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New Zealand Search and Rescue

New Zealand Search and Rescue
SAREX Guidelines

Analyse SAREX Need	completed ✓

1 **Establish SAREX Planning Team.** (See Appendix A on page 6 for instructions and Appendix C and D on pages 8-13 for examples) ⬤

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_____   _____

2 **Identify trends and predictions, response needs and asset assessment.** (See Appendix B on pages 5-6) ⬤

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3 **Summarise need:** ⬤

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4 **Specify the purpose of this SAREX:** ⬤

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5 **Determine specific SAREX objectives:**

i. _____

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ii. _____

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iii. _____

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iv. _____

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v. _____

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vi. _____

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6 **Select exercise name:**

7 **Establish a budget:**

8 **Obtain lead/joint agency authority:**

9 **Seek multi agency participation:**

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Design SAREX

10 **Set key Performance indicators (KPI's):** ⬤

i. _____

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ii. _____

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iii. _____

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iv. _____

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v. _____

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vi. _____

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11 **Develop exercise scenario:** ⬤

12 **Evaluate plan against training need:** ⬤

13 **Determine exercise controllers, participants and resources required:** ⬤

14 **Confirm and announce exercise date/time location:** ⬤

15 **Develop detailed events:** ⬤

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16   **Develop exercise safety plan:** ⭕

17   **Develop exercise 'control rules':** ⭕

18   **Appoint exercise monitors (local and external) and define their role:** ⭕

19   **Confirm multi agency participation:** ⭕

20   **Set up SAREX** ⭕

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Conduct

21   SAREX's are run under CIMS, IAMSAR, or other recognised structure. ⬜

22   Monitoring systems/real time feedback processes are in place. ⬜

23   Start the exercise. ⬜

24   Sustain and control exercise activity. ⬜

25   Intervention (if required) to keep on track. ⬜

Debrief

26   Hot debrief immediately after SAREX
Includes:

    All personnel/agencies, written or verbal. ⬜

    Preliminary feedback from monitors. ⬜

    Provide appropriate exercise closure. ⬜

27   Cold debrief within appropriate time frame.

    Key performance indicators are evaluated. ⬜

    Internal review and analysis of SAREX systems, performance and processes. ⬜

28   Monitors analysis and findings completed. ⬜

29   SAREX report completed. ⬜

30   Report circulated to participants and agencies. ⬜

Implement Learning

31   Implement report findings into Readiness-plans, SOP's and training and development. ⬜

32   Ongoing evaluation. ⬜

33   Develop 'lessons learned' and distribute as appropriate. ⬜

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Appendix A

1. Instructions

- The guidelines are designed to provide a generic framework for running SAREX's.

- The extent to which they are used and completed depends on the size and complexity of the SAREX. This may vary from a local three hour exercise to a national two day multi agency SAREX.

- Support to complete the guidelines can be sought from experienced personnel in the key SAR agencies.

2. References

- The Ministry of Civil Defence publication "CDEM Exercises – Directors Guidelines for Civil Defence Emergency Management Groups (DGL 010/09) provides in depth detail of how to run exercises: www.civildefence.govt.nz.

- The Annex provides the following useful checklists:

    - **Annex A:** Exercise development checklist

    - **Annex B:** Exercise Coordinating Instruction

    - **Annex C:** Communications and media management plan

    - **Annex D:** Exercise General Instruction

    - **Annex E:** Standard message/inject template

    - **Annex F:** Exercise control and evaluator rules of play

    - **Annex G:** Sample master schedule of events

    - **Annex I:** End of exercise report

- LandSAR NZ website, www.landsar.org.nz, contains the "Search and Rescue Incident Management Guidelines using the Coordinated Incident Management System.

- The NZ Police system is utilized to apply for RNZAF support.

Appendix B

1. Identifying trends, predictions, response needs and asset assessment using SAR Vulnerability Assessment (SVA)

SVA means establishing the operational trends:

- what has happened historically in an area or district

- what is happening

- predicting what is going to happen

The purpose of the SAREX can then be customised to meet the predictions. The depth and degree this process is followed will vary depending on the intended SAREX size and complexity.

