LIST OF SYMBOLS

N	= the total number of components in a container; N also denotes the outermost component
n	= a specific component when numbered from inside out; i.e., $n = 1, 2, \ldots, N$
r_n	= outside radius of component n, inches
r_{n-1}	= inside radius of component n, inches
r_o	= bore radius of container, inches
r_N	= outer radius of container, inches
k_n	= wall ratio of component n, $k_n = r_n/r_{n-1}$
K	= over-all wall ratio of container, $K = r_N/r_o$
K'	= wall ratio of inner part of ring-fluid-segment container, $K' = r_3/r_o$
E_n	= modulus of elasticity of component n, psi
p_n	= pressure acting on component n at r_n when $p \neq 0$, psi
p_{n-1}	= pressure acting on component n at r_{n-1} when $p \neq 0$, psi
p	= bore pressure, psi, $p_o = p$
q_n	= residual interface pressure acting on component n at r_n when $p = 0$, psi
q_{n-1}	= residual interface pressure acting on component n at r_{n-1} when $p = 0$, psi
S	= shear stress, psi
S_r	= semi-range in shear stress for a cycle of bore pressure, psi
S_m	= mean shear stress for a cycle of bore pressure, psi
S_{min}	= minimum shear stress during a cycle of bore pressure, psi
S_{max}	= maximum shear stress during a cycle of bore pressure, psi
σ	= design tensile stress of ductile steel, psi ($\sigma \leqq$ ultimate tensile strength)
σ_1	= design tensile stress of high-strength steel, psi ($\sigma_1 \leqq$ ultimate tensile strength)
$(\sigma)_r$	= semirange in tensile stress for a cycle of bore pressure, psi
$(\sigma)_m$	= mean tensile stress for a cycle of bore pressure, psi

LIST OF SYMBOLS
(Continued)

$(\sigma)_{min}$	= minimum tensile stress during a cycle of bore pressure, psi
$(\sigma)_{max}$	= maximum tensile stress during a cycle of bore pressure, psi
σ_r	= radial stress, psi
σ_θ	= circumferential stress, psi
σ_z	= axial (longitudinal) stress, psi
α_r	= semirange stress parameter for high-strength steel, $\alpha_r = (\sigma)_r/\sigma_1$
α_m	= mean stress parameter for a high-strength steel, $\alpha_m = (\sigma)_m/\sigma_1$
M_1	= bending moment on ring segment
M_2	= bending moment on pin segment
u	= radial displacement, inches
v	= circumferential displacement, inches
ν	= Poisson's ratio
r, θ, z	= cylindrical coordinates for radial, circumferential, and axial directions, respectively
Δ_n	= interference required (as manufactured) between cylinder, n, and cylinder, n + 1, inches
Δ_{12}	= interference required (as manufactured) between the liner, segments, and cylinder, 3, of the ring-segment and ring-fluid-segment containers, inches