



Search & Recovery Lecture 5



Search Methods



We Will Cover

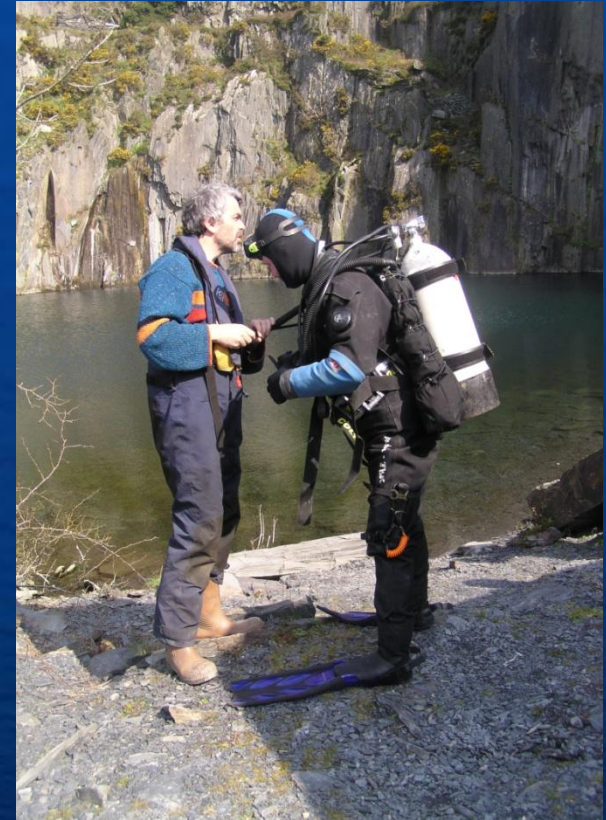
- Search essentials
- Research Stage
- Types Of Search
- Bottom line search
- Circular search





We Will Cover

- Jackstay search
- Grid search
- Compass search
- Single diver search
- R.O.V use
- D.P.V use





Search Essentials

- Aim for 100% coverage
- Method should be simple + effective
- Teamwork is essential
- Team must be adaptable if chosen method becomes unworkable
- Cost effective – in dive time



Research Stage

- Important to research and plan well before diving
- An exact search area greatly enhances the chances of recovery



Types of Search

- Search Method choice will depend on:
 - Water movement
 - Visibility
 - Equipment available
 - Numbers of divers available
 - Depth
 - Type of Seabed/ Riverbed





Swim Line Search

- Canals / rivers using bank as limiter
- In open sea using parallel jackstays
- ‘Anchor diver’ at both ends keep line taut
- Can be conducted from shore (no boat)
- Swimming with current will save energy
- Swimming against the current will be more arduous , but may improve visibility

