





# SAFELY WINCHING TO SAFETY



Captain Tony Griggs





SAFELY WINCHING TO **SAFETY**

# What does a SAR platform need to be effective?

*What we need.*

- **Good solid information....**
- **Timely**
- **Accurate**
- **Up to date**
- **Where, when, how, who, what.**
- **Aircrew capability.**
- **Aircraft capability**
- **SAR Co-ordination**
- **Back up (additional resources)**
- **Top cover**



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## ➤ CHALLENGES

- Information
- Night
- Weather
- DA
- Surface/surrounding terrain & obstacles
- Distance
- Number & weight of survivors
- Aircraft & crew limitations
- Human factors
- Endurance



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### **In flight search considerations**

- ✓ **Type of target – size, shape, colour, contrast, movement.**
- ✓ **Met visibility – slant viz, rain, snow, fog, haze**
- ✓ **Sea conditions – sea state, swell**
- ✓ **Altitude – should generally aim for as low as practicable**
- ✓ **Position of sun / moon – optimum with sun behind, moon ahead**
- ✓ **Lookouts – number, level of experience**
- ✓ **Day / Night – flares, smokes, dyes, heliograph, lights**
- ✓ **Fatigue – how intensive is the search**
- ✓ **Shadows**



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## KEY OPERATIONAL CONSIDERATIONS

**How far is it to the datum/location, plot it, any datum error.**

**How much fuel I have I got, how much do I need to get there and back, how much time on task will that give, is fuel available en-route.**

**What are the MET conditions, here, there and en-route.**

**Is the incident at a precise location or is a search required.**

**For arrival on scene; if search required, what type would be best.**

**What are the details of the incident/accident, how many casualties.**

**Are additional specialists like doctors, divers or mountain rescue teams required.**

**Is additional specialist equipment required.**

**What other assets are available on scene.**

**How long do I need to effect a rescue if found – (FUEL...FUEL...FUEL!!!)**

**Where are the survivors to be taken, do I need to make “ferry” trips.**

**On completion, where do I recover to, is the crew still fit to remain on duty.**



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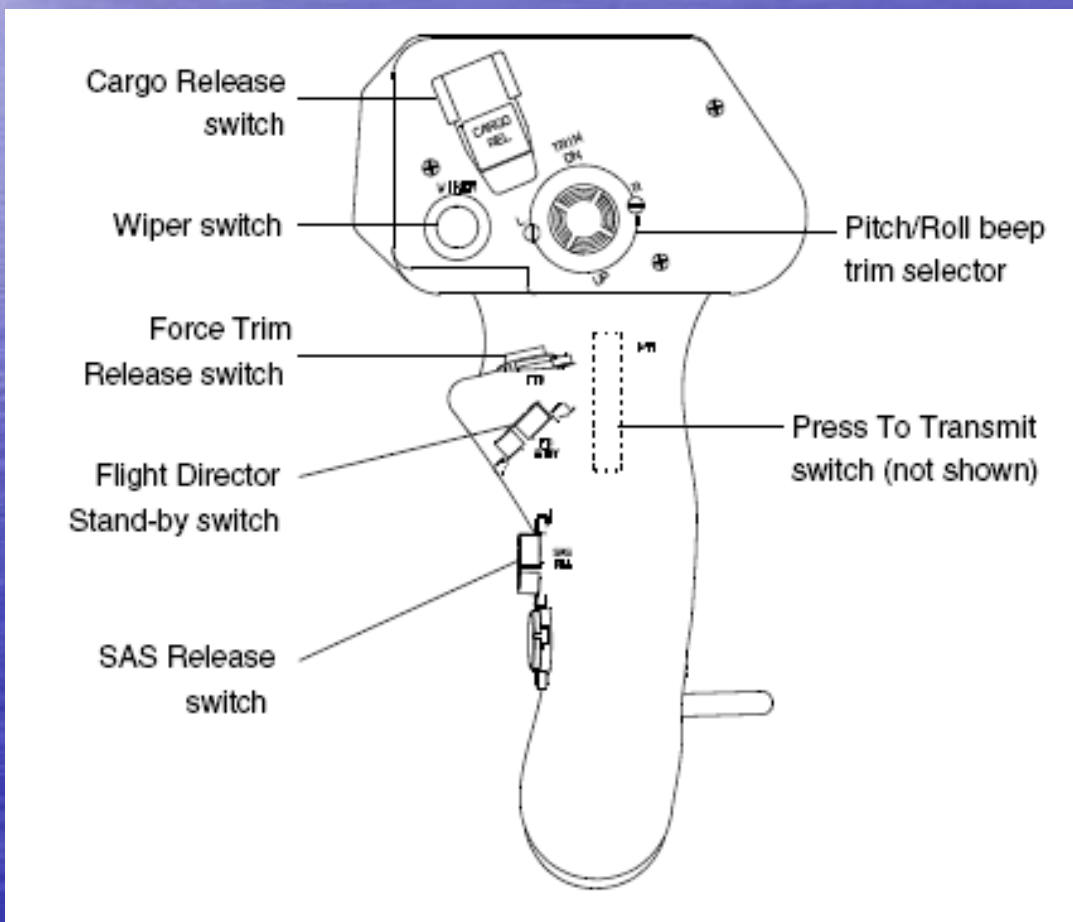
Honeywell





