



SOSS1000

Dc`jWnUbX`GcWYm

HYfa`Cby`#`&\$&%

GWXcc`cZGcWJU`GWYbWg`#`1 BGK`5ftg`UbX`GcWJU`GWYbWg

7 ci fgY`Cj Yfj]Yk

GHZZ`7cbHJW`8YHJ`g

7cbj Ybcfg

B Ua Y	9a U]	5j U]UV]]m	@cW]h]cb	D\cbY
8]UbU`DYfWY	X]UbU"dYfWY4 i bgk "YXi "Ui	D`YUgY`Ya U]`hc UffUb[Y`Ub Uddc]b]a YbH	A cfj Yb`6fck bž C Z]W`% ,	7cbHJW]j]U HYUa g

@YW]i fYfg

B Ua Y	9a U]	5j U]UV]]m	@cW]h]cb	D\cbY
5`]gcb`K UbbUb	U"k UbbUb4 i bgk "YXi "Ui	D`YUgY`Ya U]`hc UffUb[Y`Ub Uddc]b]a YbH		

GWXcc``7cbHJW]i`bZcfa Uh]cb

GWXcc``cZGcW]U`GW]ybWg

Fcca`%) -

A cfj Yb`6fck b`7 &\$

Ya U]`.g]cg4 i bgk "YXi "Ui

d\cbY. '\$&`-' ,)`% \$+

7 ci fgY'8YHJ]`g

7 fYX]hDc]bhr`*`

Gi a a UfmicZhY'7 ci fgY

H\]g`Wci fgY`YI d`cfYg`hY`bUhi fY`cZhY`Udd`]YX`gcW]U`gW]YbW]g`UbX`dfcj`]XYg`]bZc`fa`U]cb`UVci`h\ck`gcW]U`gW]YbW]`W]b`VY`Udd`]YX`hc`fYU`k`cfX`dfcV`Ya`g`"Mci`k`j`"VY`]b]fcXi`W]X`hc`]XYUg`UVci`h\hY`fc`Y`UbX`i`gY`cZ`Yj`]XYbW]`]b`XYW]g]cb]a`U_]b[`UbX`dc`]W]a`U_]b[`Uh`cW]z`bU]cbU`UbX`]b]h]fbU]cbU`"Yj`Y`g`"K`Y`U`gc`]bj`Ygh[`U]h`"ck`dc`]W]h]g`XYj`Y`cd`YXz`W]Ub[`YXz`]a`d`Ya`Yb]h]X`UbX`Yj`U`i`U]h]X`]b`Udd`]YX`gcW]U`gW]YbW]`Xca`U]bg`gi`W]`Ug`gcW]U`dc`]W]z`di`V`]W]dc`]W]z`W]a`]bU`"g]h]W]`UbX`gcW]U`k`cf`"K`Y`k`j`"U`gc`X]gW`gg`hY`dfU]W]W]z`dc`]h]W]`UbX`Y]h]W]`dfcV`Ya`g`Yb]W]ci`b]h]fYX`]b`hY`W]ca`a`i`b]W]h]cb`cZ`fYgYU]fW]`UbX`YI`dY]h]gY`hc`]bZc`fa`dc`]W]h]UbX`gcW]U`W]Ub[`Y`"

H\Y`Wci fgY`]b]fcXi`W]g`gh`XYb]h]hc`_Ym]XYUg]z`XYVU]h]g`UbX`]ggi`Yg`k`]h]b`hY`gcW]U`gW]YbW]g`]b`fY`U]h]cbg]d`]d`hc`dc`]W]h]UbX`dfU]W]W]`"K`Y`XYj`Y`cd`_Ym]gh]fU]h]`[`]Yg`UbX`g_]`g`h`U]h]gh`XYb]h]`W]b`Udd`m]hc`dU]h]W]`Uf`U]fYUg`cZ`Ya`d`c]ma`Yb]h]b`hY`_Ym]fYUg`cZ`di`V`]W]UbX`gcW]U`dc`]W]z`gcW]U`k`cf`_`UbX`W]a`]bU`"g]h]W]`"5`gY]f]Yg`cZ`fYU`k`cfX`dc`]W]h]W]Ug]`gh`X]Yg`"[]`[]`[]`b[`W`ffY]b]h]fYgYU]fW]`k`j`"VY`i`gYX`hc`]`i`gh]fU]h]hY`W]c]bb]Y]W]h]cbg`VY]h]k`Y]b`dc`]W]z`dfU]W]W]`UbX`W`ffY]b]h]XYVU]h]g`"

