

95A. FY[]cbU`Yf'9bYf[]Y!F]YgY'[YghU`hYh X]Y'Ni_i bZh'XYf'9bYf[]Yk YbXY°

6Ui bUhU``dfÀgYbh]Yfh'95A ž'Y]bYb`_ca a i bU`Yb 9bYf[]Ya Uf_hZØ\fYfž'XYf'bUW\U`h][Y'@Ògi b[Yb'ZØf'ØVYf'%ž(A]``]cbYb'A YbgW\Yb'V]YhYh"



6Ui bUhU`ž'8 Yi hgW\`UbX`!'\\ cYggYb`]gh'XYf'5bV]YhYf'95A`U`g

fY[]cbU`Yf'9bYf[]Y!DUfhbYf'ZØf'fi bX'\%\('A)``]cbYb'A YbgW\Yb'Y]b

i bj Yfn]W\\hVUfYf'5bgdfYW\\dUfhbYf"'8Ug'I bhYfbY\\\a Yb\Z'XUg'ni '\%\$\$

DfcnYbh'_ca a i bU``]gh\Z'k]fX'j cb'XYb'@UbX_fY]gYb'i bX'XYf'GhUXh

; Ohh]b[Yb'[YhfU[Yb\Z'X]Y'gUhhY'*\%\Z-'DfcnYbh'XYf'5bhY]`Y'\U`hYb''

8]Y'fYgh`]W\Yb'', \Z\'DfcnYbh'j YfhY]`Yb'g]W\'Ui Z'\%\' 'Gh\XhY'i bX

; Ya Y]bXYb'gck]Y'XYb'Nk YW_j YfVUbX'95A!6YhY]`][i b[']a

@UbX_fY]g'5`hYb_]fW\Yb'''VUi bUhU`"V`c['VYf]W\hYh\Z'XUgg'95A

b]W\h'bi f'ZU]fY'Ghfca!'i bX'; Ug!DfcXi_hY'UbV]YhYh\Z'gcbXYfb'Ui W\
X]Y'9bYf[]Yk YbXY'a]h']bbcj Uh]j Yb'?cbnYdhYb'j cfUbhfY]Vh'

6YgcbXYfg`\Yfj cfni \YVYb`]ghž`XUgg`95A `Ui ggW\`]Y»`]W\Yb`GhfcaUi q`fY[YbYfUh]j Yb`9bYf[]Yb`VYn]Y\hž'k Ug`ZØf`Df]j Uh!`i bX

; Yk YfVY_i bXYb [`Y]WX Yfa U» Yb j cb 6YXYi hi b[']gh" 8 Ug I bhYfbY\a Yb VYhfY]Vh Y]bY J]Y `nU\ `'j cb 5b `U[Yb. 6]c[UgUb `U[Ybž'K UggYf! i bX 'K]bX_fUZhk Yf_Y" 8]Y '95A 'BYhn; a V< 'j Yfk U `hYh'ni XYa 'VYY]bXfi W_YbXY ') \$"\$\$\$ '?]`ca YhYf Ghfca! i bX ; UgbYhnYž'X]Y 'ØVYf'%) 'A]``]UfXYb '?]`ck Uhhghi bXYb 'À\f`]WX 'hfUbgdcfh]YfYb"

9b[5; 9A 9BH]b XYf 9bYf[]Yk YbXY

8]Y '95A 'VYgWA ÀZh][h'XYfnY]h'%", '&'A]hUfVY]hYfž'XUfi bhYf'%%*
5i gni V]`XYbXYž'i bX`\Uh']\fYb'5i gV]`Xi b[gghUbXcfh']a 'VUi bUhU`Yf
95A '7Ua di g"'<]Yf'k YfXYb'X]Y'ni _ØbZh][Yb': UWX_fÀZhY'b]WXh'bi f
h\YcfYh]gWX ž'gcbXYfb'Ui WX'dfU_h]gWX'Ui Z']\fY'5i Z[UVYb
j cfVYfY]hYh''A]h'[fc»Ya '9fZc`[.'8 Ug'I bhYfbY\a Yb'k i fXY']b
X]YgYa '\$J\f'j cb': cW' g'A cbYm'U`g'6fUbWXYbg]Y[Yf'VY]
8 Yi hgWX`UbXg'VYghYb'5i gV]`Xi b[gVYhf]YVYb' '9bYf[]Yj Yfgcf[Yf
fY[]cbU` 'a]h'%\$\$'j cb'%\$\$'Di b_hYb'Ui g[YnY]WXbYh''