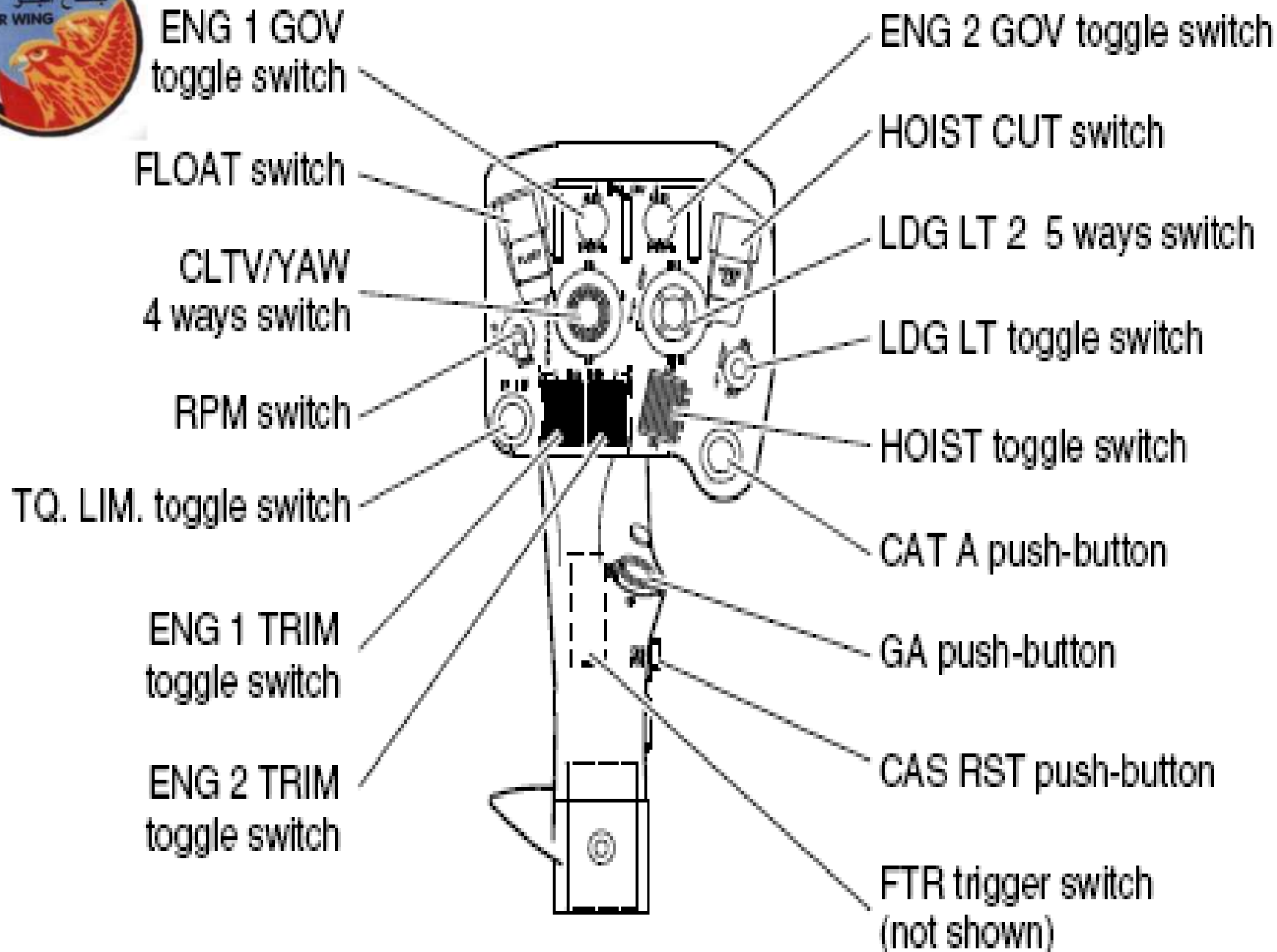
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## Pilot Cyclic grip





