

9]b\Y]h'8Ya a]b'ghUfhYh'Ua V]h]cb]Yfh']b
X]Y'C VYf`][U!GU]gcb '&\$&(#&)

9]b\Y]h'8Ya a]b'ghUfhYh'Ua `%("'GYdhYa VYf`]'b'X]Y'C VYf`][U!
GU]gcb '&\$&(#&) `a]h'XYa `N]Y`?'`UggYbYf\U`hi bX`bYi Yb
Gd]Y`Yfb`]a `?UXYf"

8]Y`<UbXVU`Yf`j cb'9]b\Y]h'8Ya a]b`V`]W_Yb`[YgdUbbh'Ui Z`X]Y
VYj cfghY\YbXY`GU]gcb '&\$&(#&) ž`X]Y`Ua `%("'GYdhYa VYf`a]h
Y]bYa `5i gk `Àfhggd]Y`[Y[Yb`X]Y`nk Y]hY`A UbbgW`UZh`XYf
A YW`YbVi f[Yf`Gh]YfY`GW`k Yf]b`VY[]bbh" `č`X]YgYf`bYi Yb
Gd]Y`nY]h'ghY`h`XYf`?'`UggYbYf\U`h]b`XYf`C VYf`][U!A YW`YbVi f[!
J cfdca a Yfb`[Ub`n`cVYb`Ui Z`XYf`5[YbXU`"HfU]bYf`<UbbYg`@Ya W_Y
]gh'g]W`XYf`<YfUi gZcfXYfi b[Yb`VYk i ggh` B UW`XYb`š`fYb`]b`XYf
J YfVUbXg`][U]gh`X]Y`C VYf`][U`Y]bY`Ybcfa Y`DfØZ b[`ZØf`i bgYf
HYUa "'š`XYf`Di b_h`a i gg`\Ufh`Yf_`Àa dZh`k YfXYb ž`Yf_`Àfh`Yf"

8]Y`YfghYb`<Y]a gd]Y`!A Ø[`]W`_Y]hYb`k UfhYb`Y]bY`K cW`Y`gd`ÀhYfž
k Ybb`XUg`HYUa `Ui Z`XYb`GJ`K UfbYa ØbXY`=hf]Zh" `č`XYf
GU]gcbj cfVYfY]hi b[`U`h`X]Y`A UbbgW`UZh`VYfY]hg`5bZub[`š`]`a]h
XYa `HfU]b]b[`VY[cbbYb"8 UVY]`k]fX`VYgcbXYfg`X]Y`[i hY
Gh]a a i b[`]bbYf\U`V`XYg`HYUa g`\Yfj cf[Y`cVYbž`X]Y`Y]bY
k]W`h][Y`F`c`Y`ZØf`XYb`[Ya Y]bgUa Yb`9fZc`[`gd]Y`Yb`k]fX"

B Yi ni [`Àb[Y`i bX`5V[`Àb[Y`df`À[Yb`XYb
? UXYf

9]b`VYXYi hYbXYf`K YW`gY`]a `? UXYf`]gh`XYf`5V[Ub[`j cb`Hcf[UfUbh
A UfW`<U[Ya Y]Yfž`XYf`ni f`G; `l b]; fY]Zgk U`X`#@c]hn`]b`X]Y
F Y[]cbU`][U!C ghgYY!GdfYY [Yk YW`gY`h]gh" `č` ; Y[Ybni [`U`h
9]b\Y]h'8Ya a]b`Y]b[Y`bYi Y; Yg]W`hYf`j YfdZ]W`hYh"l bhYf`X]YgYb
B Yi ni [`Àb[Yb`g]bX`l `];]Yf`_Y`i bX`Hcfk Ufh`Gj Yb`F`c`\`YXYfž`X]Y

VY]XY'ØVYf'k Yfhj c`Y'9fZU\fi b[Yb'Ui g'ZfØ\YfYb'J YfY]bYb
a]hVf]b[Yb"8Yf'&%! Å\fi][Y'@Ui f]b'6YW_Yf'\Uh']b'XYf
J Yf[Ub[Yb\Y]h'i a ZUb[fY]WXY'9fZU\fi b[']b'XYf'CVYf'] [U!C ghgYY!
GdfYY'[YgUa a Y'hž'VYj cf'Yf'Ui Z[fi bX'gY]bYg'Ghi X]i a g'XYb
K YWgY'j c`nc["9f'V'W_h'cdh]a]gh]gW']b'X]Y'Ni _i bZh' A Y]b'N]Y'
]gh'Ygž'Y]bYb'D'Uhn']a 'GhUa a gYWgYf'ni 'VY_ca a Yb'i bX'a]h'XYf
A UbbgW UZh'XYb'?`UggYbYf\U'h'ni 'gW UZZYb"

