

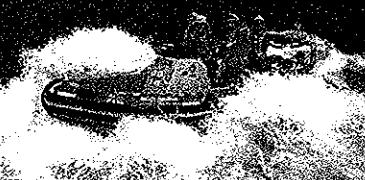


MEDICAL EVACUATIONS FROM SHIPS  
AT SEA ALONG THE SOUTH AFRICAN  
COASTLINE

The Risk of Evacuations by Boat and the  
Need for Helicopter Capacity on the  
South African Coastline




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CEO NSRI



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NOT FOR PROFIT COMPANY

- The NSRI, is a registered NPC Company (No 1967/013618/08) and Non-Profit Organisation (NPO) with the Department of Social Development, which delivers maritime rescue services along the coast and on inland navigable waters in South Africa.
- In addition, it delivers advocacy and preventative programmes which target drowning particularly in children.



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**SEA RESCUE EMERGENCY NUMBER 112**

**Statistics:**

35	RESCUE BASES
96	RESCUE CRAFT
38	RESCUE VEHICLES
16	QUAD BIKES
11	TRACTORS
1006	UNPAID VOLUNTEERS

**National Sea Rescue Institute of South Africa**

**Text Description:**  
 In terms of the SARSA (South African Search and Rescue Act) the NSRI is designated as a state-owned institution. The NSRI is a non-profit organization and is a member of the International Maritime Rescue Confederation (IMRC). The NSRI is a member of the IMRC and provides search and rescue services to the public. The NSRI is a member of the IMRC and provides search and rescue services to the public. The NSRI is a member of the IMRC and provides search and rescue services to the public.

## STRUCTURE

- The organization operates from a central head office and thirty three rescue bases (33), which create a geographic footprint of services along a coast of almost 3 000km (and 1 300km on inland dams), each with a defined management (Station Commander and committee), crew structure (1013 volunteers) and rescue resources (90 rescue craft and 28 vehicles).

## Vessels

Class I      Class II      Class III      Class IV

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## VIDEO OF ACTUAL INCIDENT

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# Letter

201507-05

Dear Portfolio Committee Chairperson,  
Portfolio Committee on Transport

The NSRI performs more than 70 medical evacuations from ships at sea on behalf of SASAR, SAMSA and DOT every year.

The transfer of patients and personnel between two vessels at sea is risky and we have advised the Maritime Safety Committee of SASAR and the SASAR Executive that we deem the risk of medical evacuations by boat to be of an unacceptable risk and that Helicopter Evacuations are more appropriate.

We have had five incidents in the last year where crew members escaped deathly by very narrow margins and I need to impress on you the consequences of not resolving this issue by ensuring the appropriate availability of Helicopter Medical Evacuation Services along the South African coastline through the South African Air Force or Private sector.

I view sea rescue as a maritime nation and expanding the ocean economy that medical rescue of crew from vessels at sea is a pillar to that vision.

I captured a video of an incident on the 11th of May 2015 and it can be clearly seen how a crew member escapes death by centimetres as the gangway disengages and he falls over.

The video can be accessed by clicking the following link - <https://youtu.be/127659245>. The password is Spige.

I am available to do a presentation to the Portfolio Committee if necessary but I think the attached video underlines that urgent action is necessary and that we cannot wait for committees to convene and make decisions. This requires common sense executive decision making within the Department, SASAR and the SANDF.

The email is copied in support of motivation of the urgency and importance that I place on this matter having worked through the channels and not receiving satisfactory resolution.

I am available to do a presentation to the Portfolio Committee on Transport if necessary.

Thank you for receiving my submission.

Yours Sincerely

Dr Clove Robertson

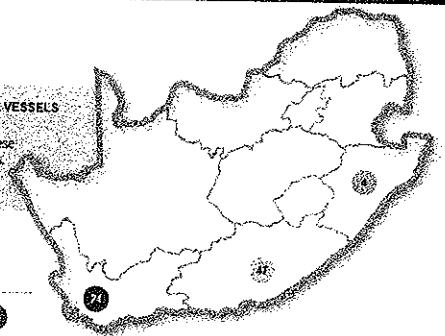


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# Boat Based Medical Evacuations 2014/15

## MEDICAL EVACUATIONS FROM COMMERCIAL VESSELS



Sea Rescue performed 75 medical evacuations of patients from ships at sea, and only a portion of these resulted in a donation from the shipping companies. We will continue to work towards an appropriate contribution from the shipping industry.



