

6i bXYgdc`nY]`Yfa]hhY`h`bUWk : U\ffUX!
8]YVghU\`a]h`K UZZYb`]b`9]g`YVYb

6i bXYgdc`nY]`Xi fWk gi Wk h`]b`9]g`YVYb`X]Y`K c\bi b[`Y]bYg
HUhj`YfXÅWk h][Yb`bUWk : U\ffUX]YVghU\`a]h`K UZZYb`
9fa]hhi b[Yb`Ui ZYb"

\$&"\$, "&\$&(` ` %&.%*

6i bXYgdc`nY]]bgdY_h]cb`A U[XYVi f[

9fa]hhi b[Yb`[Y[Yb` : U\ffUX]YVghU\`]b
9]g`YVYb

9]g`YVYb`fbcgk` `b`XYf`_Y]bYb`GhUXh9]g`YVYb`k i fXYb
Zf0\ a cf[Ybg`Ua` `&"5i [i gh&\$&(`i a ZUggYbXY
8i fWk gi Wk i b[ga U» bU\ a Yb`Xi fWk [YZ0\fh`8]Y`5_h]cb`k i fXY`j cb
XYf`6i bXYgdc`nY]]bgdY_h]cb`A U[XYVi f[`]b`Ni gUa` a YbUfVY]h`a]h
XYf`GhUUhgUbk U`hgWk UZi< U`Y`fGUU`Yk`]bg`@YVYb`[Yfi ZYbž`i a
Y]bYa` ZU\`f`Àgg][Yb`8]YVghU\`a]h`K UZZYb`bUWk ni [Y\Yb"

8Yf`< Yf[Ub[`XYg`8]YVghU\`g

≈a`NYbhfi a`XYf`9fa]hhi b[Yb`ghY\h`Y]b`(\$!`Å\ f)[Yf`A Ubbž`XYf
Xf]b[YbX`j YfXÅWk h][h`k]fXž`Ua` `%&"`GYdhYa VYf`&\$&` `Y]b` : U\ffUX
]a`K Yfhj`cb`Yhk U`(\$`\$`9i fc`Yb`hk YbXYh`ini` \UVYb`"8Ug` : U\ffUX
k Uf`Ub`Y]bYa` : U\ffUXgh`ÅbXYf`Ua` <Ui dhVU\`b\`cZ< U`Y`fGUU`Yk
Ub[YgWk`cggYbž`k c`XYf`J YfXÅWk h][Y`Y]bY`5__i ZYI` `i bX`Y]bYb
6c`nYbgWk`bY]XYf`Y]bgYhnhYž`i a`XUg`GWk`cgg`ni`Xi fWk`hfYb`bYb`
8]Yg`[YgWk`U\`]b`XYb`5VYbXghi`bXYbž`U`g`X]Y`6U\`b\`ÖZY`Z0f`XUg
Di V`_]i a`VYgcbXYfg`VY`YVh`g]bX`"A]h`XYa`Yb`hk YbXYh`Yb` : U\ffUX
a`UWk`hY`g]Wk`XYf`A Ubbž`XYf`VYfY]hg`dc`nY]`]Wk`VY`_Ubbh`]ghž`Ui g

XYa`GhUi V`K`À\fybX`XYg`J`cfZU`g`ZØ\fhY`Yf`Y]b`9]b\UbXa`YggYf`
a`]hg]Wž`k`Ug`XYb`8]YVghU\`ni`gÀh`]W`gWk`YfYf`a`UW`h"