Δb'?Ø\Yž'XYf'VYbZU`g'j cb': cfhi bU'BYi VfUbXYbVi f['_ca a hž
Yf[Åbnh'XUg'HYUa 'a]h'gY]bYa ' <]bhYf[fi bX'Ui g'XYb
B UWk i WkgVYfY]WYb'XYg'J YfY]bg" 8i fW'XYb'i a Vf i W'VY]
: cfhi bU'\UVY']W'j]Y'Y': fYi bXY'j Yf'cfYbž'k Yg\U'V']W' bUW'Y]bYf
bYi Yb' < YfUi gZcfXYfi b['[Ygi W'h'\UVY ž'gU[h'?Ø\Yž'XYf'g]W'XYb
< YfUi gZcfXYfi b[Yb'XYf'CVYf'] [U'ghY`h" ΔUbb]g'6cfW UfXh'k]fX'a]h
gY]bYb'+ Δ\ fYb'XYf'Øb[ghY'Gd]Y'Yf'a '?UXYf'gY]b'i bX'\Uh
[fc» Y'9fk Ufhi b[Yb'Ub'gY]bY'9]bgÅhnY']b'XYf'A ÅbbYf'[U"

6YgcbXYfg'VYa Yf_Ybgk Yfh']gh'X]Y'F ØW_Y\ f'j cb'?YYdYf'Gj Yb
Fc\`YXYfž'XYf'VYfY]hg'nk]gWYb'&\$%) 'i bX'&\$%+ 'gck]Y'&\$&% 'ZØf
8Ya a]b'gd]Y'hY" 8Yf'?cbhU_h'ni 'HfU]bYf' < UbbYg'@Ya W_Y'i bX
X]Y'J YfY]bVUf_Y]hj cb'VYfi Z]WYb'J YfdZ]W'hi b[Yb'\UVYb'a Y]bY
9bhgWY]Xi b['ZØf'XYb'K YWgY'Yf'Y]W'hYfh ž'VYf]W'hYh'Fc\`YXYf
i bX'VYhcbh'X]Y'6YXYi hi b['Y]bYf'[i hYb'Ni gUa a YbUfVY]h'a]h'XYa
UbXYfYb'Hcfk Ufh'A Ufj]b'; Ø\ bYf"

Ghfi _hi fj YfÅbXYfi b[Yb'i bX' _ØbZh][Y'N]Y`Y

Δ'XYf'_ca a YbXYb'GU]gcb'k]fX'9]b\Y]h'8Ya a]b'k]YXYf'Y]b['Y]g][
ghfi _hi f]Yfh'Ui ZhfYhYb"8]Y'j cf\Yf][Y
B UWk i Wkggd]Y'[Ya Y]bgW UZh'a]h'XYa ' < GJ 'DYYbYhU`@]hn'k i fXY
Ui Z[Y'Øghž'XU'X]Y'?ca a i b]_Uh]cb'nk]gWYb'XYb'VY]XYb'J YfY]bYb
b]W'h'cdh]a U'j Yf']YZi bX'XYf'6YXUfZ'XYf' B UWk i Wkggd]Y'Yf
VYghUbXž'X]fY_h]b'8Ya a]b'ni 'gd]Y'Yb"G]j]c'GWØ'Yfž'XYf
gdcfh]WY'@]hYf'i bX'nk Y]hY'J YfY]bgj c'fg]hnYbXYž'Åi » Yfh'g]W'ØVYf
X]Y'HfYbbi b[. '8]Y'Gd]Y'Yf'k ØbgW'hYb'g]W'ž'k]YXYf']b'8Ya a]b
< UbXVU`ni 'gd]Y'Yb" 8]Yg'nY][h'Y]bYb'_UfYb': c_i g'Ui Z'X]Y
GhÅf_i b['XYg'J YfY]bg'i bX'X]Y'9bhk]W_i b['c_U'Yf'HU'YbhY"

