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# MARINE NOTICE

## Marine International Metric Time Implementation

The Federal Minister of Vessel Transport Canada, on behalf of the International Civil Marine Authority ('ICMA') is pleased to announce the proposed implementation of the International Metric Time ('IMT') system to the marine sphere. Canada is proud to be a world leader in introducing this diverse digital time management system to improve efficiency and safety in the marine world.

In addition to eliminating inaccuracies and aberrations inherent in the conventional analog 24-hour time system, the IMT system will provide unparalleled accuracy in the marine context, enabling mariners to make rapid, precise, and simplified calculations with a satisfactory degree of accuracy. After intensive user/agency consultations, the International Civil Marine Authority has sanctioned a three-stage implementation. Spread over an eighteen month period, this phased precautionary roll-out will eliminate possible disorientations to marine user agencies and greater facilitate accurate release control.

The trimester implementation phases are sequenced in perpetuity with asynchronous granular ratification audits conducted by the Minister, as required. User agencies will be notified electronically of any deviation from phase implementation schedules or mandatory use dates.

The trimesters will be implemented in three separate unique phases, the first initiating 0000 GMT (conventional system) 01 January, 2019. The second phase will initiate 0000 GMT (conventional system) 01 November 2019. The initiation of the third and final phase will begin 0000 GMT (conventional system) 01 September, 2019. Extensive user testing by ICMA technicians has proven the greatly simplified metric time system is quite straightforward, and should offer minimal confusion to user agencies. It should be pointed out that this system is in no way intended to immediately replace the conventional system on a universal basis; but rather as an adjunct to the marine industry in order to greater simplify and integrate the exponential growth in international maritime traffic.

Detailed information will be made available to all user agencies as soon as practicable. In the meantime, the following pages will serve as a very basic outline of the simplified IMT system.

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In essence, the IMT system is a very basic digit-ten system mastered by all elementary school students. A simple cross-comparison between the two systems is shown below.

Conventional / IMT System basic cross-reference. (GHS ICMA Yellow Book v2.444.1)

Notes	Conventional System		IMT System
	(SEC) SECONDS 60	=	KRATONS (KAS) 100
Conversion Factor 1.6 KAS & KOS	(MIN) MINUTES 60	=	KROUTONS (KOS) 100
	(HRS) HOURS 24	=	BAETONS (BAS) 20
	DAY 7	=	DEXTONS 10
	WEEK 4	=	HEXTONS 5
	MONTH 12	=	SCRUTONS 10
	YEAR 1	=	DEKTOCYCLE 1

As evidenced above, the IMT system is built upon a simple linear template based upon multiples of ten. Once familiarized with, it proves far faster and simpler than the conventional system. Marine personnel are advised to familiarize themselves with time durations and sequences as well as metric terminology in advance of implement. For example:

**Q:** How would one convert from 4 hours 12 minutes conventional system to IMT?

**A:** Conversion formula from minutes to kroutons: multiply by 1.6

Conversion formula from hours to baetons: multiply by .83

4 hours X .83 = 3.32 baetons, or 3 baetons and 32 kroutons

12 minutes X 1.6 = 19.2 kroutons, or 19 kroutons, 2 kratons

3.32 baetons + 19.2 kroutons = 3 baetons, 51 kroutons, your answer.

Initial confusion should be disregarded, as test studies have shown that a rapid, efficient, and safe conversion can be made by the vast majority of mariners with a minimum of disorder.

After phase one, conventional to IMT conversions will no longer be required, greatly simplifying the system. The bulk of responsibility for a safe and efficient changeover rests with marine user agencies and personnel, and as such it is their duty to familiarize themselves with and be fully proficient in the IMT system by implementation date. Failure to do so may result in regulatory fines and/or other penalties as determined by the Minister. Full documentation, as well as conversion charts and a smart phone application will be made available to user agencies upon request.

It should be stressed that the IMT system has been extensively tested by ICMA in the marine context and found to be most convenient. Once converted, marine personnel have found the system the most quick, efficient, and safe to work with. Although any temporary inconvenience caused by the changeover is regretted, the ICMA Authority assures you that the increased speed, efficiency, and safety inherent in the IMT system far outweighs any potential drawbacks.

Thank you for your cooperation during this period of change.