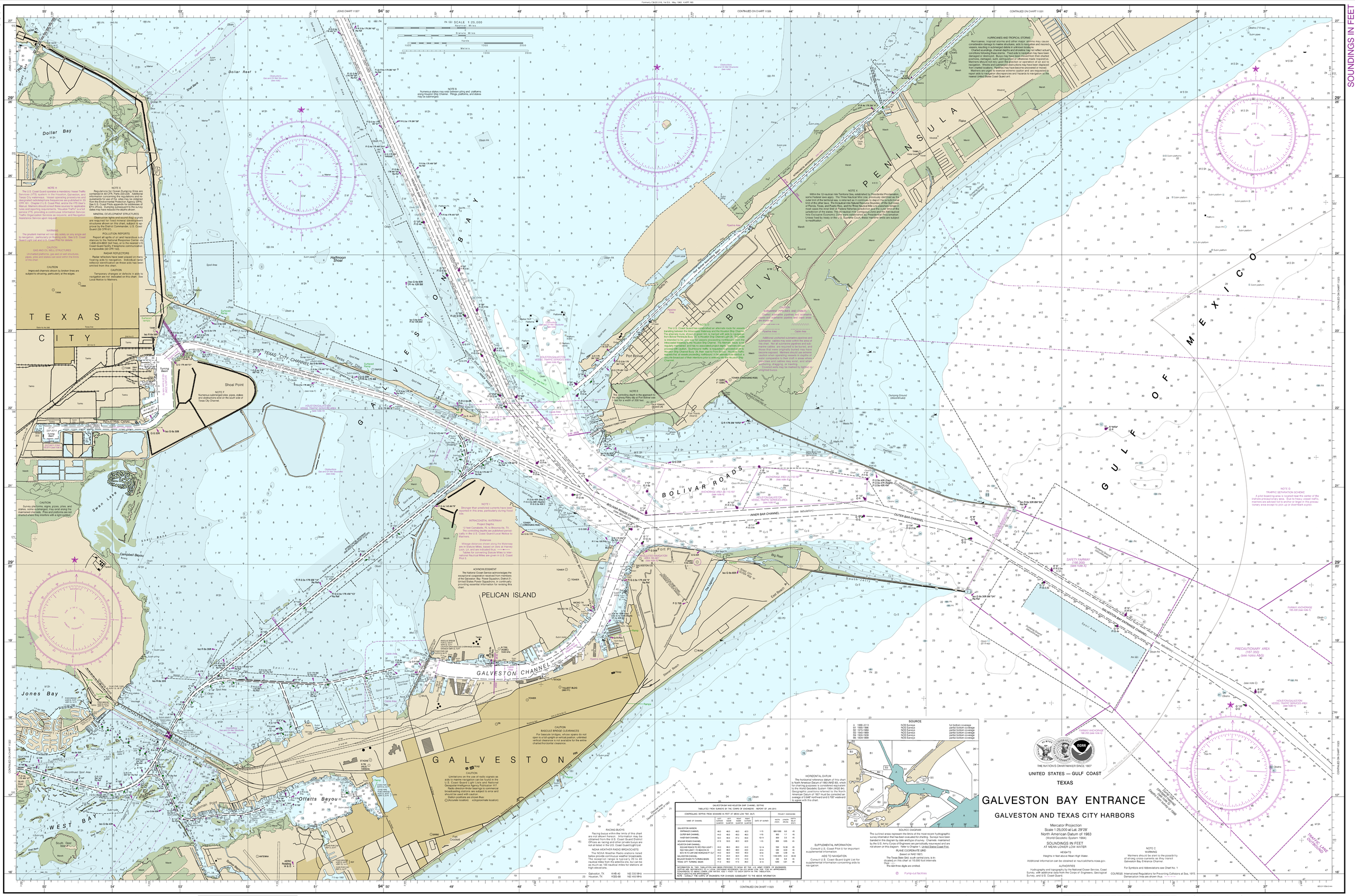
Formerly C&GS 216, 1st Ed., May 1962 KAPP 160



39th Ed., May 2015
11324

CAUTION
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

NOAA encourages users to submit inquiries, discrepancies or comments about this chart at http://www.nauticalcharts.noaa.gov/staff/contact.htm.

