Gliders for Research, Ocean Observation and Management (GROOM)
Work package 5.4

Glider Operational Risk Management Programme

Dr. Mario P. Brito, Prof. Gwyn Griffiths and Dr. David Smeed

National Oceanography Centre, Southampton, UK

Contact: mario.brito@noc.ac.uk; gxg@noc.ac.uk and das@noc.ac.uk

National Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL

Programme

o   To devise and implement a risk management process tailored to the operation of gliders in a multi-risk deployment

- o   The implementation of which will require data gathering and formal risk assessment

o   Data used for statistical analysis will consist of the operation history of gliders since January 2010

o   An online survey will be sent to all partners

o   A risk assessment workshop will gather a selected number of experts to assess the risk of potential hazards

Gliders for Research, Ocean Observation and Management meeting 22nd May 2012

National Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL

Online survey

❑ Data will be collected for all operational missions for all gliders of the research institution.

❑ Mission characteristics will include: mission number, mission travelled time, environment conditions (coastal shelf or deep ocean operation), whether or not the mission ended due to failure.

❑ Failure data will consist of:
  ➤ Collision with vessel, sea bed, nets (or other)
  ➤ Communications failure
  ➤ Leak
  ➤ Buoyancy pump failure
  ➤ Navigation sensor failure (GPS, Campus, other)
  ➤ Attitude control failure
  ➤ Science sensor failure
  ➤ Battery failure
  ➤ Command/control software failure (includes basestation)
  ➤ Onboard software failure
  ➤ Data logging failure

❑ Bottom profiler status at the time of fault

Gliders for Research, Ocean Observation and Management meeting 22nd May 2012

National Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL

GROOM – Glider Operational Risk Survey

The aim of this survey is to collect operational data of glider use since January 2010.

Welcome to the GROOM survey on glider operational risk. GROOM is an EU FP7 funded project.The aim of this survey is to collect data to support analysis of glider operational risk as part of WP5. Throughout this survey you will be asked to provide information concerning your glider usage since January 2010. The time taken to complete this survey will depend on the number of missions that you have undertaken. You will be asked to complete one survey for each mission.
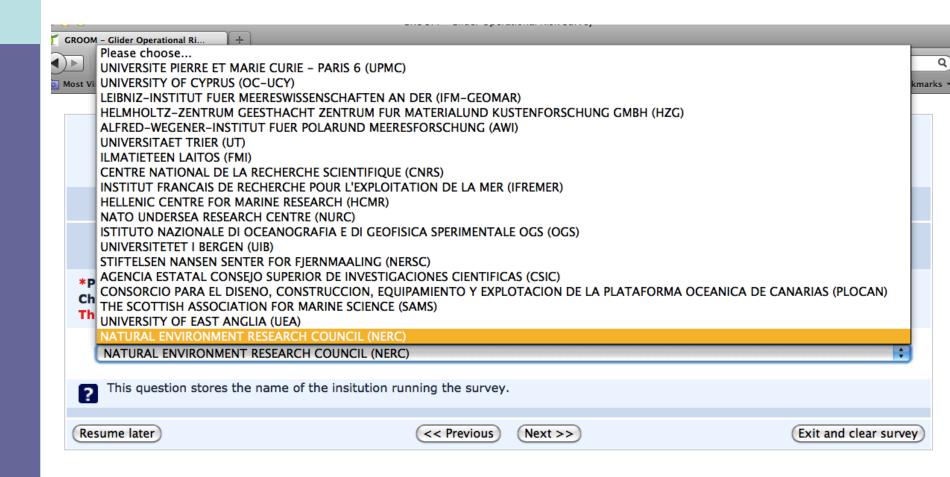
There are 11 questions in this survey.

Load unfinished survey   Next >>   Exit and clear survey

Gliders for Research, Ocean Observation and Management meeting 22nd May 2012

National Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL

Gliders for Research, Ocean Observation and Management meeting 22nd May 2012

National Oceanography Centre

NATURAL ENVIRONMENT RESEARCH COUNCIL

Gliders for Research, Ocean Observation and Management meeting 22nd May 2012

Gliders for Research, Ocean Observation and Management meeting 22nd May 2012

National Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL

*

4. Insert mission type?

Choose one of the following answers

Please choose... ⇕

5. What was the length of the mission in days?

Only numbers may be entered in this field

? Please enter the mission travelled time. Use failure time into the mission if the mission was aborted.

6. What was the mission maximum depth in metres?

Only numbers may be entered in this field

Gliders for Research, Ocean Observation and Management meeting 22nd May 2012

National Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL

7. Did the mission end in failure?

○ Yes　　　○ No　　　◉ No answer

[?] Please select 'yes' if the mission was aborted, select 'no' if the mission was sucessfull.

10. Did the glider fail initial test dive?

○ Yes　　　○ No　　　◉ No answer

[?] Please specify whether or not the glider has failed initial test dive.

National Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL

8. What is the primary cause for the end of mission?
Choose one of the following answers

○ 1. Collision with a vessel

○ 2. Collision with the seabed

○ 3. Collision with nets or other obstacle

○ 4. Collision with the seabed

○ 5. Leak

○ 6. Buoyancy pump failure

○ 7. Power/Battery failure

○ 8. Command/Control software failure (includes basestation)

○ 9. Onboard software failure

○ 10. Data logging failure

○ 11. Navigation sensor failure - GPS

○ 12. Navigation sensor failure - Campass

○ 13. Science sensor failure

○ 14. Attitude control failure

○ 15. Other technical failure

◉ No answer

[?] Please insert the primary reason for mission failure.

Gliders for Research, Ocean Observation and Management meeting 22nd May 2012