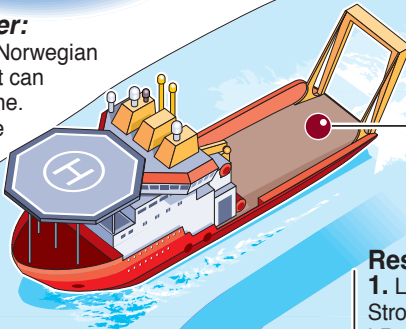


# Rescue mission with "undersea helicopter"

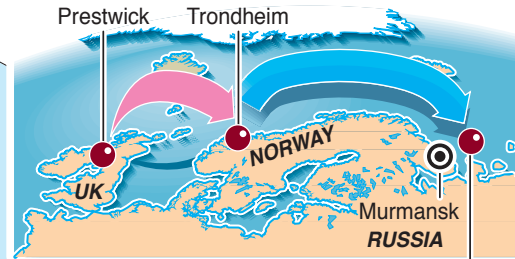
A British mini-submarine and a team of Norwegian deep divers are heading for the Barents Sea to attempt the rescue of the 118-man crew of the stricken Russian submarine *Kursk*. The LR5 rescue vessel is able to evacuate 16 people at a time

## Normand Pioneer:

Specially-equipped Norwegian ship with cranes that can lift the mini-submarine. Ship carries portable decompression facilities



LR5 launched from fantail.  
Can operate in waves up to 15m high



**Barents Sea:**  
First dive due late Saturday afternoon

Rescue team will include three Russians – experts in medical and submarine technology – who will enter the *Kursk* to assess damage and casualties

Each diving cycle will take 3-4 hours. LR5 can complete 2-3 cycles before batteries need to be recharged

**LR5:**  
Max dive depth: 460m  
Cost: £8 million  
Based: Faslane, Scotland

## Rescue procedure:

1. LR5 locates *Kursk* using sonar and tracking system. Strong lights and external video cameras enable LR5 to crawl over submarine's outer casing
2. "Transfer skirt" – pressure-resisting shell – extends over escape hatch. "Mating" can be achieved at list-angle of up to 60 degrees
3. Water pushed out, creating airlock. Pressure inside skirt reduced to same as that within LR5
4. Entry hatch to LR5 and *Kursk*'s escape hatch opened and crew transferred

**Kursk:** LR5 will attach to aft escape hatch – at depth of 108m. Forward hatch known to be damaged and unusable. LR5 docking collar confirmed compatible with Oscar II-class hatch

Submarine listing to port at up to 20 degrees – less than first feared

Massive damage from bow to fin

## LR5 Rescue Submersible

Can be piloted like an underwater helicopter, unaffected by strong, swirling currents around the *Kursk*

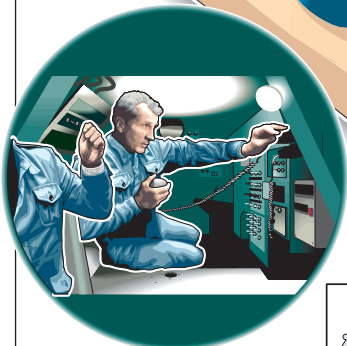
Length: 9.2m, width: 3m, speed: 2.5 knots

## Rescue chamber:

"Cram capacity" for 16 rescuees

## Main propulsion:

Two steerable thruster units



Transverse bow thrusters

Vertical side thrusters

Navigation tracking system

Cutting equipment

## Command module:

Pilot, co-pilot plus dive master

Ballast tanks used to descend and rise

Docking collar

Transverse stern thruster