7 ci fgY`@YUfb]b[`C`i`h]W]ca`Yg

%`5`dd`m]W]c`[`b]h]j`Y`g_]`g`hc`fYj`]Yk`z`UbU`mgYz`W]c]bgc`]XU]h]`UbX`gmb]h]Yg]gY`_bck`YX[`Y`dY]f]h]b]Yb]h]hc`Udd`]YX`gcW]U`gW]YbW]`X]g]W]d`]bYg`gi`W]`Ug`GcW]U`F`YgYU]fW]`UbX`Dc`]W]z`7`f]a`]bc`c[`m]UbX`GcW]U`K`cf`_`&`8`Ya`cbg]h]fU]h]`Ub`UV]`]m]hc`UXUdh]UbX`i`gY`X]g]W]d`]bU]fm`_bck`YX[`Y`UbX`fYgYU]fW]`g_]`g`]b`Udd`]YX`gcW]U`gW]YbW]`W]c]b]h]i`h]g`" `I`gY`]b]h]U]h]j`Y`UbX`"X[`Ya`Yb]h]b`Udd`]YX`g]W]c`U]f]g]d`]b`GcW]U`F`YgYU]fW]`UbX`Dc`]W]z`7`f]a`]bc`c[`m]UbX`GcW]U`K`cf`_`(`"b]h]f]d]fY]h]UbX`W]ca`a`i`b]W]U]h]`fYgYU]fW]`z]b]X]b[`g`hc`X]Z]Y]f]b]h]U]i`X]Y]b]W]g`Udd`]W]U]V`Y`hc`hY`Udd`]YX`gcW]U`gW]YbW]g`"

HYUWX]b[`G]h]fU]h]`[`]Yg`

K`Y`gY]Y`I`B`G`K`gh`XYb]h]YU]fb]Yfg`Ug`dU]h]W]d]Ub]h]g`]b`hY`dfcXi`W]h]cb`cZ`_bck`YX[`Y`UbX`k`Y`di`f]g]Y`hY`]a`d`Ya`Yb]h]h]cb`cZ`U`W`ff]W]`i`a`fYg]d]cbg]j`Y`hc`YU]W]`gh`XYb]h]g`]b]X]j`]Xi`U`b]Y]Y]X]g`"H\Y`XYg][`b`cZ]h]g]W]ci`fgY`]g]a`ch]j`U]h]X`V]m]U`XYg]fY`hc`Z`c]gh]f`hY`g_]`g`cZ]b]X]Y]d]Y]b]X]Y]b]h]Y]U]fb]b[`UbX`W]h]W]`h]b_]b[`"

H\Y]fY`U]fY`h]fY]Y`a`U]b`h]m]d]Yg`cZ]g]h]f]i`W]h]fYX`Y`U]fb]b[`U]W]h]j`]m]b`h]g]W]ci`fgY]z`gi`dd`Ya`Yb]h]b[`]b]X]Y]d]Y]b]X]Y]b]h]gh`X]m]f]fY]U]X]b[`z`b]c]h]i`h]U_]b[`z`fYgYU]fW]k`%`" @97HI`F`9G`H\]g`Wci fgY`W]c]bg]g]h]g]cZk`YY`_m]U]f[`Y]![`fci`d`Y]W]h]fYg]z`k`"W]X`a`Um]b]W]h]XY`hY`dfYgYb]h]h]cb`cZ]`]XYc`W]d]g]z`[`fci`d`U]W]h]j`]h]Yg`UbX`[`fci`d`X]g]W`gg]c]bg`"H\Y`Y]W]h]fYg`U]fY`XYg][`b]Y]X`hc`VY`dU]h]W]d]U]h]c]fm]UbX`Y]b[`U[`]b[`]gi`dd`Ya`Yb]h]b[`]b]X]Y]d]Y]b]X]Y]b]h]gh]X]m]b`hY`W]ci`fgY`h]U]h]Y]b]W]ci`fU[`Yg`W]c]gY`Y]b[`U[`]Ya`Y]b]h]k`]h]k`Y]Y`_m`fY]U]X]b[`]g`"&`"HI`HC`F`-5`@G`Hi`hc]f]U]g`U`c]k`gh`XYb]h]hc`X]g]W`gg`h]Y]c]f]Y]h]W]U`Udd]f]c]U]W]X]g]z`U]g`_`ei`Y]g]h]cb]g]z`Z`f]h]Y]f]b]h]f]f]c[`U]h]`W]c]b]W]d]h]g`UbX`]ggi`Yg`U]f]g]b[`]Z]c]a`h]Y]f`]b]X]Y]d]Y]b]X]Y]b]h]gh]X]m`Hi`hc]f]U]g`U`gc`dfc]j`]XY`gh`XYb]h]k`]h`hY`c]d]d]c]f]h]b]m]hc`"