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## SOUTH AFRICA




- **The Big Five**
  - A big coastline 3000km
  - Big Seas (Cape of Storms)
  - Big Ships (Europe to the East)
  - Big shipping traffic
  - Big problems



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## MEDICAL EVACUATION STRUCTURE




- **Cape Town Radio Receives all requests or Medical Evacuations**
- **Emergency Physicians in Cape Town evaluate requests**
- **Standard Text TMAS (Telemedical Advice at Sea) and photograph**
- **Physician Recommends Medical Evacuation**
- **Maritime Rescue Coordination Centre (MRCC) in Cape Town coordinates response**



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## RESPONSE




- Helicopter Evacuation by
  - South African Airforce
  - Private Operator (R200,000)
- Boat Evacuation by
  - NSRI (NPC)
  - Private Operator



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## LEGISLATIVE MANDATE

- South African Search and Rescue (SASAR) Act 2002
- MRCC
- Tasking via Port Captain (SubRCC)
- Station Commander (Sub-sub RCC)



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## HELICOPTER EVACUATION

- NSRI has rescue swimmers and supports local EMS and Helicopter providers in providing crew for Helivacs.



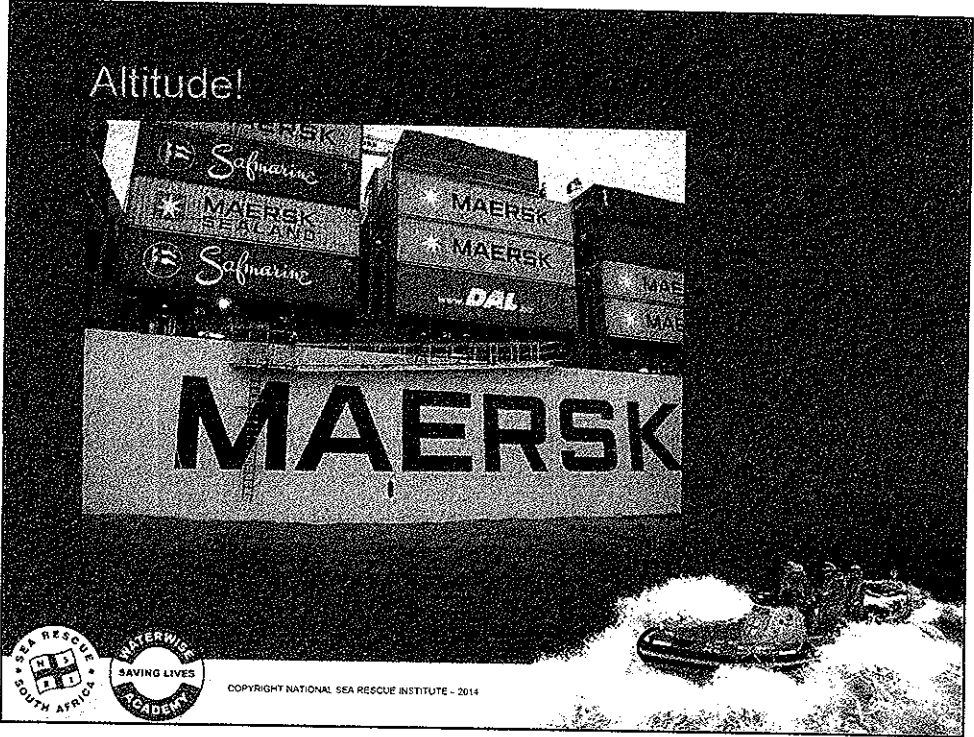
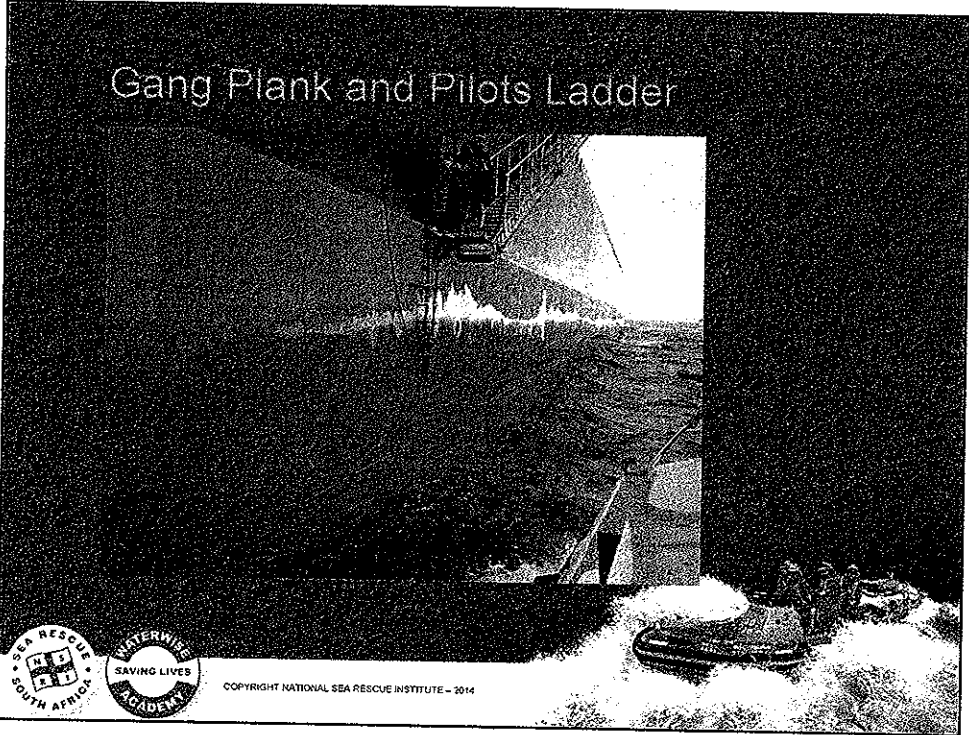
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## BOAT EVACUATIONS