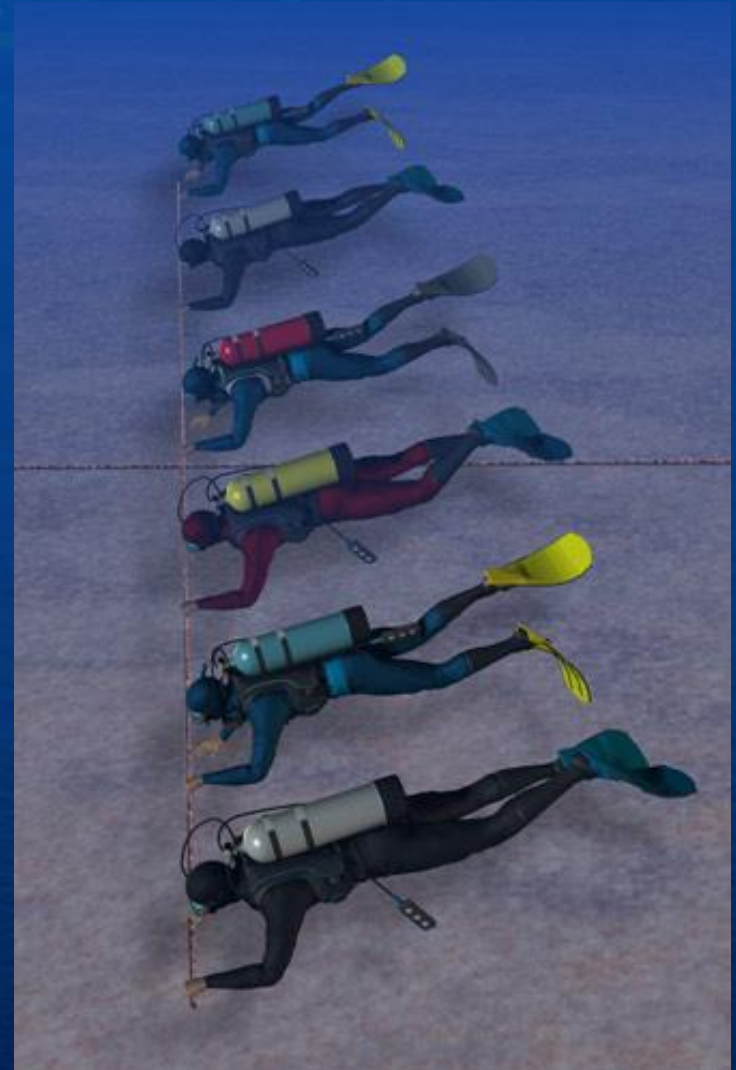
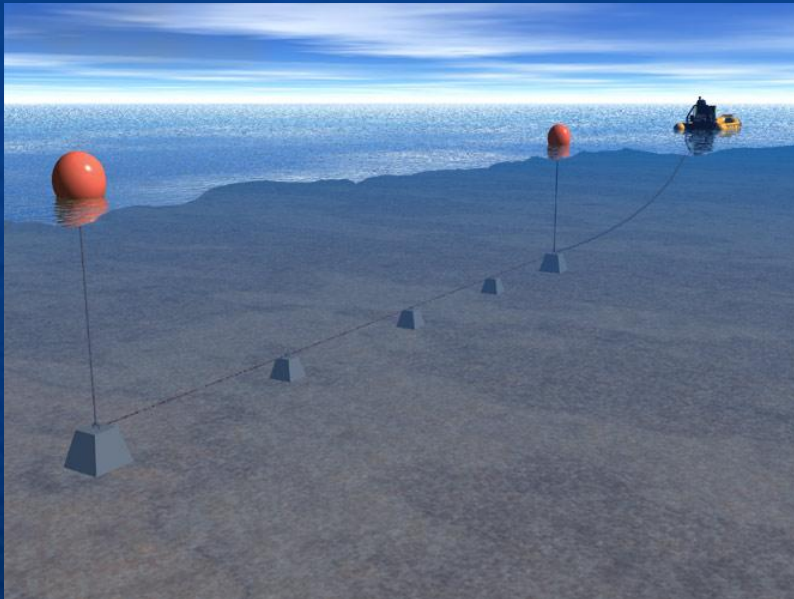


Bottom Line Search

- Quick coverage of large area
- Uses many divers (2-8)
- Difficult to control, if not practised
- Distance between divers depends on visibility
- Too much distance between divers reduces effectiveness



Bottom Line Search





Tow Search

- Can be useful for large areas
- Needs experienced divers and cox'n
- Very slow speeds when towing divers