Yb[U[Y]b' d'fcXi Wñj Y'X]gW gg]cb'k]h' h\Y]f'dYYfg'UbX'hc' d'Ufh]W]dUHY']b'U'fUb[Y'cZgfi Wñi fYX'YUfb]b[
UWñj]ñYgž]bWñ X]b['[fci d#dU]f#]bX]j]Xi U'UbU'nt]WU'k cf_žZcfa U'UbX']bZcfa U'XYVUH'gžei]nnYg'UbX'a]b!
dfc'YWñg"

' "'B89D9B89BH'@95F B Æ; '57 H ð ð H ð G

ñXYdYbXYbh'YUfb]b['UWñj]ñYg'a i ghVY'Wca d'YHYX'YUW'k YY_"H\Y'YUfb]b['UWñj]ñYg'UfY'XYg][bYX'hc
Zcgh'f']bXYdYbXYbhgh' XmUbX'hc'U'ck'Zc'f'Yb[U[Ya Ybhk]h'X]ZY'fYbh]Ug_g'h\UhW]bbchVY'i bXYfU_Yb']b'U
h'hc'f]U'Ybj]fcba Ybñž'gi W\Ug'WcbXi Wñb['cb']bY'fYgYUfW'cf'k UH\X]b['U'Z'a "'Gh'XYbñg'k]''U'gc'i bXYfU_Y
Z]Y'Xk cf_VmicVgYfj]b['UbX'fYdc'f]b['cb'fYU'!'Z]'dc'Wñia U_]b["'5Wñj]ñYg'UfY'k]''VY'YI d'U]bYX'UbX'k]'
a cghimVY'ZUW]ñ]UH'X'Vmi'h'Y'I b]j Yfg]mi@YUfb]b['A UbU[Ya YbhGmñh'Ya "'

5ggYgga Ybh

D`YUg`Y`g`Y`A`cc`X`Y`Z`f`X`Y`U`]`Y`X`U`g`g`Y`g`g`a`Y`b`h`]`b`Z`f`a`U`h`]`c`b`Z`]`b`W`i`X`]`b`[` `i`a`U`f`_]`b`[` `W`]`h`Y`f`U`"

5ggYgga YbhHUg_g

5ggYgga YbhHUg_g	K Y][\ h	8i Y`8UH`	Gh XYbh@YUfb]b[Ci hWta Yg`5ggYggYX
A]bcf`9ggUmi	' \$i	%&#`\$` #&`\$&`%`\$`).`\$\$`DA	%ž`'
:]Y`Xk cf`_`F Ydcfh	&\$i	\$`-`#`\$`(` #&`\$&`%`\$`).`\$\$`DA	&ž`'
A U`cf`9ggUmi) \$i	'`\$`#`\$`(` #&`\$&`%`\$`).`\$\$`DA	&ž`(`

5ggYgga Ybh8YHJ]`g

5ggYgga Ybh%`A]bcf`9ggUm

GHUfhXUH`Y`Bch5dd`]WUV`Y

@Yb[h. `%ž&`\$\$`k`cfXg

8YHJ]`g.

Gh XYbthg`gi`Va]hU`g`cfh`YggUm`c`Z`%ž&`\$\$`k`cfXg`c`b`h`Y`W`b`h`Y`b`h`c`Z`h`Y`Z`]`f`g`h`g`Y`h`c`Z`Y`W`h`f`Y`g`"`H`]\`g`Y`g`g`U`m`U`c`k`g`g`h`i`X`Y`b`h`g`h`c`Y`I`d`c`f`Y`h`Y`]`g`g`i`Y`g`]`b`[`f`Y`U`h`Y`f`X`Y`H`J`]"

Gh XYbthg`k`]`V`Y`d`f`c`j`]`X`Y`X`k`]`h`k`f`]`h`Y`b`Z`Y`X`V`U`W`_`U`c`b`[`g`]`X`Y`U`a`U`f`_]`b`[`f`i`V`f`]`W`c`b`h`Y`]`f`g`i`Va]h`Y`X`k`cf`_"`5ggYgga Ybthg`k`]`V`Y`a`U`f`_`Y`X`U`b`X`f`Y`h`f`b`Y`X`k`]`h`]`b`%`\$`k`cf`_]`b`[`X`U`mg`"

5XX]h]cbU`XYHJ]`g.