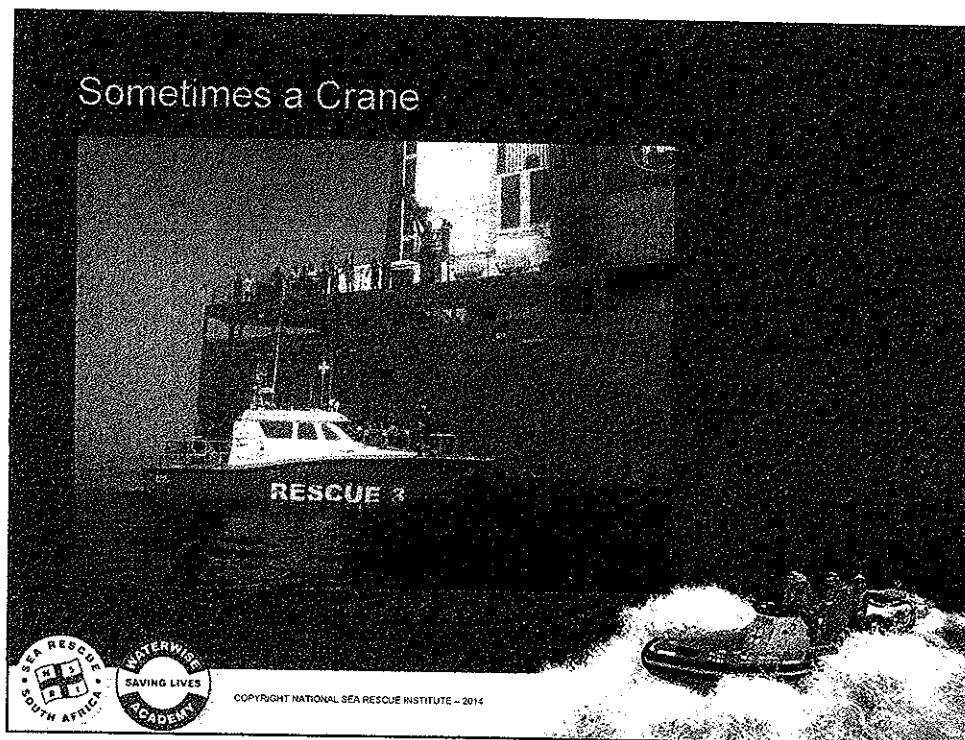
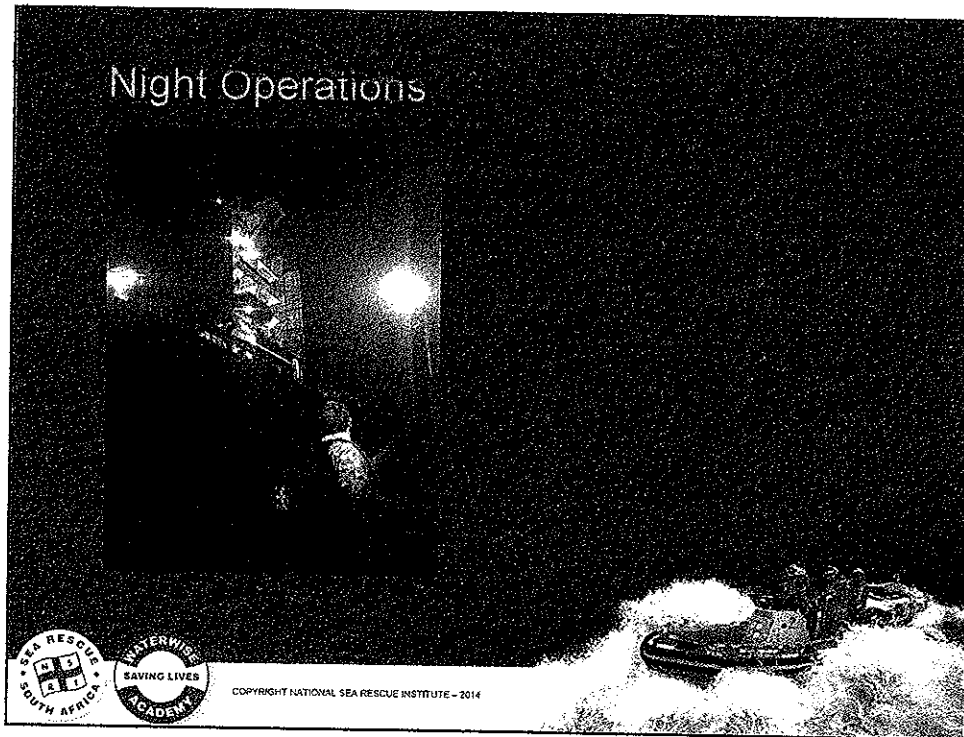
- The NSRI performs an average of 70 evacuations of sick or injured seamen from ships at sea by boat every year.