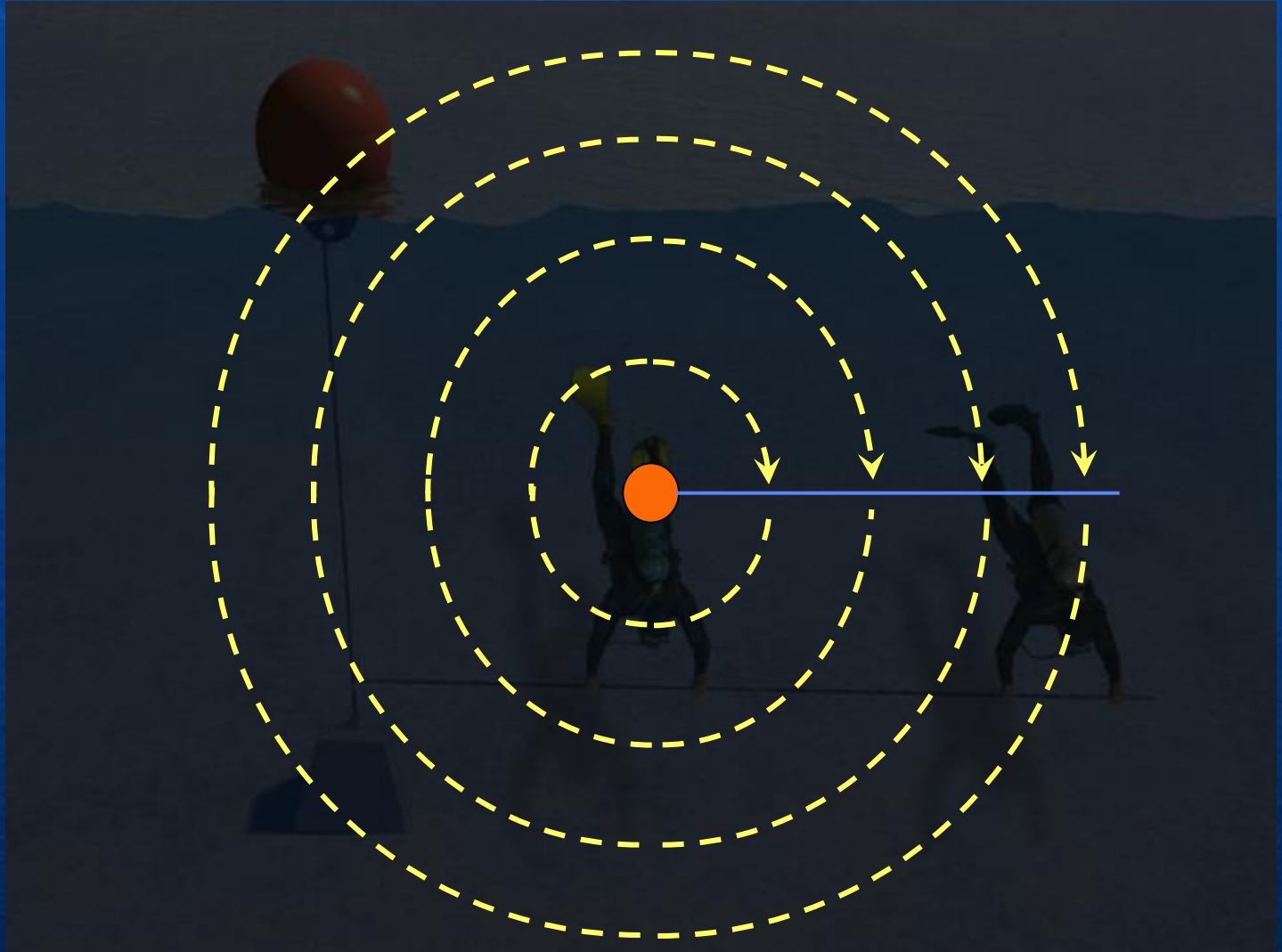


Circular Search

- Where search area is small
- Diver(s) circle(s) around weighted shot-line
- Diver uses reel from central shot
- Fixed bottom line indicates full circle completed
- No special equipment required



