



# Ditching in Light Aircraft



# What we will Cover:

- **Before Flight**
- **The Emergency**
- **The Ditching**
- **Egress – the Escape**
- **Survival**
- **Questions/ Discussion**

# Before Flight

- Mind Set –
  - Be prepared, dress appropriately, think about what might happen, and have your Plans A and B set with a possible C in the background
- Loading the Aircraft –
  - Its going to be a very sudden stop, so if its not tied down it will be in the cockpit with you.
- Life Jackets –
  - *The majority of fatalities for MFIT accidents occurred during ditching. All of these fatalities were as a result of drowning after the accident, not as a direct result of the impact forces. None of the persons who drowned were wearing lifejackets. Those involved in these accidents who were wearing lifejackets survived.* [2005 Report to CAA on NZ Fixed Wing Aviation Accidents](#)
- Survival Gear – Dinghy
  - If you can't access it immediately after the ditching, plan on not using it.
- Harness system – Four point is best
- Briefing – Your passenger may save you, so brief accordingly.

# The Emergency

- Common Causes – Fuel Starvation & Engine Icing
  - Ditch before the fuel runs out
  - Carb Heat ON for fluctuating RPM or boost
- Fly the Aircraft –
  - Best glide or normal powered approach
- Radio Call/IFF –
  - Mayday or Pan at least. IFF to Emergency.
- Brief your Passenger –
  - Brace, Brace
- Configuration –
  - Gear
  - Flaps
  - Doors
  - Master Switch

# IFF Track

## PLOT 1047 AIRCAT RADAR DATA PLOT

Designer: DAR AIRCRAFT CRASH

Plotted: 21/11/99 06:40:38

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### Selection Criteria:

Picture Center: 4310S17250E

Picture range: 5 NM

### Time period:

from: 21/11/99 04:00:00

to: 21/11/99 04:10:00 *050*

### Selected SSR codes:

1200

### Selecting Mult Radar Tracks

### Selected General Maps:

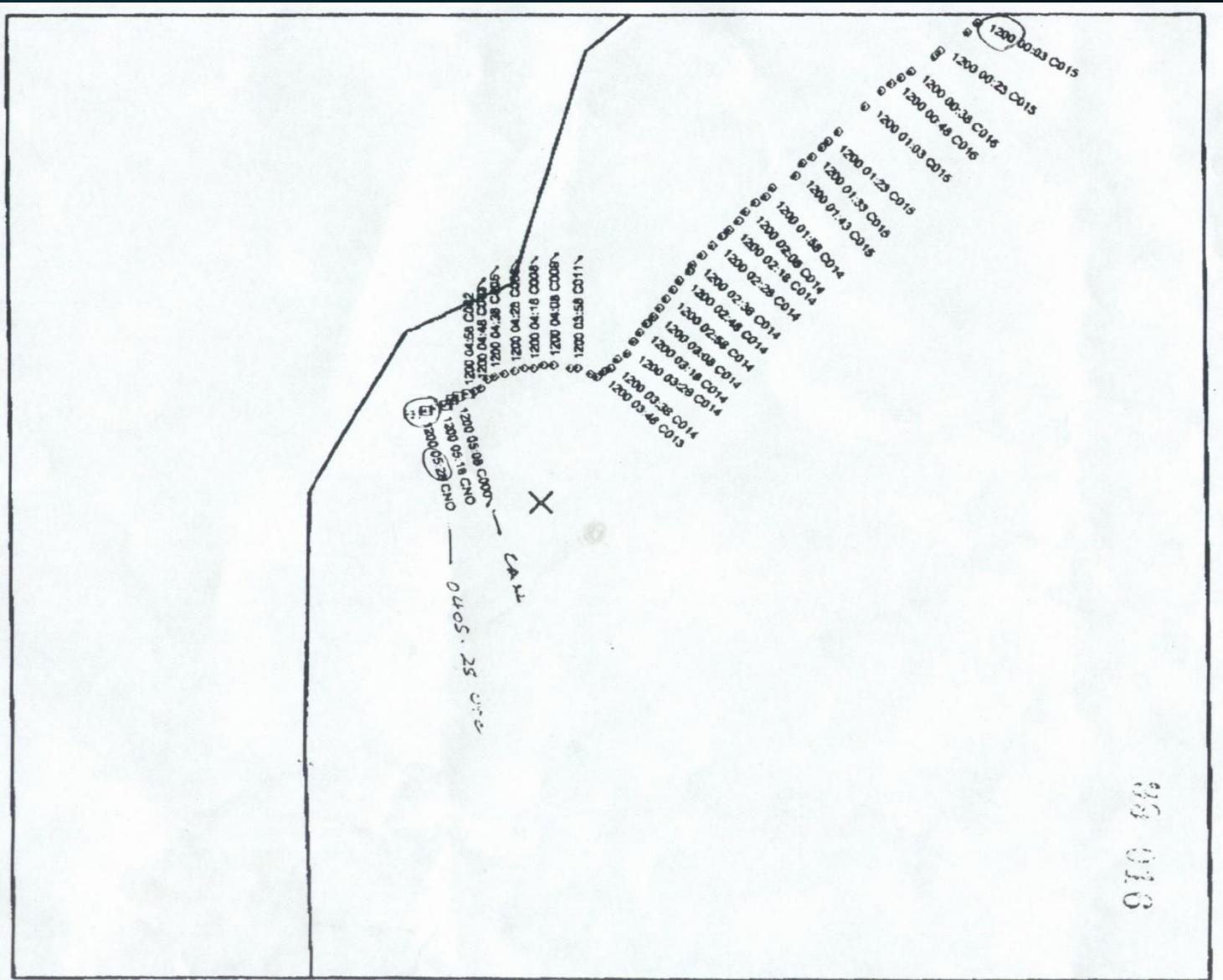
57

### Selected Restricted Maps:

SCALE 1:102,944

0 1  
|-----| NM

1cm = 0.655 NM



99 018

# The Ditching

- Assessment of Conditions –
  - Altitude will/may determine time to do this. Don't dither, make a decision and go with it.
- Wind –
  - Assessing speed and direction
- Chop –
- Swell – General rules are:
  - Land parallel to the primary swell – best
  - Land parallel and on the back side of a swell – second best
  - Land parallel and on the front side of the crest – bad
  - Land into the swell face – worst
  - If you have to ditch into wind try for just past a crest on the back side of the swell – but get in the water before the next face arrives!









