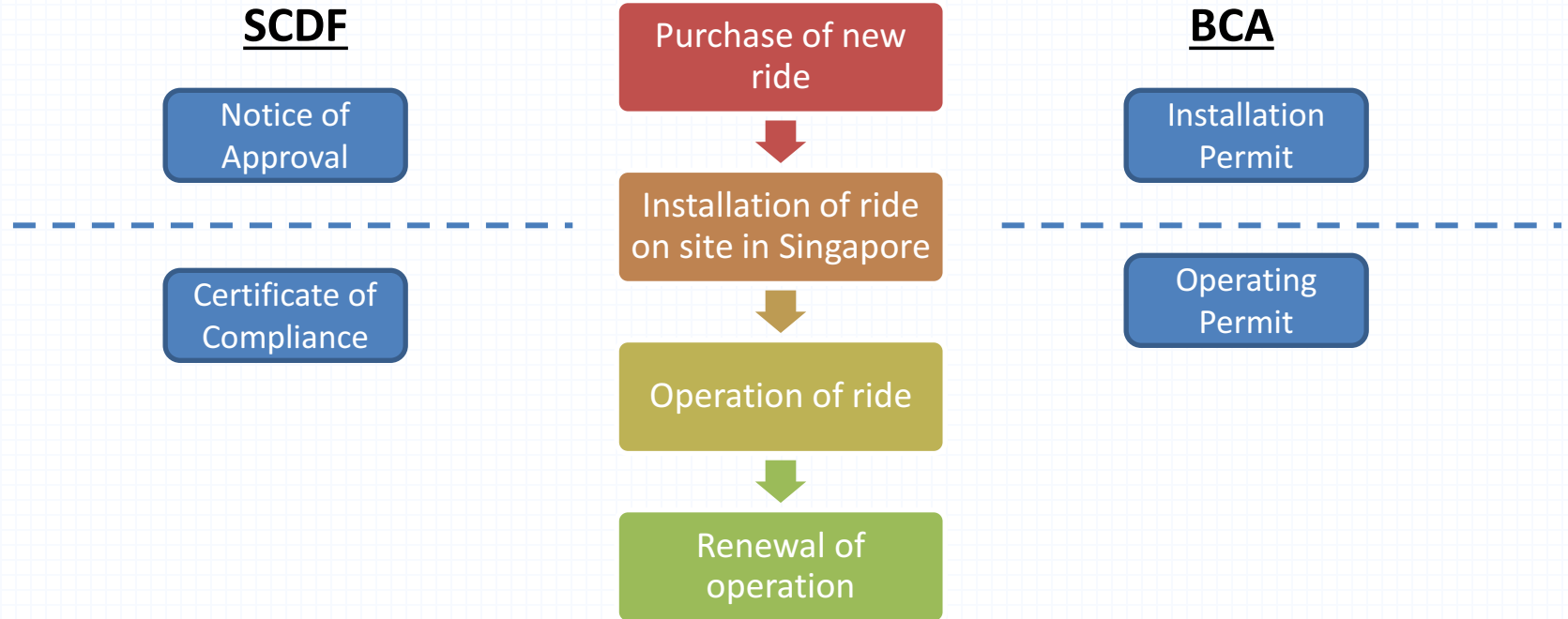


Fire and Rescue Management System (FRMS)

- FRMS ensures that the amusement rides comply with fire safety requirements and are equipped with a robust fire & rescue plan