Circular Search



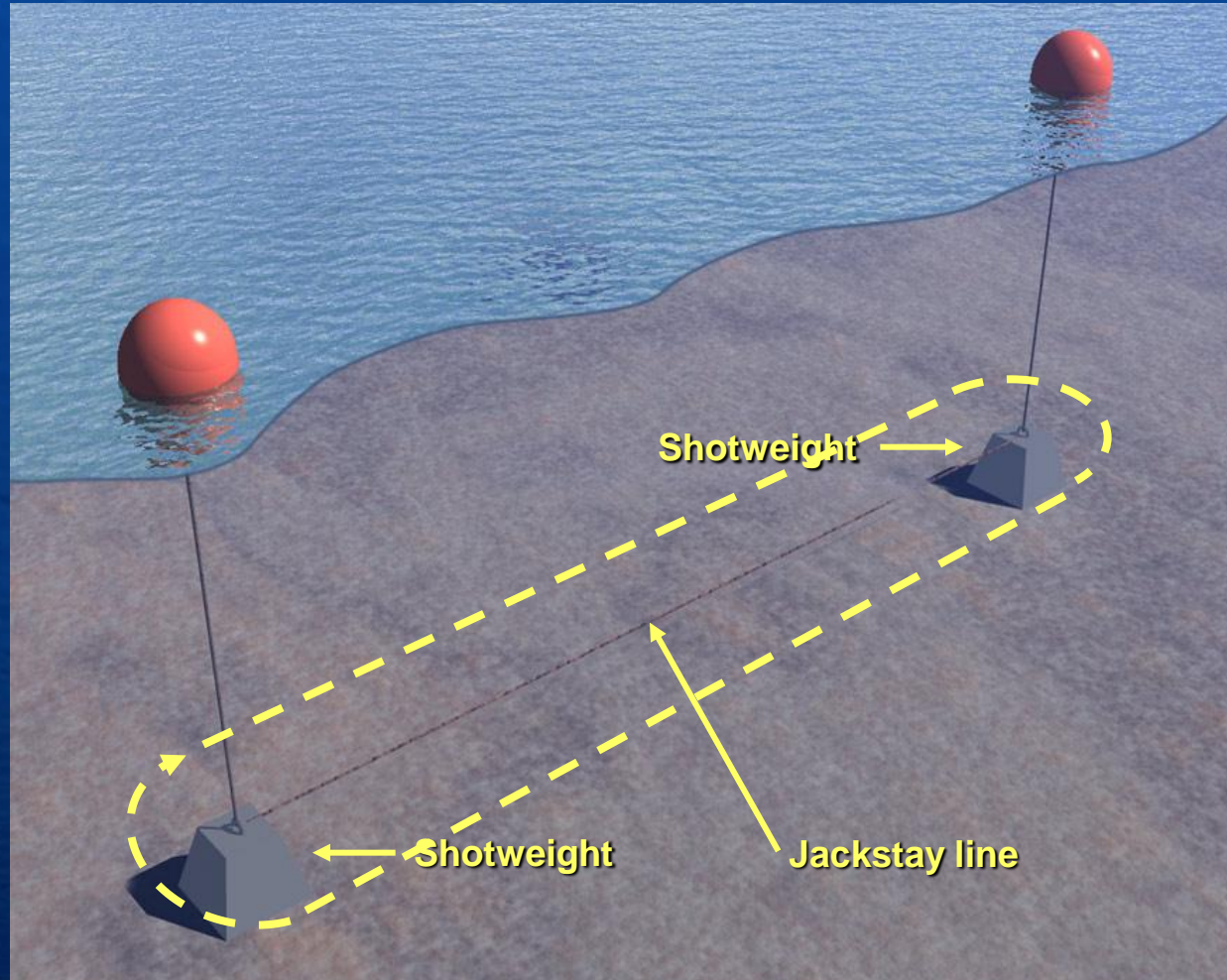


Jackstay Search

- For small objects
- Restricted area
- Good coverage
- Takes time
- Bad weather hampers
- Equipment required
- Practice needed

