# Sector & Expanding Square

**Distress position is known within close limits and search area is not extensive**

**First leg is run in the direction of the current starting at the CSP**

**Track Spacing &/or Sweep width**

**Person in the water (PIW)  .1 NM ~ 600 ft or 200 yds**

**1 football field around the boat                    ( 2  football fields)**

**Object  <15 ft    ½ NM**

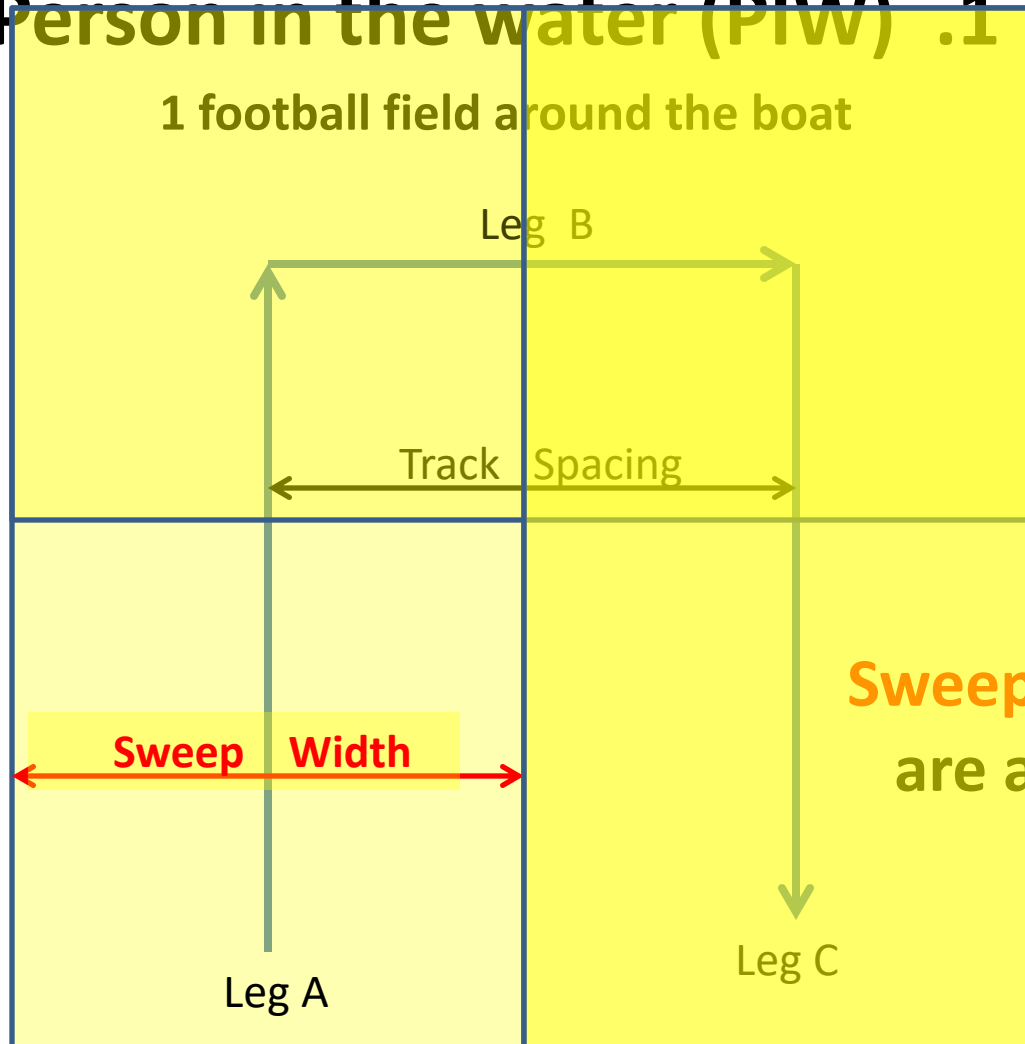**Object  >15 ft    1 NM**

# Sector & Expanding Square

**Track Spacing &/or Sweep width**

**Person in the water (PIW) .1 NM** ~ **600 ft or 200 yds**

**1 football field around the boat** *( 2 football fields wide)*

**Track of the vessel**

Leg B

Track Spacing

Area you look on leg A

**Sweep Width**

**Sweep Width**

**Sweep width & Track Spacing are always the same value**

Leg C

Leg A

# Sector Search  (VS)

**Distress position is known within close limits and search area is not extensive**

**First leg is run in the direction of the current