8i`fW`gi`W`i`b[`ga`U»`bU\`a`Yb`i`bX`
:`i`bX`ghØW`_`Y`

6Y]`XYf`8i`fW`gi`W`i`b[`gY]bYf`K`c\`bi`b[`]b`9]g`YVYbž`Ub`XYf`
]bg[`YgUa`h`%+`6i`bXYgdc`]n]ghYb`VYhY`]`[`h`k`UfYbž`ZUbX`X]Y`
9]bgUhm[`fi`ddY`YXcW`b]W`h`XUg[`Yg`hc`\`YbY`:`U\`ffUX`c`XYf`X]Y`
K`Yf`_`nYi`[`Yž`X]Y`ZØf`XYb`8]YVghU\`j`Yfk`YbXYh`k`i`fXYb`"
GhUhhXYggYb`Yb`hXYW`_`hYb`X]Y`6YUa`hYb`nk`Y]`:`U\`ffUXfU\`a`Ybž`X]Y`
]a`d`c`]nY`]`]W`Yb`b`Zcfa`Uh]c`bggmghYa`U`g[`Yg`hc`\`Yb`fY[`]ghf]Yfh`
k`UfYb`"8]YgY`F`U\`a`Yb`k`i`fXYb`g]W`Yf[`YghY`hž`i`bX`X]Y`
ni`gh`À`bX]`[`Yb`6Y\`ØfXYb`k`i`fXYb`i`a`[`Y\`YbX`]bZcfa`]Yfhž`i`a`X]Y`
<Yf`_i`bZ`h`ni`_`ÀfYb`"

5i`gk`]f`_i`b[`Yb`Ui`Z`X]Y`:`;`Ya`Y]bgW`UZh`

8]Y`k`]YXYf\`c`hY`Df`ÀgYbn`XYf`6i`bXYgdc`]nY]`VY]`XYf`6Y`_`Àa`dZ`b[`
j`cb`:`U\`ffUXX]YVgh`À`\`Yb`\`Uh`b]W`h`bi`f`9b`hk`]W`_i`b[`gUgdY`_`hY`ZØf`
X]Y`GhUXhž`gcbXYfb`Ui`W`5i`gk`]f`_i`b[`Yb`Ui`Z`XUg`G]W`Yf\`Y]hg[`YZØ\`
]\`fYf`6Yk`c\`bYf`":`U\`ffUXX]YVghU\`]gh`Y]b`\`Ài`Z[`Yg`DfcV`Ya`ž`j`cf`
U`Ya`_]b`gh`À`Xh]gW`Yb`:`YV]YhYbž`i`bX`X]Y`6Ygcf[`]b]g`XUfØVYf`
VYa`Ø\`h`X]Y`c`_`U`Y`:`;`Ya`Y]bgW`UZhž`g]W`U`_`hj`Yf`ZØf`a`Y\`f`
G]W`Yf\`Y]h`Y]bni`gYhnYb`"8Ug`J`cf[`Y\`Yb`XYf`Dc`]nY]`nY][`hž`XUgg`
a`Ub`XYa`J`YfVfYW`Yb`b]W`h`bi`f`bUW`[`Y\`hž`gcbXYfb`Ui`W`
df`Àj`Yb`hj`Y`A`U»`bU\`a`Yb`ni`f`GW`UZZ`b[`]Y]bYg`g]W`YfYfYb`i`a`ZY`Xg`
Yf[`fY]Z`h`"

:`c`fhgY`hni`b[`]XYf`9fa`]h`h`i`b[`Yb`

8]Y`9fa`]h`h`i`b[`Yb`fi`bX`i`a`XYb`:`U`X`Ui`Yfb`Ubž`i`bX`Yg`V`Y]Vh`
UVni`k`UfhYbž`k`Y`W`Y`k`Y]hYfYb`8YhU]`g`Ub`g`@]W`h`_`ca`a`Yb`k`YfXYb`"
8]Y`6i`bXYgdc`]nY]`i`bX`X]Y`GhUUhgUbk`U`hgW`UZh`UfVY]hYb`<`UbX`]b`
<`UbX`XUfUbž`@]W`h]b`X]YgYb`:`U`ni`Vf]b[`Yb`i`bX`À\`b`]W`Y`J`cfZ`À`Y`
]b`Ni`_i`bZ`h`ni`j`Yf\]bXYfb`"

F ØW_ZfU[Yb`V]hhY`Ub.

6i bXYgdc`nY]]bgdY_h]cb`A U[XYVi f[
HY`YZcb. Ž (-`f\$Ł' - %!) *) (-!) \$)
9!A U]. `Vdc`]"a U[XYVi f["cYU4 dc`nY]"Vi bX"XY
4 Vdc`Sd]f

C f][]bU`!7cbhYbhj cb. `6i bXYgdc`nY]]bgdY_h]cb`A U[XYVi f[ž
ØVYfa]hhY`h`Xi fW`bYk g`U_hi Y`

· ·B 5;

8YhU]`g

6Ygi W`Yb`G]Y`i bg`Ui Z. `b!U["XY