



Lights & Shapes I: Power-Driven & Towing

Part C foundations — when lights and shapes apply, the arcs and ranges to quote cold, and the night signature of power-driven, towing and pushing vessels.

R · 20 Application

- Lights shown **sunset to sunrise**; nothing else that could be mistaken
- Also in restricted visibility, and any time conditions require
- Shapes shown by day; fitted per **Annex I**

R · 21 Definitions of lights

- Masthead **225°** white forward; sidelights **112.5°** each
- Sternlight **135°** white aft; all-round **360°**
- Towing light = yellow, sternlight arcs; flashing **120+/min**

R · 22 Visibility (ranges)

- 50 m+: masthead **6 NM** · sidelights 3 · stern/all-round 3
- 12–50 m: masthead **5 NM** (3 if <20 m) · sidelights 2 · others 2
- <12 m: masthead 2 · sidelights 1 · stern/all-round 2

R · 23 Power-driven underway

- Forward masthead + **sidelights** + sternlight
- Second masthead aft if **50 m+** (optional below)
- Hovercraft (non-displacement): all-round **flashing yellow**

R · 24 Towing astern

- Tug: **two** masthead in a line (three if tow >200 m)
- Plus **yellow towing light** above sternlight + sidelights
- Tow shows sidelights + sternlight; diamond if >200 m

R · 24 Pushing & alongside

- Pushing ahead / towing alongside: **two** masthead + sidelights
- Composite unit (rigidly connected): light as **one** PDV
- Vessel towed alongside: sidelights + sternlight

R · 24 Awkward & submerged tows

- Pushed ahead (not composite): sidelights at **forward end**
- Inconspicuous, partly submerged tow: all-round white each end
- Diamond by day if length >200 m

TRAP Easy marks to lose

- Towing light is **yellow**, above the white sternlight
- **Three** masthead lights vertical = tow exceeds 200 m
- Second masthead is **mandatory** at 50 m+, not optional

TIP Read the lights fast

- Two whites in a line ahead = **she's towing**
- Yellow over the stern = you're astern of a tug, tow ahead
- Three whites = give a **very wide berth** (>200 m tow)

ORAL What the examiner wants

- Quote arcs cold: masthead **225°** + stern **135°** = **360°**
- "Sunset to sunrise, in restricted vis, and whenever conditions require"
- State the range table for **your ship's length band**

● FOUNDATION ● JUDGEMENT ● LIGHT SIGNATURE ● EXAM TRAP ● ORAL TIP

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