starting at the CSP**

**<u>Track Spacing</u> &/or <u>Sweep width</u>**

**Person in the water (PIW)  .1 NM** ~ 600 ft or 200 yds

1 football field around the boat                    *( 2  football fields)*
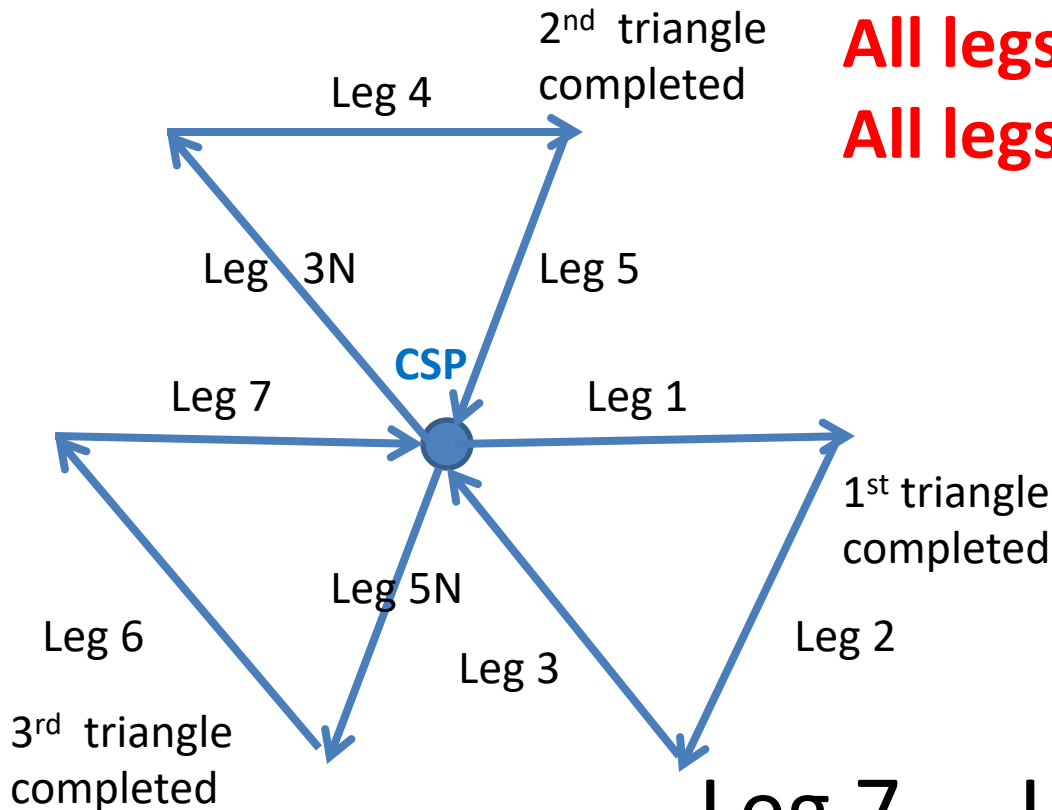
**Object  <15 ft      ½ NM**

**Object  >15 ft     1 NM**

**All Turns are 120 deg to the right**  (3 equilateral triangles)

# Sector Search (VS)

Current
090

**120 deg turns to the right**

2nd triangle completed

Leg 4

**All legs are track spacing long**
**All legs are equal run times**

Leg 3N

Leg 5

CSP

Leg 7

Leg 1

1st triangle completed

3 equilateral triangles

Leg 5N

Leg 6

Leg 3

Leg 2

3rd triangle completed

*Only* **3 courses**

| Leg 7 | Leg 4 | Leg 1 | **090** |
| Leg 5N | Leg 5 | Leg 2 | **210** |
| Leg 6 | Leg 3N | Leg 3 | **330** |

# Sector Search  (VS)

1.  CSP  (starting point is Sally Rocks Buoy)
2.  Current  is  220 deg  ~  Track spacing  .1 NM

*Length of each leg*

Speed of your vessel  is  6 kts.