Last Correction: 9/29/2015. Cleared through:
LNM: 3715 (9/15/2015), NM: 3915 (9/26/2015)

To ensure that this chart was printed at the proper scale, the line below should measure six inches (152 millimeters).
If the line does not measure six inches (152 millimeters), this copy is not certified safe for navigation.

This chart was distributed as a PDF (Portable Document Format). Printing PDFs may alter the chart scale, color, or legibility that may impact suitability for navigation. Printed charts provided by NOAA certified Print on Demand (POD) providers fulfill a vessel's requirement to carry a navigational chart "published by the National Ocean Service" in accordance with federal regulations, including but not limited to 33 C.F.R. 164.33(a), 33 C.F.R. 164.72(b), and 46 C.F.R. 28.225(a). POD charts meet stringent print standards and can be recognized by an official certification of authenticity printed on the chart. A list of POD providers can be found at: nauticalcharts.noaa.gov/pod

This chart provides additional information for the small craft operator.

DETERMINATION OF WIND SPEED FROM SEA CONDITIONS

Wind Speed (knots)	Wind Description	Sea Conditions	Wind Force (Beaufort)	Probable Wave Height (feet)
0-1	Calm	Sea smooth and mirror-like.	0	-
1-3	Light air	Scale-like ripples without foam crests.	1	$\frac{1}{4}$
4-6	Light breeze	Small, short wavelets; crests have a glassy appearance and do not break.	2	$\frac{1}{2}$
7-10	Gentle breeze	Large wavelets; some crests begin to break; foam of glassy appearance. Occasional white foam crests.	3	2
11-16	Moderate breeze	Small waves, becoming longer; fairly frequent white foam crests.	4	4
17-21	Fresh breeze	Moderate waves, taking a more pronounced long form; many white foam crests; there may be some spray.	5	6
22-27	Strong breeze	Large waves begin to form; white foam crests are more extensive everywhere; there may be some spray.	6	10
28-33	Near gale	Sea heaps up and white foam from breaking waves begins to be blown in streaks along the direction of the wind; spindrift begins.	7	14
34-40	Gale	Moderately high waves of greater length; edges of crests break into spindrift; foam is blown in well-marked streaks along the direction of the wind.	8	18

WEATHER RULES FOR SAFE BOATING

Before setting out:

1. Check local weather and sea conditions.
2. Obtain the latest weather forecast for your area from radio broadcasts.

When warnings are in effect, don't go out unless you are confident your boat can be navigated safely under forecast conditions of wind and sea.

While afloat:

1. Keep a weather eye out for:
   A. A sudden vertical cumulus cloud development
   B. A sudden change in wind direction
   C. A sudden noticeable increase in wind velocity
   D. A drop in temperature
2. Be alert to heavy static on your AM radio which indicate approaching thunderstorms
3. Check radio weather broadcasts for latest forecasts and warnings

TIDAL INFORMATION

Near real time water level data, predictions and weather data are available via the Internet at http://tidesandcurrents.noaa.gov. Annual predictions of the rise and fall of the tides are available in printed form from private sector printers.

RULES OF THE ROAD
(ABRIDGED)

Motorless craft have the right-of-way in almost all cases.
Sailing vessels and motorboats less than sixty-five feet in length shall not hamper, in a narrow channel, the safe passage of a vessel which can navigate only inside that channel.
A motorboat being overtaken has the right-of-way.
Motorboats approaching head to head or nearly so should pass port to port.
When motorboats approach each other at right angles or obliquely, the boat on the right has the right-of-way in most cases.
Motorboats must keep to the right in narrow channels when safe and practicable.
Mariners are urged to become familiar with the complete text of the Rules of the Road in U.S. Coast Guard publication "Navigation Rules."

CAUTION

Small craft should stay clear of large commercial and government vessels even if small craft have the right-of-way.

All craft should avoid areas where the skin divers flag, a red square with a diagonal white stripe, is displayed.