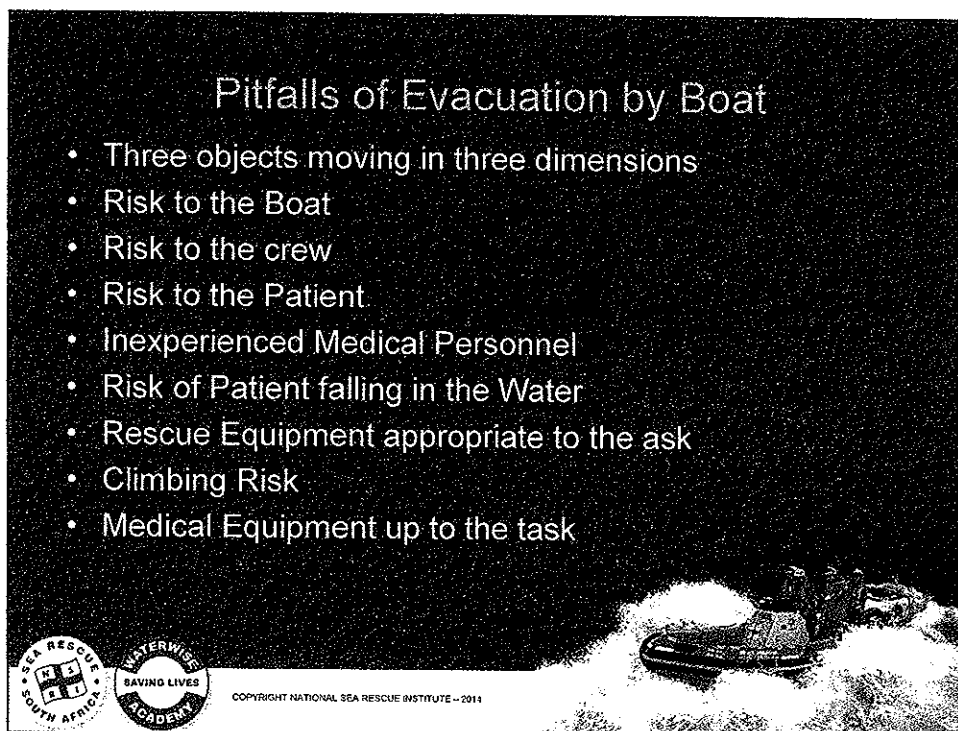
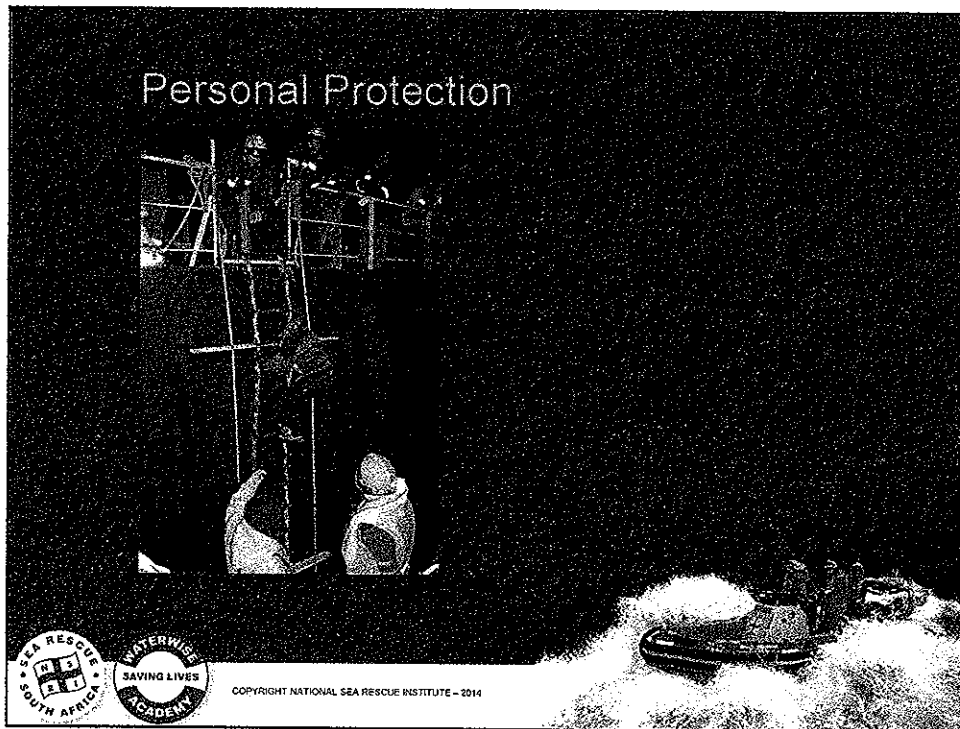