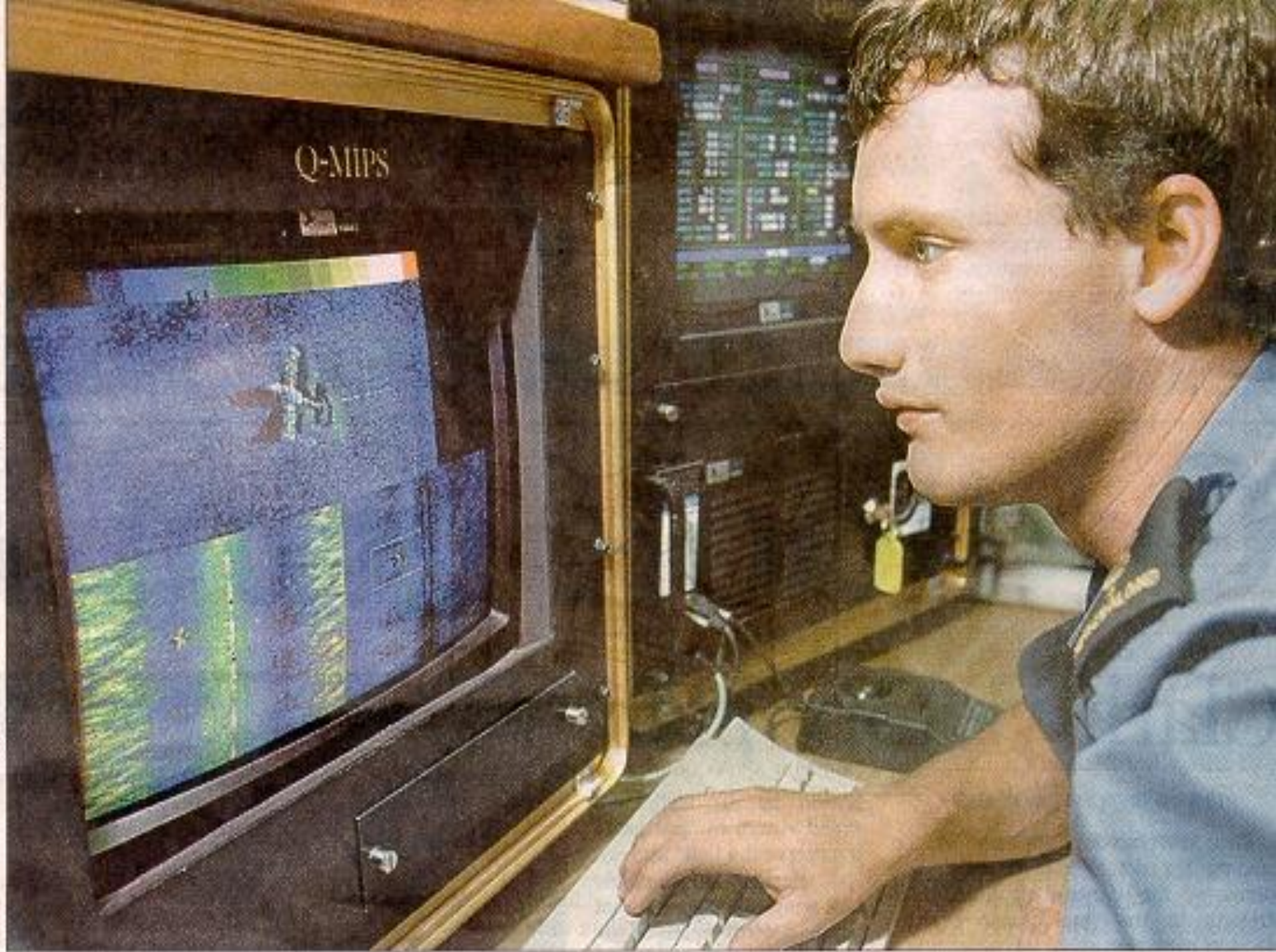




# The Ditching continued

- Touchdown –
  - Minimum rate of descent, may skip
  - Major deceleration when main gear digs in
  - Random control/throttle movement
  - Turnover
  - Cold water immersion

**THE BOTTOM LINE – YOU HAVE A BETTER THAN  
85% CHANCE OF SURVIVING THE DITCHING!**







# The Egress – getting out of there!

- The Door –
  - Crack open
  - If you have to break out a window, could you?
- Your Passenger –
  - Help them out
  - Stay near aircraft
  - Link up
- The Dinghy –
  - One hand release
  - DO NOT inflate in the aircraft!
- Hazards –
  - Sea water ingestion
  - Fuel ingestion
  - Fire
  - Jagged metal



# Survival

- You're out! –
  - Inflate life jacket
  - Get passenger
  - Get dinghy – inflate
  - Get in
  - Turn on beacon
  - Brew tea and await rescue



# Questions/Discussion