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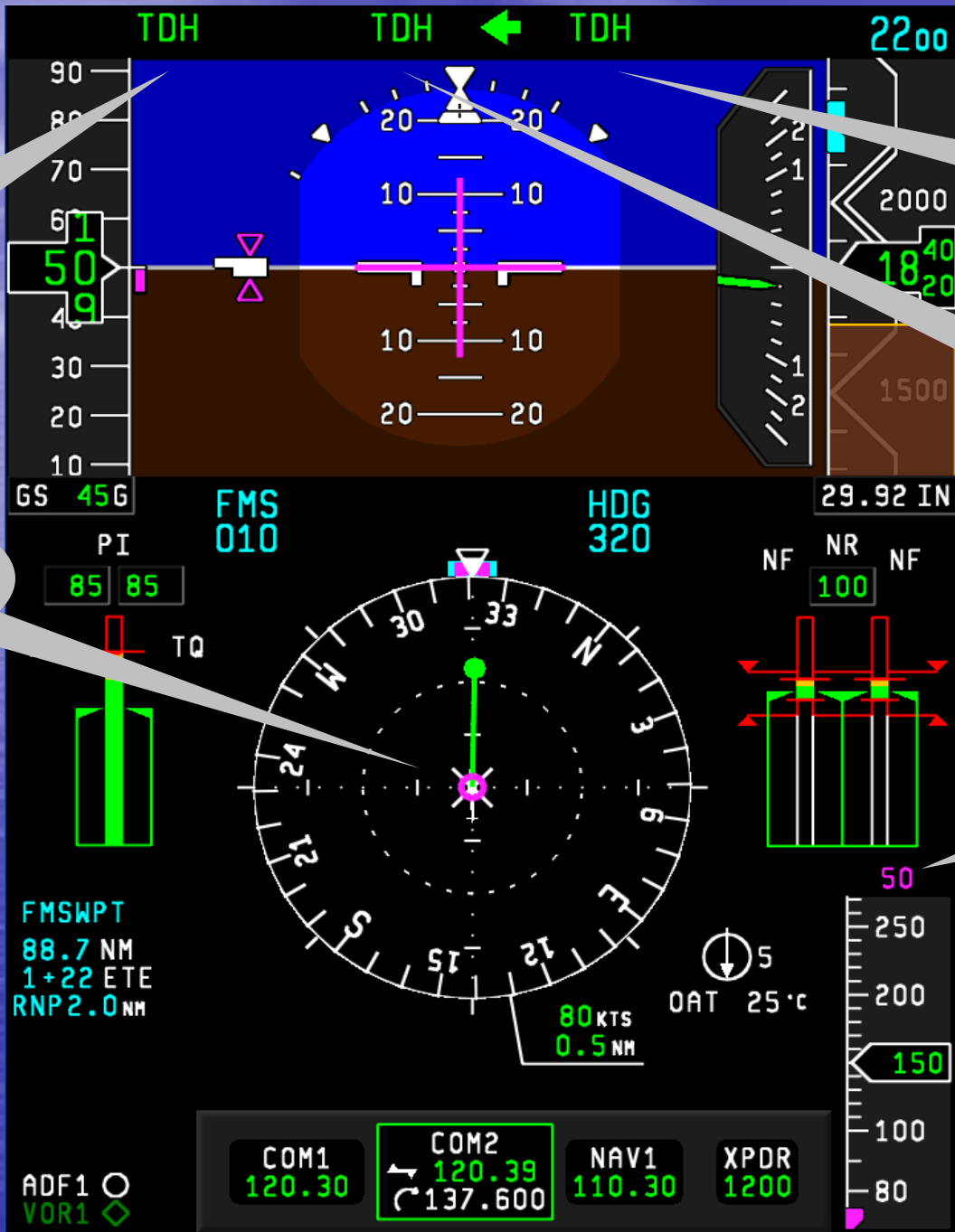
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Collective engaged