2.1 Identify Operational Trends

Identify operations that have happened locally and in adjacent areas/region over last five years with an emphasis on the last year:

- Type

- Number

- Debrief information/notes

- Issues in the readiness plan/standard operating procedure/systems/processes and equipment for IMT's and in the field

Identify predicted trends locally and in adjacent areas/regions over the next five years. Consider:

- Demographics

- Activities

- Terrain/ease of access

- Existing assets

- Facility changes

- Type of operations

- Research and development

- Anticipated issues in the readiness plans, standard operating procedures, systems, processes and equipment for IMT's and in the field

2.2 Informal trends and incidents

Survey key local or regional SAR or related persons and organizations for near misses, unreported incidents and in house incidents to develop an overall picture.

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2.3 Organisations/groups/individuals to consider consulting

- Government and local body
- SAR Council and SAR Secretariat
- Rescue Coordination Centre NZ (RCCNZ)
- Police
- LandSAR
- Department of Conservation (DOC)
- Coastguard
- Surf
- Defence
- NZ Water Safety Council
- NZ Mountain Safety Council
- Outdoors New Zealand (ONZ)
- Coroners
- Advisers
- Local SAR Committee
- Related recreational and commercial groups
- Medical services
- Fire
- Helicopter operators
- Media
- Industry newsletters
- Cultural groups
- Educational and representative organizational bodies
- Other

2.4 Research, Developments and Training

Survey key individuals and partner organizations and industries globally for:

- New research and developments
- New equipment
- Technology
- Internet/literature search
- Related industries
- Research reports

Review:

- Local/regional and national goals and training plans
- Past SAREX training and exercise recommendations

SAREX Guidelines
Marine Example

Analyse SAREX Need   completed ✓

1 **Establish SAREX Planning Team.** (See Appendix A on page 6 for instructions and Appendix C and D on pages 8-13 for examples)   ✓

Rescue Coordination Centre NZ   NZ Police

Maritime NZ   Coastguard

2 **Identify trends and predictions, response needs and asset assessment.** (See Appendix B on pages 5-6)   ✓

Trends and predictions:

- Coastal shipping, exporting and fishing boat movements are normal for the port.

- There is an increase in passenger cruise liners visiting the port each year.

- Due to the limited port size the liners anchor in the bay and passengers, predominantly elderly, are transferred to shore via the liners boats.

Response Needs: Day/night and all weather ability to provide:

- SAR response for grounding/incidents with the liner.

- SAR response for incidents with the liners boats.

- a SAR response capability for potentially large numbers of passengers, predominantly elderly, in the water or coming ashore.

Asset Assessment:

- Nil specific incident/area SOP's exist.

- Current shore based rescue craft can only carry 40 passengers.

- The Rescue helicopter/s have a winch facility and can carry three passengers.

- There is no shore based facility or systems for dealing with multiple casualties as people reach shore.

- The local marine control centre is limited in size and resources.

3 **Summarise need:**   ✓

- The increased number of passenger liners using the port and transferring predominantly elderly passengers to and from shore via boats increases the probability of an incident.

- The weather and sea conditions can deteriorate rapidly.

- Any incident will likely receive high international media coverage.

- This means the systems and assets for an incident need to be assessed and tested.

4 **Specify the purpose of this SAREX:**   ✓

To test the existing Marine SAR systems and land based facilities to manage an incident of full multiple passenger boats being caught in a severe squall between ship and shore.

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5 **Determine specific SAREX objectives:** ✓

   i. To identify all agencies that may be required to respond to the scenario.

   ii. To test all responding agencies SOP's.

   iii. To develop and test procedures that will meet New Zealand's obligations to respond.

   iv. Identify any problem areas that may need addressing at local, national and government level.

   v. Develop or amend local procedures to meet the International Aviation and Maritime Search and Rescue (IAMSAR) and SOLAS requirements being mindful that CIMS procedures are aligned to IAMSAR in most areas.

   vi.

