

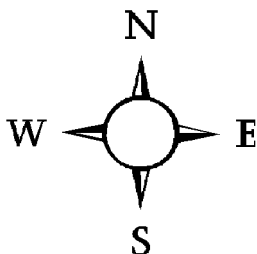
# Boat Winds

## Canadian Mafor Codes and Other Weather Information

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### Mafor Codes

Mafor means "MARine FORecast," and is broadcast frequently on the Canadian VHF marine weather channels, using the following format:

[date-time]/[area]/[mafor]/[waves]. This breaks down easily into the following steps:

#### Step 1

[date-time] - You'll hear someone tell you the date and time of the forecast in plain language. The time is given in "UTC," not always necessarily also specifying local time.

#### Step 2

[area] - For example, where I boat, they will often say, "...for the St. Lawrence River from Kingston to Cornwall," and will often add when the next scheduled forecast will be issued.

(Occasionally they also issue unscheduled interim forecasts if severe or changing conditions warrant.)

#### Step 3

[mafor] - five numerals, representing five variables.

- i always the numeral "1," in North America;
- ii the duration, in hours, for the information to follow,
- iii the wind direction,
- iv the wind speed,
- v the forecast atmospheric conditions.

#### Step 4

[waves] - Next comes forecast wave heights, measured in metres, from trough to crest.

### Step 3 (Mafor) Details

The following explains the five-digit Mafor code.

#### Digit Two - Duration

You'll hear a single number, from one to nine, which means the duration of the forecast conditions, starting either at the time stated, or at the end of the previous MAFOR code group. The numbers mean this:

- 0 - starting conditions
- 1 - 3 hours
- 2 - 6 hours
- 3 - 9 hours
- 4 - 12 hours
- 5 - 18 hours
- 6 - 24 hours
- 7 - 48 hours
- 8 - 72 hours
- 9 - occasional

#### Digit Three - Direction

Another single number is used to state the predicted wind direction:

- 1 - NE
- 2 - E
- 3 - SE
- 4 - S
- 5 - SW
- 6 - W
- 7 - NW
- 8 - N
- 9 - variable

#### Digit 4 - Wind Speed (& other information)

mafor	knots	Beaufort	nautical	flags	waves
0	0-10	0-3	gentle breeze		scattered whitecaps
1	11-16	4	moderate breeze	flap	many whitecaps -to 1.25m
2	17-21	5	fresh breeze	ripple	occas. crests -to 2.5m
3	22-27	6	strong breeze	beat	reg. crests - early foaming - to 4m
4	28-33	7		extend	heaping
5	34-40	8	gale		definite foam streaks -to 6m
6	41-47	9			
7	48-55	10	storm		dense foam -to 0m
8	56-63	11			
9	>63	12	hurricane		>14m

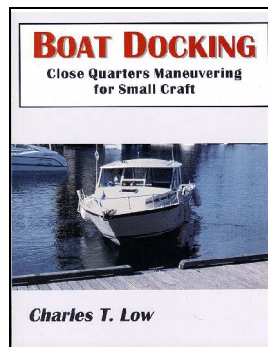
#### Digit 5 - Atmosphere

- 0 - visibility  $\geq$  3 nautical miles
- 1 - risk of superstructure ice
- 2 - stronger ice risk
- 3 - mist ( $5/8$  to 3 mile visibility)
- 4 - fog ( $< 5/8$  mile visibility)
- 5 - drizzle
- 6 - rain
- 7 - snow or rain and snow
- 8 - squalls +/- showers
- 9 - thunderstorms

### Example

0403/[area]/12646 14755 12720, means:

On the 4th day at 0300h UTC (they assume you know the current month!), in whatever specified area, the forecast duration is for 6 hours (12646), with a wind direction from the west (12646), at a speed of 28-33 knots (12646), and an atmosphere of rain (12646). Then, "14755" means that for the following 12 hours (i.e. starting at 0900h UTC), the winds will be from the NW at 34-40 knots, in drizzle. Finally, "12720" means that for the next 6 hours (i.e. starting at 2100h UTC), the winds will still be from the NW, but reduced to 17-21 knots, with at least moderate visibility.



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