0 Speed Ref



Roll engaged

Pitch engaged

Rad Alt Ref

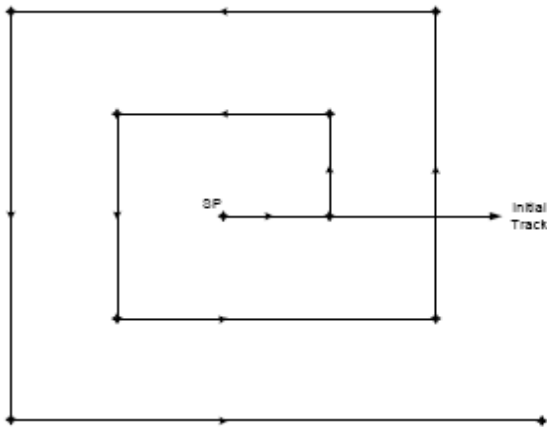
# SAFELY WINCHING TO SAFETY



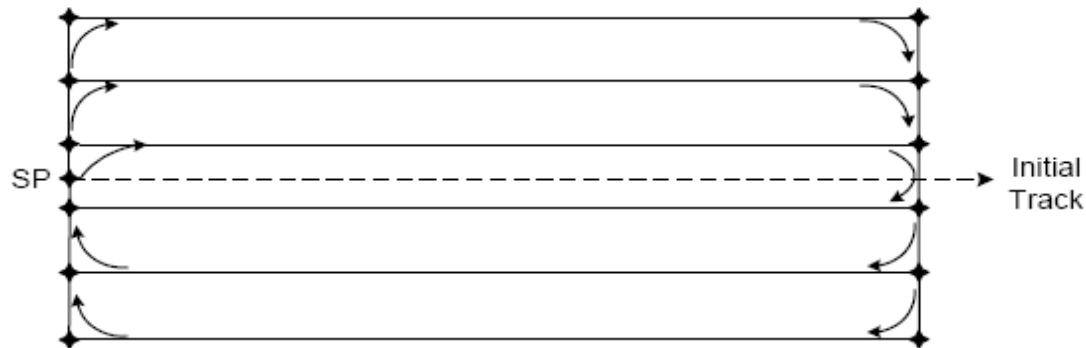


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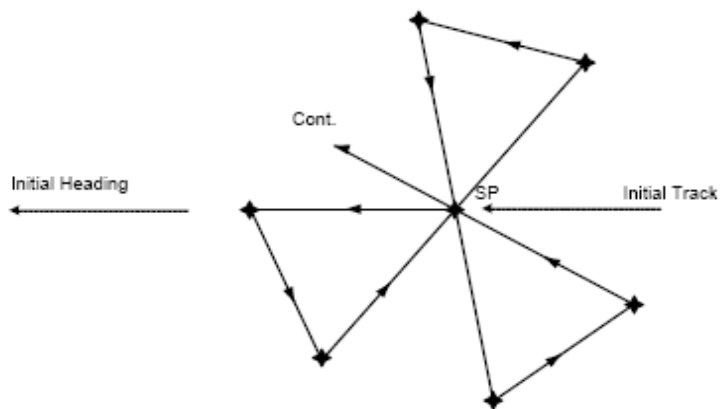
# Search Patterns



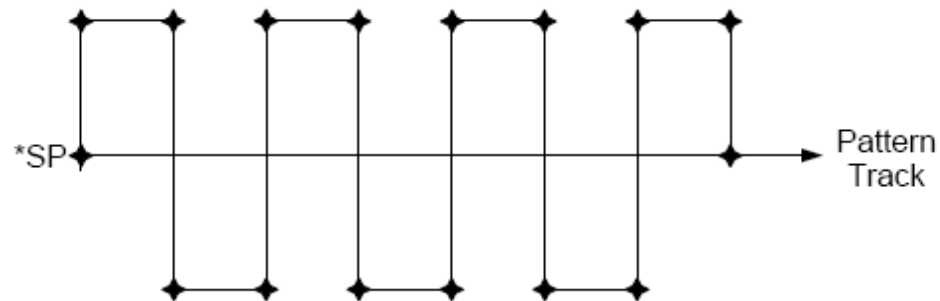
**Expanding Square**



**Parallel**



**Sector**



**Ladder**







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# QUESTIONS?