6 **Select exercise name:** ✓

ONE LINER

7 **Establish a budget:** ✓

$3,000

8 **Obtain lead/joint agency authority:** ✓

Maritime NZ/NZ Police sign-off.

9 **Seek multi agency participation. Emails sent to key agencies plus phone calls:** ✓

RCCNZ

NZ Police – Communications Centre and local

Maritime NZ

Maritime Operations Centre

Defence

Rescue Helicopter/s

Harbour Master and Port Authorities

St Johns

Land SAR National and Local

Shipping Companies

Surf Life Saving

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Design SAREX

10   Set key Performance indicators (KPI's):   ☑

   i. All agencies SOP's are monitored and check listed through out the exercise for improvements.

   ii. Each contributing agency or organisation provides a report with improvement recommendations towards the final exercise report.

   iii. Develop or amend SOP's incorporating the improvements.

   iv. Strengths and limitations of the local marine control centre are identified.

   v. Strengths and limitations of the local response resources are identified.

   vi.

11   Develop exercise scenario: ☑

A passenger liner is anchored in a bay. Four boats are ferrying passengers back to the liner when a sudden squall hits which, combined with the tides and currents, produces violent conditions. The boats are driven towards the rocky shore and one has capsized.

12   Evaluate plan against training need: ☑

Desktop exercise and content meets training need.

13   Determine exercise controllers, participants and resources required: ☑

1 x RCC based.

2 x Local marine control centre.

Representatives or phone contactable as per list in no 9.

14   Confirm and announce exercise date/time location: ☑

Friday 1300 – 1800

15   Develop detailed events: ☑

The scenario is compounding with another boat capsizing and passengers trying to reach the shore in squally conditions, rough sea and a rocky coastline.

16 **Develop exercise safety plan:**

Paper exercise ✓

17 **Develop exercise 'control rules':**

To be defined by the controllers in conjunction with the planning committee. ✓

18 **Appoint exercise monitors (local and external) and define their role:**

External Maritime NZ monitor x 3. ✓

1 x RCC based monitoring the RCC response.

2 x Local marine control centre – monitoring local response.

19 **Confirm multi agency participation:**

As in 9 ✓

20 **Set up SAREX** ✓

Conduct

completed ✓

21   SAREX's are run under CIMS, IAMSAR, or other recognised structure.   ✓

22   Monitoring systems/real time feedback processes are in place.   ✓

23   Start the exercise.   ✓

24   Sustain and control exercise activity.   ✓

25   Intervention (if required) to keep on track.   ✓

Debrief

26   Hot debrief immediately after SAREX
Includes:

   All personnel/agencies, written or verbal.   ✓

   Preliminary feedback from monitors.   ✓

   Provide appropriate exercise closure.   ✓

27   Cold debrief within appropriate time frame.

   Key performance indicators are evaluated.   ✓

   Internal review and analysis of SAREX systems, performance and processes.   ✓

28   Monitors analysis and findings completed.   ✓

29   SAREX report completed.   ✓

30   Report circulated to participants and agencies.   ✓

Implement Learning

31   Implement report findings into Readiness-plans, SOP's and training and development.   ✓

32   Ongoing evaluation.   ✓

33   Develop 'lessons learned' and distribute as appropriate.   ✓

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SAREX Guidelines
Land Example

Analyse SAREX Need	completed ✓

1 **Establish SAREX Planning Team.** (See Appendix A on page 6 for instructions and Appendix C and D on pages 8-13 for examples) ✓

NZ Police

SAR Coordinator

LandSAR

Three members local committee

2 **Identify trends and predictions, response needs and asset assessment.** (See Appendix B on pages 5-6) ✓

Trends and predictions:

- Most outdoor activity expected to remain consistent.
- New mountain bike tracks are being established in foothills.
- One injured biker needed finding and evacuating this year. Nil previously.
- Number of riders expected to increase to 2-3,000 per year plus feature events.
- Some will be riding in groups and others alone.
- Predicted incidents will be moderate to serious injury.

Response Needs:

Day/night and all weather capability for a SAR response in the tracked area to:

- Missing mountain biker/s.
- Injured/fatal mountain biker/s.