Turn time 10 sec. ~ *take ½ the time out of each leg*

3.  You start your search pattern at 1800
4.  Start time      Leg        Course      Time to start turn

| Start time | Leg | Course | Time to start turn |
|---|---|---|---|
| 18h   00m   00s | 1 | _____ | ____h_____m_____s |
|  | 2 | _____ | ____h_____m_____s |
|  | 3 | _____ | ____h_____m_____s |

**End of 1ˢᵗ triangle**

# Sector Search  (VS)

1.  **CSP  (starting point is Sally Rocks Buoy)**
2.   **Current  is  220 deg  ~  Track spacing  .1 NM**
     **Speed of your vessel  is  6 kts. ~ Turn time 10 sec.**
3.  **You start your search pattern at 1800**

5.  **Start time          Leg      Course      Time to start turn**

 **____h____m____s  3N    _____      ___h___m___s**
 **                    4     _____      ___h___m___s**
 **                    5     _____      ___h___m___s**

**End of 2ⁿᵈ triangle**

# Sector Search  (VS)

1. **CSP  (starting point is Sally Rocks Buoy)**
2. **Current  is  220 deg  ~  Track spacing  .1 NM**
   **Speed of your vessel  is  6 kts. ~ Turn time 10 sec.**
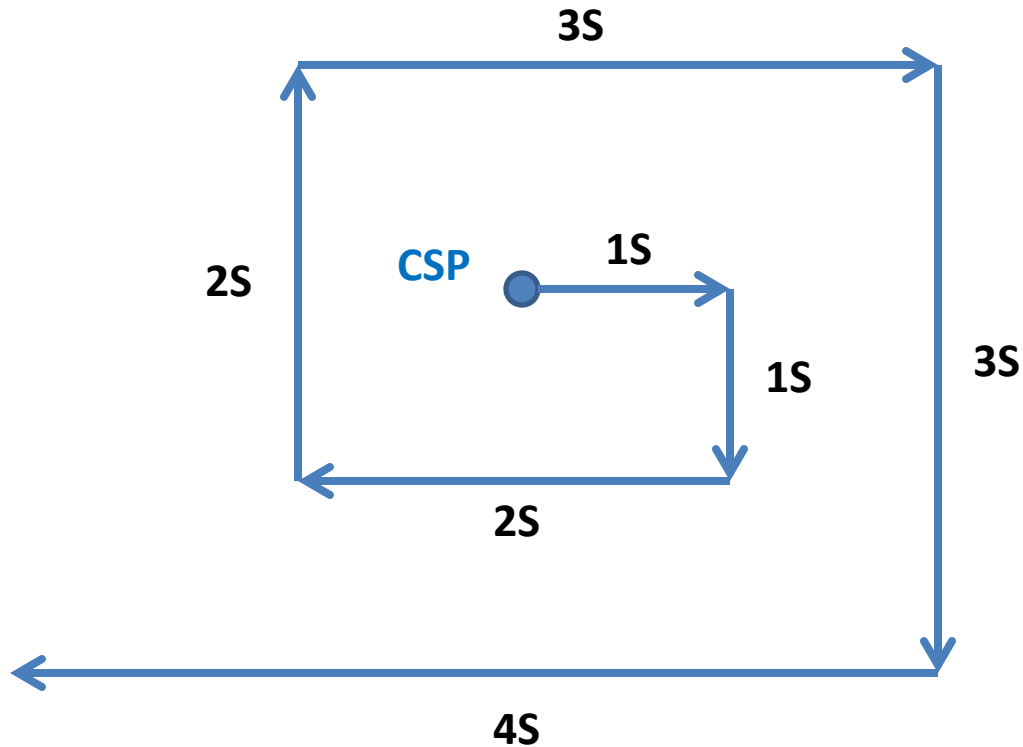3. **You start your search pattern at 1800**

