

New Outside rib Layout

28 Aug 60

New planks $5\frac{1}{2}"$ deep instead of $3\frac{1}{2}"$ deep.

Thus add $(5\frac{1}{2} - 3\frac{1}{2}) \tan 16^\circ = 2 \cdot .287 = .564 = \frac{9}{16}"$

New planks start at radius of $15'8"$ instead of $15'0" = 8"$ difference

Thus add $8\frac{9}{16}"$ additional to L' for items a to c and m to u

Point	Old L'	add	New L'	Point	Old L'	add	New L'
a	$11\frac{1}{4}"$	$8\frac{9}{16}"$	$1'7\frac{13}{16}"$	l	$2'2\frac{5}{16}"$	"	$2'2\frac{9}{16}"$
b	$1'1\frac{7}{8}"$	"	$1'10\frac{7}{16}"$	m	$4'8\frac{15}{16}"$	$8\frac{9}{16}"$	$5'5\frac{1}{2}"$
c	$1'3\frac{1}{8}"$	"	$1'11\frac{11}{16}"$	n	$5'0"$	"	$5'8\frac{9}{16}"$
d	$3'1\frac{13}{16}"$	$\frac{1}{4}"$	$3'1\frac{1}{16}"$	o	$5'1\frac{15}{16}"$	"	$5'10\frac{1}{2}"$
e	$3'6\frac{3}{16}"$	"	$3'6\frac{7}{16}"$	p	$5'2\frac{7}{8}"$	"	$5'11\frac{7}{16}"$
f	$3'5\frac{1}{2}"$	"	$3'5\frac{3}{4}"$	q	$4'9\frac{15}{16}"$	"	$5'6\frac{1}{2}"$
g	$2'10\frac{1}{16}"$	"	$2'10\frac{5}{16}"$	r	$5'1\frac{7}{16}"$	"	$5'10"$
h	$2'6\frac{11}{16}"$	"	$2'6\frac{15}{16}"$	s	$5'4\frac{3}{8}"$	"	$6'1\frac{15}{16}"$
i	$3'3\frac{1}{2}"$	"	$3'3\frac{3}{4}"$	t	$5'6\frac{1}{4}"$	"	$6'2\frac{11}{16}"$
j	$3'6\frac{7}{16}"$	"	$3'6\frac{11}{16}"$	u	$5'7\frac{1}{8}"$	"	$6'3\frac{11}{16}"$
k	$3'2\frac{7}{8}"$	"	$3'3\frac{1}{8}"$				(over)

New Inside rib Layout

New planks $5\frac{1}{2}"$ deep instead of $3\frac{1}{2}"$ deep.

Thus add $(5\frac{1}{2} - 3\frac{1}{2}) \tan 6^\circ = 2 \cdot .105 = .21"$, say $\frac{1}{4}"$ to L'
for items d thru l

New planks $5\frac{1}{2}"$ instead of $3\frac{1}{2}"$ deep.

This raises surface of disk $2" \cos 16^\circ = 1\frac{15}{16}"$

To make rib support rods fit, only raise skin $1\frac{1}{2}"$

Sample calculations

Point a = 2.5152' above reference platform

add distance surface is raised

New point a above reference platform

Distance bottom mounting hole below platform

Bottom hole below new point a on surface

Center distance of holes in rib support rod

Top hole below surface of skin

$$2' 6\frac{3}{16}"$$

$$1\frac{1}{2}"$$

$$2' 7\frac{11}{16}"$$

$$1\frac{13}{16}"$$

$$2' 9\frac{1}{2}"$$

$$2' 6\frac{3}{8}"$$

$$3\frac{1}{8}"$$

Point m = 1.3800' above reference platform

add distance surface is raised,

New point a above reference platform

Distance bottom mounting hole below platform

Bottom hole below new point a on surface

Center distance of holes in rib support rod

Top hole below surface of skin

$$1' 4\frac{9}{16}"$$

$$1\frac{1}{2}"$$

$$1' 6\frac{1}{16}"$$

$$1\frac{13}{16}"$$

$$1' 7\frac{7}{8}"$$

$$1' 5\frac{5}{8}"$$

$$2\frac{1}{4}"$$