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## Recent Safety Incidents

### Incident 1

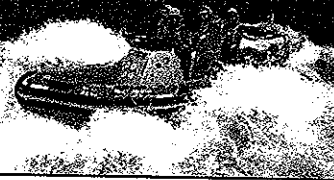
Boat sucked under the stern into propeller wash crushing superstructure/aerials

### Incident 2

Gang Plank Descending, missing crew member by centimeters and damaging boat



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## Recommendations

### Recommendation 1

Evacuation by Helicopter

### Recommendation 2

No Gang Plank

### Recommendation 3

Climb with protection on rope



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## Recommendations

Recommendation 4  
Full PPE, Helmet, Harness, Lifejacket

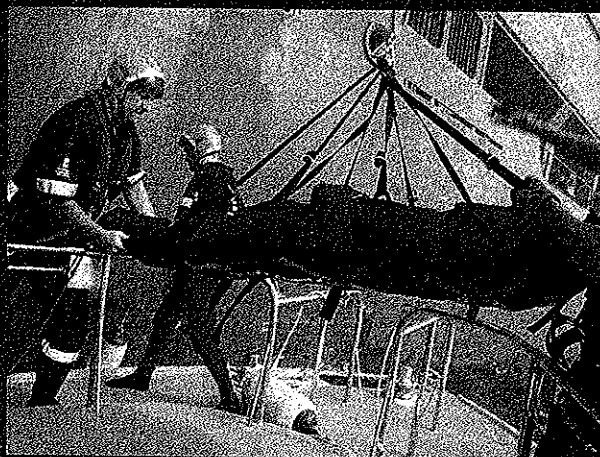
Recommendation 5  
Bauman Bag and Vacuum Mattress for patient

Recommendation 6  
Fully redundant rope lowering system



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## Bauman Bag and Vacuum Mattress

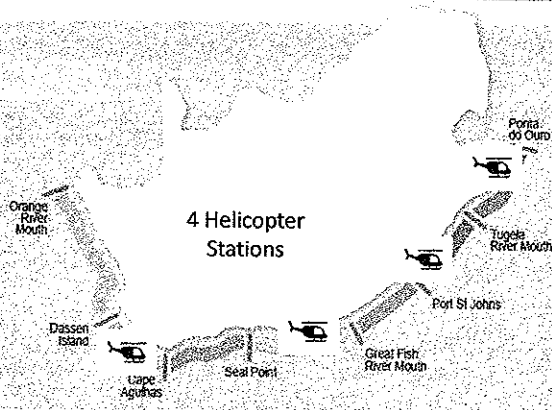


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## Coastal Medical Evacuation Helicopter Solution

### Rescue Bases

In terms of the SASAR (South African Search and Rescue) Act, the NSRI is delegated as a sub-sub-Rescue Coordinating Centre at Station Level to effect coordination and control over Maritime Rescue. The MRCC (Maritime Rescue Coordination Centre) and Port Captains provide National and Regional coordination. The MRCC are receiving 112 emergency calls and SafeTrx overdue alarms and acting as a dispatch centre for the NSRI.



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## HELICOPTERS

- First Prize SAAF because of existing footprint
  - Oryx Helicopters (two ready to fly), aircraft, crew, training
- Second Prize Private Sector National Coastal Provider
  - Equivalent/Twin Engine (two ready to fly)
- Formal Bid and Contract (DOT/SAMSA Budget)
- Single Provider for Medivacs from Ships
- Dedicated Crew, Pilot(s), Engineer, Paramedic, Swimmer
- CAA Licensing CATS 138 with equipment/personnel
- Currency Training
- Built on top of current service



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## Estimated Flying Costs Per Annum SAAF (Fuel Only)

- Operations
  - R15000/hour
  - Assume 150 hours, two hours per 75 rescues.
  - R2,250,000.00
- Training
  - Assume 4 hours training for each operational hour.
  - R9,000,000.00
- Total Fuel cost per annum
  - Approximately R12 million.



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## DISCUSSION WITH SAAF

- a) The SAAF has a responsibility for SAR in South Africa
- b) Aircraft exist but are not maintained
- c) Crews are not trained/current
- d) Squadron reconfiguration could be a solution i.e. bigger aircraft at Port Elizabeth
- e) SAAF are the preferred provider
- f) Training requirements are 4:1 Training: Operations (hours)
- g) Response threshold should be lower and managed
- h) Fuel costs are covered/provision can be made through reprioritization
- i) SAR must be a SAAF Priority
- j) Land-on training/capacity is absent.
- k) Teams must be constructed around squadrons to include pilot/command/engineer/medical/swimmer. Limited small teams with optimal skill and currency.
- l) Issues deserve workshop between DOT/MRCC/SAMSA and SAAF
- m) Up to 100 Medivacs/Annum
- n) Geographic capacity must meet geographic demand e.g. PE
- o) Helicopter Squadrons must be prioritized and resourced because of their civilian interface and necessity to social security in the SAR Context.



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## Conclusion

- South Africa is a Maritime Nation
- We have an International Responsibility to Provide Rescue
- Helicopter Evacuation of patients is safer
- Cost is affordable
- Standing contract with SAAF or Private provider is essential



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## THANK YOU



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