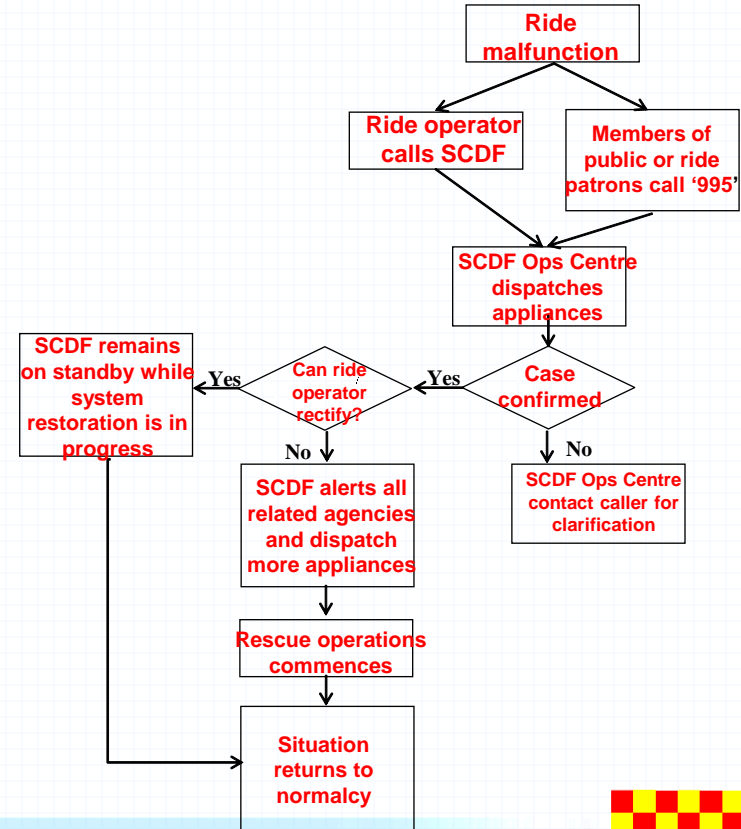


Framework



Contingency Planning

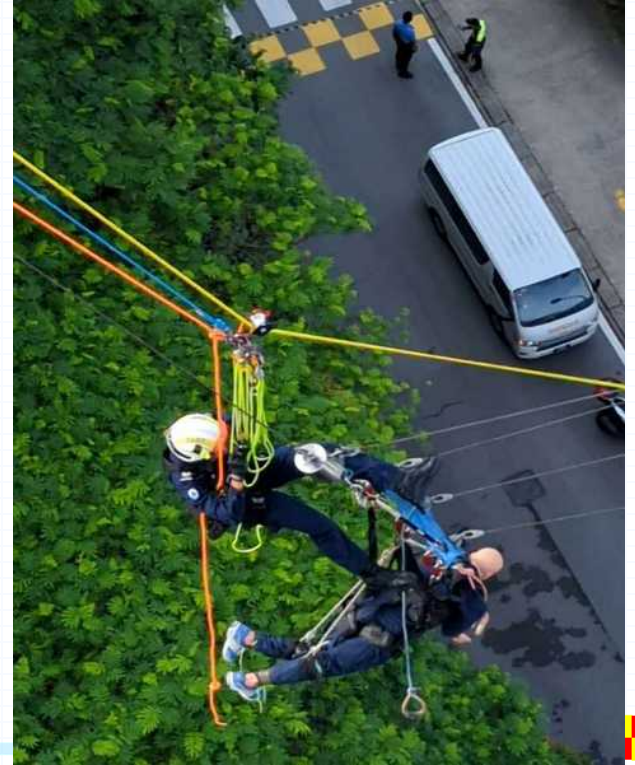
- In the event of any incident, the ride operator is responsible for conducting effective recovery measures to bring the situation back to normalcy.
- When there is a stoppage, system recovery will be the first option to bring passengers back to safety.
- Rescue conducted by SCDF will only take place after all system recovery options are exhausted



