## Vera Cruise Bill of Materials

The following list of materials is intended to be a general guide only. Before ordering any materials, the text and plans should be checked for possible options. All lumber listed as 1" stock is to be standard "lumberyard four-quarter" material which when finished may vary to somewhat less or slightly more than 3/4" in thickness, unless specified as NET. All widths are NET and all lengths allow for cutting to fit. Grouping lumber and purchasing random-random material to resaw to the required size will result in considerable savings. All lumber used should be first grade free from shakes and knots. Although oak (white oak), Sitka spruce, and mahogany (African, Honduras, or Phillipine-dark red varieties) are called out in the listing, lumber typical to the locale and of similar types and weights may be substituted. Long-leaf yellow pine is a good substitute for oak. All plywood (PW) is to be marine (MAR) or exterior (EXT) grade. The marine-type is preferable as the inner cores are solid and thus the panel has more structural integrity. Douglas-fir (DF) is satisfactory with the quality of the exposed faces of the veneer being designated by the letters "A" or "B". The "AA" grade panels are always preferable, however, "AB" grade is acceptable. All plywood should be a minimum of three plies. All fastenings should be bronze or hot dipped galvanized ferrous metal. Brass fastenings are not advised nor are the electroplated screws commonly sold in hardware stores. All screws are to be of the flat head type intended for wood. All nails are of the ring-type nail common to boat construction. Unless otherwise specified, all wood-to-wood joints are to be glued with a waterproof or highly water resistant glue such as plastic resin, resorcinol, epoxy, or other equivalent type used per the manufacturer's instructions regarding temperature, clamping requirements, curing time, and mixing method. CHECK ALL SIZES TO THE WORK PRIOR TO CUTTING. Abbreviations used are: Mahog = mahogany; SP = Sitka spruce; DF = Douglas-fir; PW=plywood; Ext=exterior; MAR=marine.

ITEM	MATERIAL	NO. PCS.	SIZE
LUMBER:			
Frame members	Mahog or oak	85 Bd. Ft. of 1" stock with some 12" widths	
Keel	Mahog or oak	1	1 1/2"x4"x16'
Chine	Mahog or oak	2	1 1/4"x2 1/2"x20'*
Sheer	Mahog or oak	4	5/8"x1-1/2"x23'*
Battens, bottom	Mahog or oak	2 2 2	1"x3"x16' 1"x3"x14' 1"x3"x11'

Skeg	Oak	1	1 1/4"x3"x11'		
Spray rail	Mahog or oak	2	1"x1 1/2"x20'*		
Carling	Mahog or oak	2	1"x6"x16'		
Strongback and deck battens	Mahog or SP	3	1"x2"x4'		
Blocking	Mahog or SP	1" scraj	1" scrap as required		
Bumper rail	Mahog or oak	2	1 1/4" x 2" x 8'		
* These lengths can be spliced (see instructions).					

## **PLYWOOD:**

Transom	AB Ext	1	3/4"x4'x8'
Stem, breasthook, floor timbers	AB Ext	1	3/4'x4'x8'
Gussets for frames	AB Ext	1	3/8"x4'x8'
Planking-Bottom	MAR or AB Ext	2 3	3/8"x4'x8' 3/8"x4'x8'
Planking-Side	MAR or AB Ext	6	3/8"x4'x8'
Decking	AB Ext	2	3/8"x4'x8'

## **FASTENINGS:**

Screws: Flathead wood type, bronze or hot dipped galvanized

- 1" #8 5 gross
- 1-1/4" #8 6 gross
- 1-1/2" #8 2 gross
- 2" #10 1 gross
- 3" #14 10 only

Nails: Ring type boat nails, bronze or Monel

• 1-1/4" - 1 1/2 pounds

**Carriage Bolts:** Bronze or hot dipped galvanized complete with nuts and washers. Check all lengths to work.

- 1/4" (length varies) 7 only (plans call out 3/16" which can be used, if available)
- 3/8" x 6" 6 only

Glue: Approximately 2 gallons of Epoxy or other marine-type.