

## *Ship's Bell Code*

4:00 8:00 12:00 = 8 Bells  
4:30 8:30 12:30 = 1 Bell  
5:00 9:00 1:00 = 2 Bells  
5:30 9:30 1:30 = 3 Bells  
6:00 10:00 2:00 = 4 Bells  
6:30 10:30 2:30 = 5 Bells  
7:00 11:00 3:00 = 6 Bells  
7:30 11:30 3:30 = 7 Bells

*Hours Are Even Numbers And  
Half Hours Are Odd Numbers*



## *The Six Watches Per Day*

- 1 The First Watch 8:00 pm To 12:00 am Midnight
- 2 The Mid-Watch 12:00 am Midnight to 4:00 am
- 3 The Morning Watch 4:00 am To 8:00 am
- 4 The Forenoon Watch 8:00 am To 12:00 pm Noon
- 5 The Afternoon Watch 12:00 pm Noon To 4:00 pm
- 6 The 1st Dog Watch 4:00 pm To 6:00 pm  
The 2nd Dog Watch 6:00 pm To 8:00 pm

### *NOTE:*

*The Afternoon Watch Is Broken Up Into Two Watches Called "Dog Watches"*

The purpose of the two day watches is to make an odd number of watches in the 24 hours thus giving the men different watches each day.

In horology the term refers to a clock which strikes according to a system similar to that used on board ship where a bell is struck manually to denote "watches" or a period of duty. A Ship's Bell Clock may not necessarily agree with the nautical time since the majority of "domestic" ship's bell clocks strike the series of blows up to eight, starting at 12.30 p.m. with one bell and adding a blow at each half hour up to 4 p.m. when eight bells are sounded. Then the same sequence is repeated, whereas true nautical time strikes one bell at 6.30 p.m. to denote the Dog Watches (where the domestic clock would strike five bells) 7 p.m. two bells, 7.30 p.m., three bells and 8 p.m. eight bells, as noted in the table of nautical times. Some ship's bell clocks are made to strike true nautical time but the majority strike as the table in pairs, i.e. ding to denote one bell, ding, ding to denote two bells, and ding, ding, ding, to denote three bells and so on. It will be noted that the hours are as on board ship.

The 24 hours is divided into 7 watches.

Ship's Bell Code							
AM	PM	Bells					
12:30	12:30	1	X				
1:00	1:00	2	XX				
1:30	1:30	3	XX	X			
2:00	2:00	4	XX	XX			
2:30	2:30	5	XX	XX	X		
3:00	3:00	6	XX	XX	XX		
3:30	3:30	7	XX	XX	XX	X	
4:00	4:00	8	XX	XX	XX	XX	
4:30	4:30	1	X				
5:00	5:00	2	XX				
5:30	5:30	3	XX	X			
6:00	6:00	4	XX	XX			
6:30	6:30	5	XX	XX	X		
7:00	7:00	6	XX	XX	XX		
7:30	7:30	7	XX	XX	XX	X	
8:00	8:00	8	XX	XX	XX	XX	
8:30	8:30	1	X				
9:00	9:00	2	XX				
9:30	9:30	3	XX	X			
10:00	10:00	4	XX	XX			
10:30	10:30	5	XX	XX	X		
11:00	11:00	6	XX	XX	XX		
11:30	11:30	7	XX	XX	XX	X	
12:00	12:00	8	XX	XX	XX	XX	



## *History and Origins of the Ship's Bell Clock*

The "Ship's Bell" system of chimes evolved from a crude sand clock dating back to the time of Columbus. This primitive clock was called a sand or sandglass clock, and was an essential device for marking the time at sea.

Records of epic voyages tell us about this device and how the helmsman used it to measure time in half-hour increments. Watches or shifts were organized into increments of four hours; a custom that is still widely used. With the sandglass at his side, the helmsman would signal the passing of half-hour increments starting with the strike of one bell at the end of the first half hour, two at second and so on until reaching eight bells, which signaled the end of the watch.

The tradition of the sand clock continued for hundreds of years and was replaced only by the development of the mechanical clock. But, it was not until the 19th century that the first mechanical ship's bell clock was produced in America. The principle of this American innovation remains almost unchanged to this day.