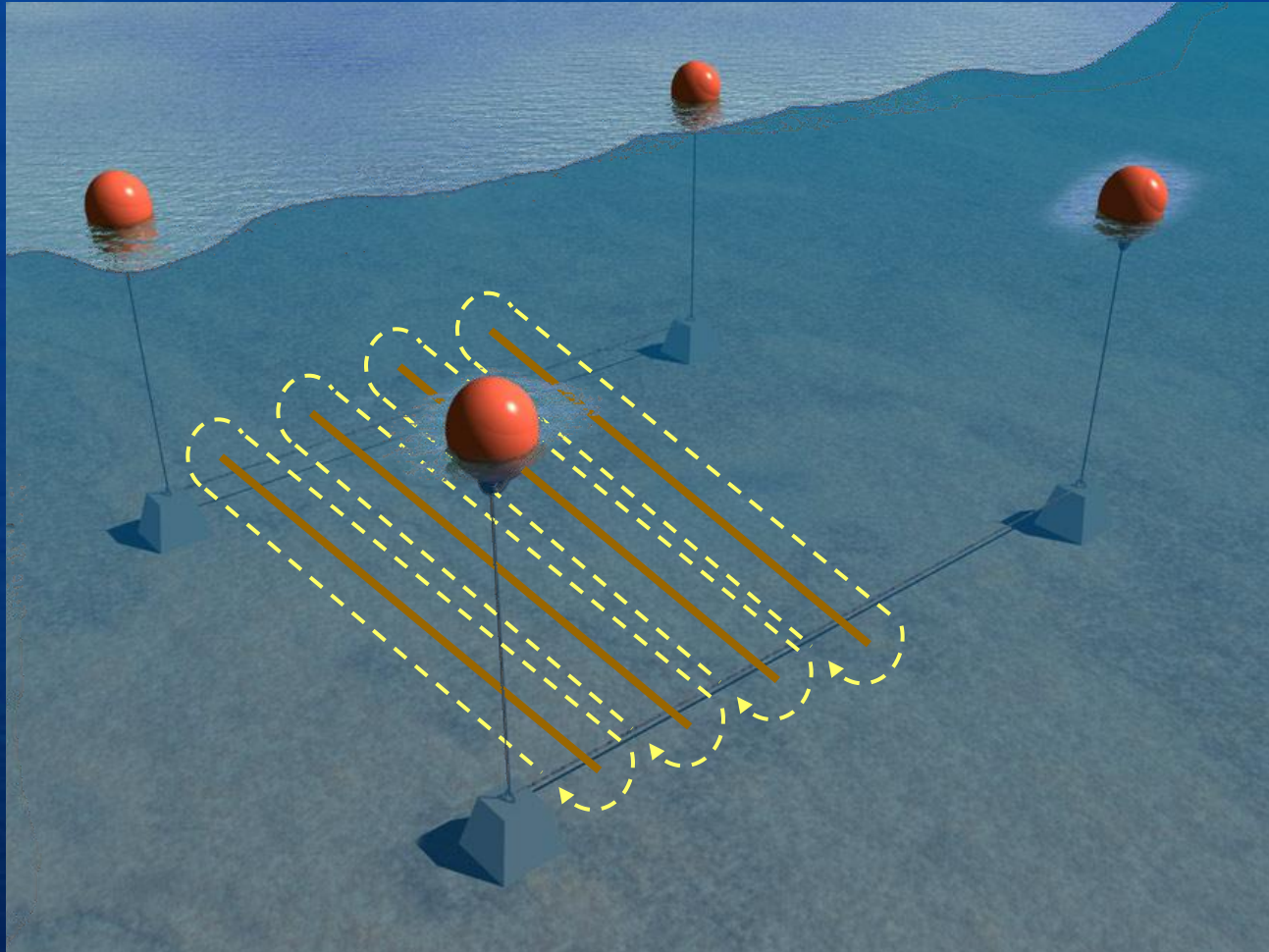


Jackstay Search





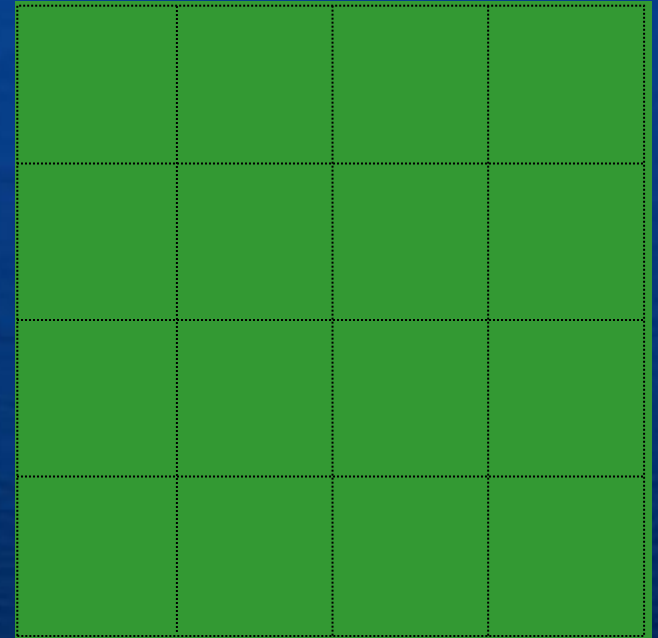
Jackstay and Parallel Baselines Search





Grid Search

- For finding small items
- In very small areas
- 100% coverage possible
- Need lots of time
- Labour intensive





Compass

- For large object
- Good navigation skills
- Good visibility
- Slack water
- Practice needed





Single Diver Search

- Easy to commence
- Ideal for search such as river-bank
- Fast flows / bad visibility
- Communications / standby diver
- Safety lines / harness
- Experienced personnel
- Safety



Single Diver Search





R.O.V