5. **Start time          Leg     Course     Time to start turn**

 **____h____m____s   5N     _____   ____h____m____s**

 **6      _____   ____h____m____s**

 **7      _____   ____h____m____s**

**End Time**

**End of 3ʳᵈ triangle**

# Expanding Square (SS)

**current**

**Track Spacing &/or Run Time = S**

3S

2S

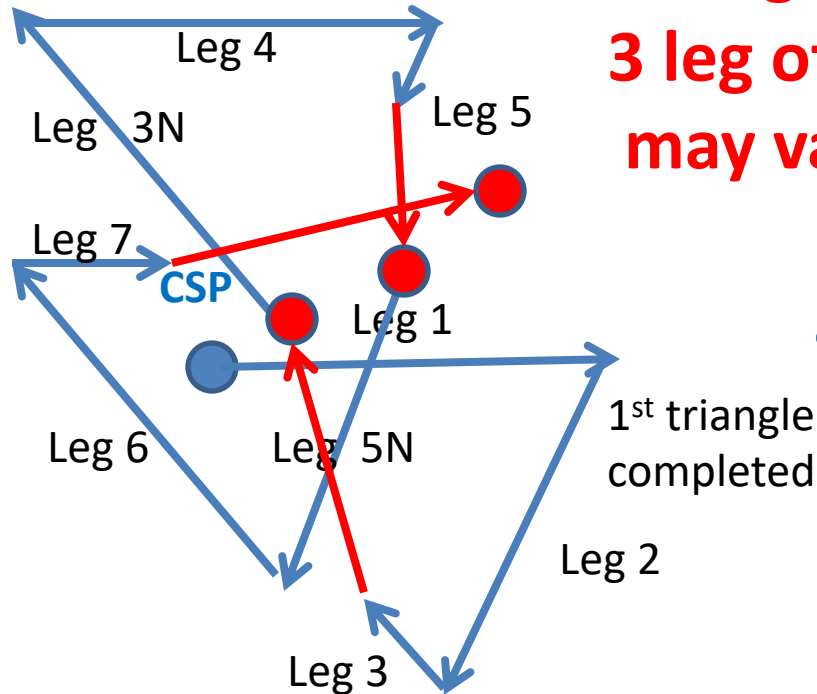**CSP**

1S

1S

2S

3S

4S

**All turns are 90 degree right turns**

# Sector Search (VS)

**Current**
**090**

**120 deg turns to the right**

2nd triangle completed

**All legs are track spacing long**

**3 leg of each triangle**

**may vary in length (run time)**

Leg 4

Leg 3N

Leg 5

Leg 7

CSP

**On the 3rd leg of each**

**triangle steer for the**

**datum marker**

Leg 1

Leg 6

Leg 5N

1st triangle completed

Leg 2

*Only **3 courses***

3rd triangle completed

Leg 3

**Datum marker is drifting while you are making the triangle**

| Leg 7 | Leg 4 | Leg 1 | **090** |
|-------|-------|-------|---------|
| Leg 5N | Leg 5 | Leg 2 | **210** |
| Leg 6 | Leg 3N | Leg 3 | **330** |

# Sector Search  (VS)

1. **CSP  (starting point is Sally Rocks Buoy)**
2. **Current  is  220 deg  ~  Track spacing  .1 NM**
   **Speed of your vessel  is  6 kts. ~ Turn time 10 sec.**
3. **You start your search pattern at 1800**

5. **Start time**        **Leg**      **Course**        **Time to start turn**

____h____m____s  **3N**  _____        ____h____m____s

                 **4**   _____        ____h____m____s

                 **5**   _____        ____h____m____s

**End of 2<sup>nd</sup> triangle**