9ggUmei Ygh]cbg`k`]`V`Y`d`c`g`h`Y`X`c`b`A`cc`X`Y`"

Hi fb]h]b`g`Y`H`J`b`[`. `H`]\`g`U`g`g`[`ba`Y`b`h`]`g`g`i`Va]h`Y`X`h`f`c`i`[`\`H`i`fb]h]b`U`b`X`g`h`i`X`Y`b`h`g`X`c`b`c`h`g`Y`Y`H`i`fb]h]b`g`]`a`]`U`f`]`m`i`f`Y`d`c`f`h`g`"

5ggYgga Ybh&`:`]Y`Xk cf`_`F Ydcfh

@Yb[h. `*`\$\$`k`cfXg

8YHJ]`g.

Gh XYbthg`gi`Va]hU`*`\$\$`k`cfX`Z`Y`X`k`cf`_`f`Y`d`c`f`h`"`H`]\`g`]`g`X`c`b`Y`U`Z`Y`f`k`U`h`W`]`b`[`U`c`W`U`[`c`j`Y`f`b`a`Y`b`h`a`Y`Y`h`b`[`f`Y`]`h`Y`f`]`b`d`Y`f`g`c`b`c`f`c`b`]`b`Y`L`Z`U`b`X`U`b`U`mg`]`b`[`h`Y`d`f`c`W`Y`X`]`b`[`g`"`H`Y`f`Y`d`c`f`h`k`]`U`c`k`g`h`i`X`Y`b`h`g`h`c`U`d`d`m`h`Y`h`Y`c`f`m`Y`U`f`b`h`]`b`h`Y`W`i`f`g`Y`h`c`h`Y`f`Y`U`k`c`f`X`c`Z`d`c`]`W`h`a`U`_]`b`[`"`Gh XYbthg`k`]`V`Y`d`f`c`j`]`X`Y`X`k`]`h`k`f`]`h`Y`b`Z`Y`X`V`U`W`_`U`c`b`[`g`]`X`Y`U`a`U`f`_]`b`[`f`i`V`f`]`W`c`b`h`Y`]`f`g`i`Va]h`Y`X`k`cf`_"`5ggYgga Ybthg`k`]`V`Y`a`U`f`_`Y`X`U`b`X`f`Y`h`f`b`Y`X`k`]`h`]`b`%`\$`k`cf`_]`b`[`X`U`mg`"

5XX]h]cbU`XYHJ]`g.

⊖gffi W]cbg`Zcf`hY`Z]Y`Xk cf_`hUg_`k]`VY`dfcj]XYX`]b`WUgg`UbX`cb`A`ccX`Y"

Hi`fb]h]b`gYH]b[. `H\]g`Ugg][`ba`Ybh]g`gi`Va`]hYX`h`fci`[\`Hi`fb]h]b`UbX`ghi`XYbhg`Xc`bchgYY`Hi`fb]h]b`g]a`]Uf]mifYdcftrg"

5ggYgga`Ybh`. `A`U`cf`9ggUm

GhUfhXUHy`. `Bch5dd`]WUV`Y

@Yb[`h`. `&ž&\$`\$

8YHJ]`g.

Gh`XYbhgi`Va`]hU`cb[`YggUmicZ&ž&\$`k`cfXg"9ggUmei`Ygh]cbg`k`]`VY`a`UXY`Uj`U]UV`Y`]b`WUgg`UbX`cb`]bY" `H\]g`YggUmU`ck`g`gh`XYbhg`h`c`YI`d`cfY`_Ym]ggi`Yg`]b`[`fYUHyf`XYHJ]"

Gh`XYbhg`k`]`VY`dfcj`]XYX`k`]h`k`f]hYb`ZYXVUW`U`cb[`g]XY`U`a`Uf_]b[`fi`Vf]Wcb`hY]f`gi`Va`]hYX`k`cf_"

5ggYgga`Ybhg`k`]`VY`a`Uf`_YX`UbX`fYh`fbYX`k`]h]b`%\$`k`cf_]b[`XUmg"

5XX]h]cbU`XYHJ]`g.