8]Y 5i gV]`Xi b[']b 'XYf '9bYf[]Yk]fhgW UZh YfZÀ\fh Y]bYb
bUW\\U`h][Yb '6cca "'6Yfi ZY ']a '6YfY]W 'YfbYi YfVUfY '9bYf[]Ybž
k]Y 'ni a '6Y]gd]Y '**\[\frac{1}{2}\] [Yb]Yi f.]bbYb 'ZØf 'YfbYi YfVUfY '9bYf[]Ybž
: UW\U[fUfk]fhY 'ZØf 'YfbYi YfVUfY '9bYf[]Yb 'i bX 'hYW\b]gW\Y
5gg]ghYbh]bbYb 'ZØf '9bYf[]Ya UbU[Ya Ybhž'V]YhYb'j]Y 'Y '7\UbW'b"
@Ui h'Y]bgh]Y["Wca 'g]bX '5i gV]`Xi b[g[Àb[Y ']b'I a k Y`hhYW\b]_
cXYf'9`Y_hfchYW\b]_'VYgcbXYfg'[YZfU[hž'UVYf'Ui W\
K Y]hYfV]`Xi b[Yb']a '6YfY]W\'Gc`UfhYW\b]_'i bX
?`]a UgW\i hna UbU[Ya Ybh'YfZfYi Yb'g]W\'[fc*Yf'6Y`]YVh\Y]h"

8]Y 6Yfi ZY XYf Ni _i bZh

8]Y '9bYf[]Yk]fhgWw UZhij YfàbXYfhig]Ww 'fUgUbhž'Ub[Yg]Ww hg'XYf
ni bY\a YbXYb'<]hnYk Y``Ybž'X]Y'Xi fWw 'XYb'? `]a Uk UbXY``VYX]b[h
g]bX"'HfUX]h]cbY``Y'K Àfa Y_fUZhk Yf_Y'ghY\Yb'i bhYf'8fi W_ž
k À\fYbX'ZYI]V`Yž'XYnYbhfU`Y'@Ògi b[Yb'Ub'6YXYi hi b['[Yk]bbYb"'
YbYf[]YVYfi ZY"XY'`]ghYh'ØVYf'' %\$'6Yfi ZY']b'XYf'8UhYbVUb_ž
XUfi bhYf'gdUbbYbXY'&Vg'k]Y'6YfUhYf'ZØf'K]bXYbYf[]Y'i bX
\[\dagger[Yb]Yi fY'ZØf'9bYf[]YUb`U[Yb!'i bX'; YVÀi XYg]a i `Uh]cb"'8]YgYg
X][]hU`Y'6Yfi Zg`YI]_cb']gh'VYgcbXYfg'\]`ZfY]Ww 'ZØf'U``Yž'X]Y']b'X]Y

6fUbWXY'Y]bghY][Yb'cXYf'g]WX'i a cf]Ybh]YfYb'k c``Yb"

9g^]gh^U^gc^b]Wk h^bi f^]b^XYf^Dc^]h]_^j]Y^*6Yk Y[ib[^]b^F]Wk hib[bUWk\U^h][Yf^9bYf[]Yj Yfgcf[ib[\check{z} Ui Wk^X]Y^6Yfi ZgV]^XYf^XYg^&%" \$\frac{1}{2}\fra

8YhU]`g	
Cfh	6UibUhU`ž'8YihgWX`UbX
EiY``Yb	• VUi bUhU`"V`c[
	k k k "Y]bgh]Y["Wca
	• k k k "YbYf[]YVYfi ZY"XY

6Ygi WXYb G]Y i bg Ui Z. bU[!\YggYb"XY