Contingency Planning

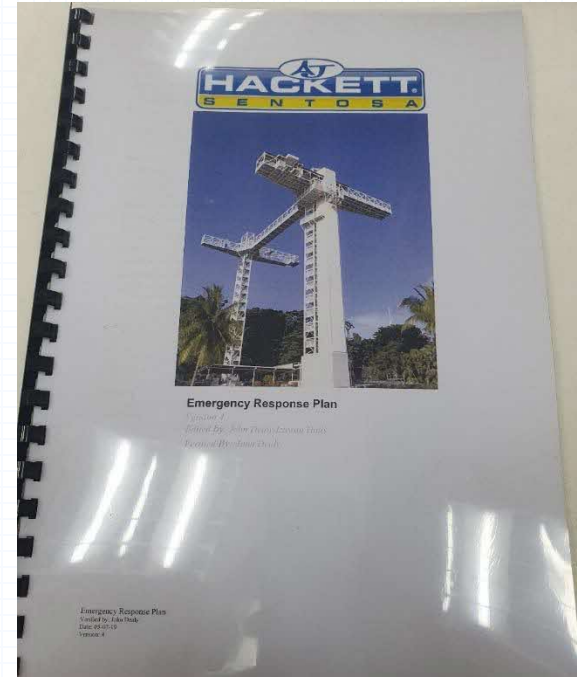
To ensure that ride operators are adequately prepared for emergencies, SCDF requires the following actions:

- 1) Formulation of an Emergency Response Plan
- 2) Formation of an Emergency Response Team
- 3) Appointment of a Fire & Rescue Coordinator



Why need an Emergency Response Plan?

- To prepare staff for emergencies or adverse incidents
- To ensure that everyone is aware of their specific roles in the conducting evacuation, etc.
- It acts as a review mechanism to ensure that ride operators are aware of the inherent risks associated with the ride



Emergency Response Team

- Formed by staff of the company (who are familiar with the ride operations)
- Emergency Response Team is responsible for mitigating any fires at the initial stage and conduct on-site rescue operations



Fire and Rescue Coordinator

ARSA Part IV: DUTIES OF FIRE AND RESCUE COORDINATOR AND OPERATOR

Appointment of fire and rescue coordinator

11.—(1) The operator of an amusement ride shall appoint a person who has undergone and successfully completed such ¹²

training as is required by the Commissioner of Civil Defence to be the fire and rescue coordinator for the amusement ride.



Fire and Rescue Coordinator

- Role of FRC:
 - ✓ Ensure that the fire safety and rescue equipment and apparatus provided under the emergency response plan for the amusement ride are maintained in good working condition at all times
 - ✓ Ensure that the emergency response team is operationally ready to execute the emergency response plan for the amusement ride in the event of an adverse incident
 - ✓ Conduct daily checks within the vicinity of the ride to ensure that there is no fire hazards and to remove any such item if found
 - ✓ Conduct drills or exercise from time to time for the purpose of evaluating and validating the effectiveness of emergency response plan
 - ✓ Notify the Commissioner of SCDF immediately of any adverse incident, and provide a full report on the adverse incident within 24 hours of its occurrence



Establishing working relationship with stakeholders

- Joint-drills and exercises are often conducted with stakeholders to establish a healthy working relationship
- It also provides SCDF an opportunity to understand various rides and the different terrains that they need to operate in



Establishing working relationship with stakeholders

- Also provides an opportunity to exchange ideas and learning points
- Establish a presence amongst ride operators



Ground Deployment Exercise with MFLG

- Objective: To assess MFLG and multi-agencies competency in coordinating rescue operations
- Conducted several rounds of discussions with stakeholders on the possible scenarios and other operational issues



Ground Deployment Exercise with MFLG

Briefing to Crane Operator,
CCS and SCDF's team



Rigger man ensuring all lifting
components is secured



Rescue-Cage being lifted up



Rescue-Cage being
anchored to the cabin



Conclusion

- SCDF works closely with the various ride operators to ensure
 - ✓ By design, the ride is fire-safe
 - ✓ The ride comes with a robust rescue and emergency system/plan
 - ✓ When required, SCDF is able to conduct efficient rescue when all other means are exhausted
- SCDF conducts checks and audits to ensure compliance, competency of operators in their contingency plans, incl. running of redundancy systems and rescue operations



Thank You