Asset Assessment:

- Nil readiness plan exists.
- Nil identification of potential high risk accident sites.
- Nil identification of helicopter landing sites and vehicle access points.
- Nil landing sites prepared.

3 **Summarise need:** ✓

The new mountain bike trails are likely to result in 1-5 moderate to serious injury and or missing incidents per year.

This will require an increase in skills and systems to locate, treat and evacuate missing/injured mountain bikers.

4 **Specify the purpose of this SAREX:** ✓

To practice and test locating, treating and evacuating missing/injured mountain bikers from the foothill areas.

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5 **Determine specific SAREX objectives:** ☑

   i. To test the incident management teams ability to manage missing mountain biker incident/s.

   ii. To trial the new mountain biking area/activity SAR readiness plan.

   iii. To practice and test the capability of search resources.

   iv. To practice and test the treatment of an injured mountain biker.

   v. To practice and test the evacuation of an injured mountain biker.

   vi.

6 **Select exercise name:** ☑

AVANTI ONE

7 **Establish a budget:** ☑

$4,000

8 **Obtain lead/joint agency authority:** ☑

Police District Commander sign off.

9 **Seek multi agency participation. Emails sent to key agencies plus phone calls:** ☑

NZ Police

LandSAR

St Johns

Mountain Bike Club

Rescue helicopter/s

10 **Set key Performance indicators (KPI's):**   ✓

i. Incident management team and monitors produce reports on management performance.

ii. New readiness plan has improvements added.

iii. Search resources are measured against active and passive search methods.

iv. Injured mountain biker is treated and stabilised.

v. Injured mountain biker is safely stretchered to evacuation site and evacuated by helicopter.

vi.

11 **Develop exercise scenario:**   ✓

Two mountain bikers are staying in a back packers close to the mountain bike tracks.

They fail to return to from an early morning ride and at 1400 their empty vehicle is located at the road end.

It is raining and the weather is deteriorating. Their cell phones are at the back packers.

12 **Evaluate plan against training need:**   Meets needs and a full scale SAREX is appropriate.   ✓

13 **Determine exercise controllers, participants and resources required including RNZAF request for helicopter support:**   ✓

1 x exercise controller at the ICP

1 x umpire at the ICP

2 x monitors to observe exercise ICP and field

20 local SAR participants

Rescue helicopter

St Johns

2 x Bike club members to provide advice

14 **Confirm and announce exercise date/time location:**   Saturday 1500 until response complete.   ✓

15 **Develop detailed events:**   ✓

Two mountain bikers.

One crashes at the bottom of a 3 metre jump and breaks their leg plus

internal injuries. Other rider crashes trying to avoid the other,

gets injured, but goes for help and has not been seen.

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16   **Develop exercise safety plan:**   ?   ✓

17   **Develop exercise 'control rules':**   "No Duff" applies.   ✓

18   **Appoint exercise monitors (local and external) and define their role:**   ✓

External SAR monitor.

Incident Management team activities/systems.

Experienced Police SAR Squad Member/volunteer.

Field resources deployment and performance.

19   **Confirm multi agency participation:**   As in 9   ✓

20   **Set up SAREX**   ✓

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Conduct

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22   Monitoring systems/real time feedback processes are in place.   ✓

23   Start the exercise.   ✓

24   Sustain and control exercise activity.   ✓

25   Intervention (if required) to keep on track.   ✓

Debrief

26   Hot debrief immediately after SAREX
Includes:

     All personnel/agencies, written or verbal.   ✓

     Preliminary feedback from monitors.   ✓

     Provide appropriate exercise closure.   ✓

27   Cold debrief within appropriate time frame.

     Key performance indicators are evaluated.   ✓

     Internal review and analysis of SAREX systems, performance and processes.   ✓

28   Monitors analysis and findings completed.   ✓

29   SAREX report completed.   ✓

30   Report circulated to participants and agencies.   ✓

Implement Learning

31   Implement report findings into Readiness-plans, SOP's and training and development.   ✓

32   Ongoing evaluation.   ✓

33   Develop 'lessons learned' and distribute as appropriate.   ✓

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