9ggUmei`Ygh]cbg`k`]`VY`Uj`U]UV`Y`cb`A`ccX`Y"

Hi`fb]h]b`gYH]b[. `H\]g`Ugg][`ba`Ybh]g`gi`Va`]hYX`h`fci`[\`Hi`fb]h]b`UbX`ghi`XYbhg`Xc`bchgYY`Hi`fb]h]b`g]a`]Uf]mifYdcftrg"

F Ygci fWg

DfYgW]VYX F Ygci fWg

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

Hi fb]h]b 'Gi Va]gg]cb

≠Zmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UHYa dh]b['hc'gi Va]hmc i f'Ugg][ba YbhiHfci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'- ' ,) " ' ' %cf'Ya U] 'h'Ya 'cb'YI HYfbU'HY'hgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY' , .\$Ua '—%\$. \$\$da 'cb'k YY_XUmg'UbX'-. .\$Ua '—) . \$\$da 'cb'k YY_YbXg'fI *) 'XUmg'U'm'UfL" ≠Zmci
UfY'i bUV'Y'hc'gi Va]hmc i f'Ugg][ba YbhiXi Y'hc'U'Zi 'hk]h'Hi fb]h]b'mci 'a UmiUdd'm'Zc'f'Ub'YI HYbg]cbž'Vi hmc i
a i ghfYhU]b'mci f'h]W_Yhbi a VYf'Zca '9I HYfbU'Gi ddcfhfU'cb['k]h'Ubmic'h'Yf'fY'Y] UbhXcW a YbfgL'hc

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i`g]b[`h`Y`k`c`f`X`g`c`f`]X`Y`U`g`c`Z`c`h`Y`f`g`i`U`b`X`d`f`Y`g`Y`b`h]b[`h`Y`a` `U`g`m`c`i`f`c`k`b`" `#`W`U`b`h`U`_`Y`a` `U`b`m`
Z`c`f`a`g`Z`Z`c`a` `X`Y`]V`Y`f`U`h`Y` `W`X`Y`U`h]b[`h`c` `U`W`W`Y`X`Y`b`h`U` `m`i`W`c`d`m]b[`Z`c`a` `U`g`c`i`f`W` `k`]h`c`i`h`U`W`_`b`c`k` `Y`X[`Y`a` `Y`b`h`

I`B`G`K` `[`f`c`i`d`g`d`U[]Uf]ga `]b`h`c` `h`Y` `Z`c` `c`k`]b[`W`U`h`Y`[`c`f`]Y`g.

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V]hYg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wc'dmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi WñUbX'5Ww'dhUV'Y'I gY'cZ
I BGK '⇒H'F Ygci fW'g'Dc`]Wñ
- VY'Uk UfY'cZñY'ghUbXUfXg'cZVY\Uj]ci f'YI dYWñX'cZYj YfñcbY']b'ñY'I BGK 'Wc a i b]j

5 WUXYa]WbZcfa Uh]cb

: cfYggYbh]U`gh XYbh]bZcfa Uh]cb fY`Uh]b[`tc.

- fYei Yghg`Zcf`YI H`bg]cb/
- `UhY`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<YU`h`UbX`GUZYmidc`]WYg/
- YI Ua]bUh]cb`dfcW`Xi fYg/
- gdYW]U`W`bg]XYfUh]cb`]b`hY`Yj YbhicZ]`bYgg`cf`a]gUXj Ybh fY/
- gh XYbhYei]m]UbX`X]gUV`]m/
- UbX`c`hYf`YggYbh]U`UWUXYa]W]bZcfa Uh]cbz`gYY

[\ftdg.#k k k "Uftg"i bgk "YXi "Ui #W ffYbh\]gh XYbh\]UWUXYa \]W\]bZcfa Uh\]cb#dfchW`g!\[i \]XY`\]bYg#](#)

⇒ U[Y`7 fYX]h

DUf]Ua YbhUfm]f]Ub[`Yz`7 UbVYffU" D\cfc `Vm]8 `DYfWXY

7F ⇒ CG

7F ⇒ CG `Dfcj]XYf`7 cXY. \$\$\$- , ;

5W_bck `YX[Ya YbhicZ`7 ci bhfm

K Y`UW_bck `YX[Y`hY`6YXY[U`dYcd`Y`k `c`UfY`hY`fUX]h]cbU`W`ghcX]Ubg`cZ`hY`UbXg`cb`k `]W`I BGK
? Ybg]b[hcb`W]a di g`]g`cW]hYX"