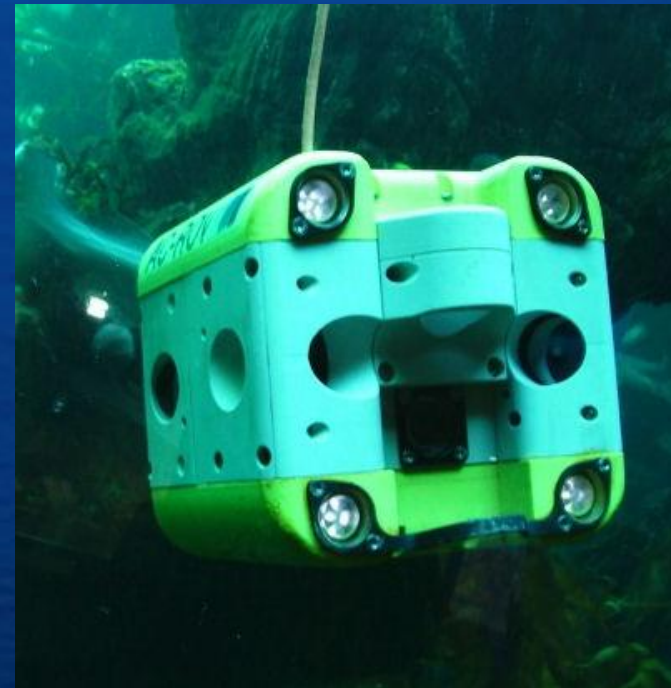
May be an option in cold or deep water if available





R.O.V

Requires specialist training





Diver Propulsion Vehicle

- **May be useful for large areas with good visibility**
- **Divers need to be competent in their use**





Search Methods

- Record all areas searched to avoid duplication
- Ensure 100% Coverage

**Good luck
everybody !**



Summary

- **Search essentials & Research Stage**
- **Types Of Search**
- **Bottom line search**
- **Circular search & Jackstay search**
- **Grid search & Compass search**
- **Single diver search**
- **R.O.V use & D.P.V use**