BROADCASTS OF MARINE WEATHER FORECASTS AND WARNINGS BY MARINE RADIOTELEPHONE STATIONS

CITY	STATION	FREQ	DAILY BROADCAST-CST	SPECIAL WARNING
Galveston, TX	NOY	2670 kHz	4:50, 6:50, 10:50 AM, 4:50 PM	*On receipt
Port Aransas, TX	NOY-3	157.1 MHz 2670 kHz	4:40, 10:40 AM, 4:40 PM 4:40, 6:40, 10:40 AM, 4:40 PM	

*Preceded by announcement on 2182 kHz/156.8 MHz

Distress calls for small craft are made on 2182 kHz or channel 16 (156.80 MHz) VHF

CONTINUOUS MARINE WEATHER BROADCASTS

CITY	STATION	FREQ (MHz)	BROADCAST TIMES
Galveston, Texas	KHB-40	162.550	24 hours daily
Houston, Texas	KGG-68	162.400	24 hours daily

PUBLIC BOATING INSTRUCTION PROGRAMS

The United States Power Squadrons (USPS) and U.S. Coast Guard Auxiliary (USCGAUX), national organizations of boatmen, conduct extensive boating instruction programs in communities throughout the United States. For information regarding these education courses, contact the following sources:

USPS - Local Squadron Commander or USPS Headquarters, Post Office Box 30423, Raleigh, N.C. 27612, 919-821-0281

USCGAUX- 8th Coast Guard District, Hale Boggs Federal Building, 500 Camp St., New Orleans, LA 70130-3396, Tel. 504-589-2937 or USCG Headquarters (G-BAU), Washington, D.C. 20593-0001.

MARINE WEATHER FORECASTS NATIONAL WEATHER SERVICE

CITY	TELEPHONE NUMBER	OFFICE HOURS
Houston, TX	*(281) 337-5074	8:00 AM-4:00 PM (Mon.-Fri.)

*Recording (24 hours daily)

TIDAL INFORMATION

PLACE		Height referred to datum of soundings (MLLW)		
NAME	(LAT/LONG)	Mean Higher High Water	Mean High Water	Mean Low Water
		feet	feet	feet
Port Bolivar	(29°22'N/94°47'W)	1.4	1.3	0.2
Texas City Turning Basin	(29°23'N/94°53'W)	1.4	1.3	0.5
Galveston Channel (Pier 21)	(29°19'N/94°48'W)	1.4	1.3	0.3

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(Apr 2015)

SAFETY HINTS

1. Keep your chart up to date by applying all Notices to Mariners corrections when you receive them.
2. Read carefully all notes printed on your chart, each is vital to your safety afloat.
3. Learn the meaning of each symbol and abbreviation on your chart from Chart No. 1.
4. The compass on your chart shows the variation from true north, however you must also correct your bearing for the deviation of your boat.
5. Constantly use your chart from the beginning to end of each trip. Keep in mind the orientation of your boat with respect to the chart.
6. Maintain your position on the chart by relating charted features with those you can identify in your surroundings.

To ensure that this chart was printed at the proper scale, the line below should measure six inches (152 millimeters).
If the line does not measure six inches (152 millimeters), this copy is not certified safe for navigation.

Last Correction: 5/22/2015. Cleared through:
LNM: 3715 (9/15/2015), NM: 3915 (9/26/2015)

To ensure that this chart was printed at the proper scale, the line below should measure six inches (152 millimeters).
If the line does not measure six inches (152 millimeters), this copy is not certified safe for navigation.

This chart was distributed as a PDF (Portable Document Format). Printing PDFs may alter the chart scale, color, or legibility that may impact suitability for navigation. Printed charts provided by NOAA certified Print on Demand (POD) providers fulfill a vessel's requirement to carry a navigational chart "published by the National Ocean Service" in accordance with federal regulations, including but not limited to 33 C.F.R. 164.33(a), 33 C.F.R. 164.72(b), and 46 C.F.R. 28.225(a). POD charts meet stringent print standards and can be recognized by an official certification of authenticity printed on the chart. A list of POD providers can be found at: nauticalcharts.noaa.gov/pod