PREDICTION OF CURRENT AND DIRECTION

LOCATION: _____ No. _____

REFERENCE STATION _____

DATE: _____ DESIRED TIME: _____ STANDARD TIME

INSTRUCTIONS for Entering Data in Current Form.

1. Locate Subordinate Station - Table 2 - Enter Time Differences & Speed Ratios for Slacks and Maximums and local directions of flood and ebb
2. Locate Reference Station - Table 1 - Enter Times and Speeds of Slacks and Maximums for Day of Interest
3. Calculate times and speeds of maximums, and times of slack at subordinate station

	Table 1			Table 2			Calculate			Table 2
	REFERENCE STATION			SUBORDINATE STATION			SUBORDINATE STATION			DIRECTION
	TIME			Diff.			TIME			
			CURRENT			Speed			SPEED	
	h	m	F/E	knots	±	h	m	Ratios	h	m	F/E	knots	
Slack				////				////				////	////
Max-F/E													°
Slack				////				////				////	////
Max-F/E													°
Slack				////				////				////	////

Bracket Desired Time from Chart - Slack and Maximum just before and after desired Time, Circle F or E.
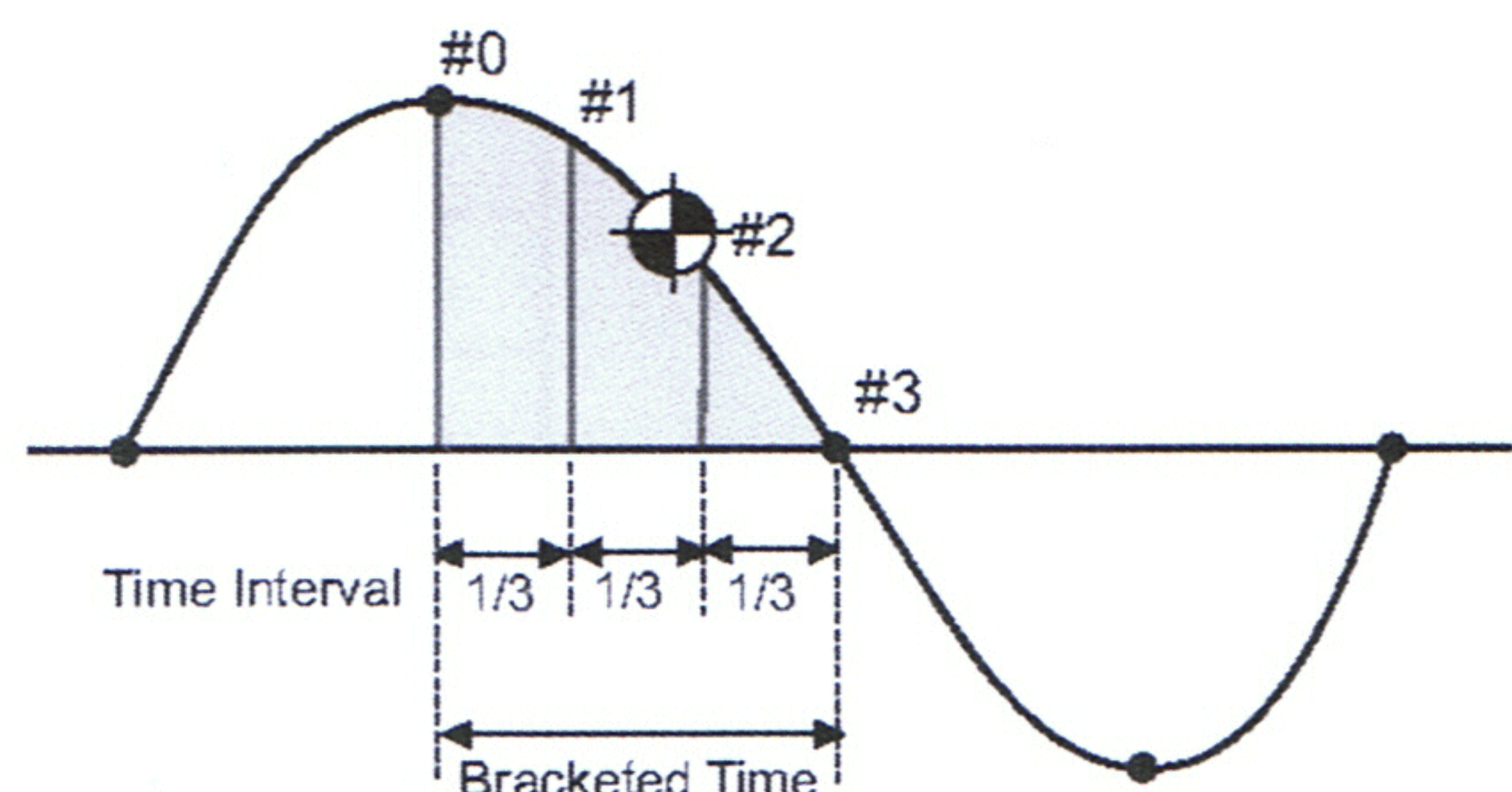
	h	m
(1) Enter the Later of the Bracketed Times		
(2) Enter the Earlier of the Bracketed Times		
(3) Subtract (1) - (2) to get Time Difference		
(4) Convert (3) into minutes		m
(5) Divide (4) by 3 to get Time Interval (nearest minute)....		m

(6) Determine Times for each Increment (Std Time) - start with Earlier of Bracketed Times (2), then add Time Interval (5) to get Time #1, then add again to get Time #2, and finally, add again to get Time #3.

Earlier Time (2)

Time#0		Time#1		Time#2		Time#3
h m	+ (5) =	h m	+ (5) =	h m	+ (5) =	h m

Direction of Bracketed Interval	0	1	2	3
Maximum to Slack	100%	90%	50%	0%
Slack to Maximum	0%	50%	90%	100%

(7) Select the Time # closest to the Desired Time and read the Percentage of Maximum for that time - based on Max to Slack or Slack to Max

(8) Select the Max from the Bracketed Time and enter the Speed of that Max, then factor by the % to the Desired Time Interval (#). Enter direction of Current from Form at top of page for the appropriate max.

Calculate

F or E	SPEED of MAX (from top)	% of MAXIMUM	CURRENT (desired time)	DIRECTION (from top)
	kn		kn	°