5i » YfXYa 'k]fX' b]W\h' bi f' X]Y` YfghY` A` ÀbbYfa` UbbgW\ UZh' U_h]j` 'gY]b"
5i W\` X]Y` nk` Y]hY` A` UbbgW\ UZh' k`]fX`]b` XYf` 6Yn]f_gcVYf`][U!C` gh`
UbhfYhYbž` k` À\ fYbX` X]Y` :` fUi` Yba` UbbgW\ UZh' i` bX` X]Y` k` Y]V`]W\Y` 6!
ž` [YbX`]b` X]j` YfgYb` @][Yb` gd]Y` Yb` k` YfXYb` "G\ Ø` Yf` VY` f` ÀZh][h`
K`]f` k` c` Y` b` 8Ya` a`]b` U` g` hfUX]h]cbY` Y` < UbXVU` g` hUXh` d` f` ÅgYb]h]YfYb`
i` bX` XYb` Ni` gW\ Ui` Yfb` UhhfU` _h]j` Yb` < UbXVU` V`]YhYb` " 8]Yg` nY][hž`
XUgg` X]Y` 5a` V]h]cbYb` k` Y]h` ØVYf` X]Y` YfghY` A` ÀbbYfa` UbbgW\ UZh`
\]bUi` g[Y\Yb` i` bX` U` Y` A` UbbgW\ UZh` Yb` i` bhYfgh` ØhnYb` gc` Y` b"

8]Y` 6YXYi` hi` b[`XYg` 5i` Zgh]Y[g`

8Yf` 5i` Zgh]Y[`j` cb` 9]b\Y]h` 8Ya` a`]b`]b` X]Y` C` VYf`][U!A` YW\` YbVi` f[!`
J` cfdca` a` Yfb` a` Uf_]Yfh` Y]bYb` VYXYi` hYbXYb` G\ f]h`]b` XYf`
J` YfY]bg[YgW\]W\ hY` "B` UW\` ž\ fYb`]b` XYf` J` YfVUbXg`][U` \` Uh` g]W\` X]Y`
A` UbbgW\ UZh` Y]bYf` \` Ø\ YfYb` < YfUi` gZcfXYfi` b[` [YghY` hž` X]Y` gc` k` c` \`
gd` cf]h]W\` U` g` Ui` W\` k`]fhgW\ UZh`]W\` VYXYi` hYbX`]gh` 8Yf` 5i` Zgh]Y[
gc` f[h` b]W\` h` bi` f` ZØf` a` Y\ f` 5i` Za` Yf` gUa` _Y]h`]b` XYf` F` Y[]cbž` gcbXYfb`
_Ubb` Ui` W\` ni` \` Ø\ YfYb` 9]bbU\` a` Yb` Xi` fW\` Ni` gW\ Ui` Yf` i` bX`
Gdc` bgcfYb` ZØ\ fYb` "8` Ua`]h` Y]b\Yf` [Y\ h` X]Y` J` YfUb` hk` c` fh` i` b[ž` X]Y`
@[U` ni` \` U` hYbž` k` Ug` ZØf` j`]Y` Y` J` YfY]bY` Y]b` _f]h]gW\ Yg` N]Y` X` UfghY` h`

8Yf` J` YfY]b` \` Uh` g]W\` ghf` UhY[]gW\` Ui` Z` X]Y` bYi` Y` GU]gc` b` j` c` fVYfY]hY` hž`
]bXYa` Yf` gY]bY` ?` UX` Yfghfi` _hi` f` Ub[YdU` »` hi` bX` bYi` Y` Gd]Y` Yf`
]bhY[f]Yfh` \` Uh` "Gc` W\Y` J` Yf` ÅbXYfi` b[Yb` g]bX` c` Zh` b` ch` k` YbX][ž` i` a`
g]W\` Ub` X]Y` G\ bY` Y` V][_Y]hi` bX` X]Y` ž` bhYbg]h` Åh` XYf` \` Ø\ YfYb` @][Yb`
Ubni` dUggYb` "Ni` XYa` g]bX` X]Y` Z]bUbn]Y` Y` b` F` U\` a` YbVYX]b[i` b[Yb`
\` Ai` Z][Yb[Yfž` k` Ug` VYXYi` hY` hž` XUgg` Y]b` GhUV`]h` Åhg` _cbnY` dh`
i` a` [YgY` h` h` k` YfXYb` a` i` ggž` i` a`]a` k` Yh` h` VYk` YfV` ni` VYghY` \` Yb`"

8]Y` 5i` gk`]f` _i` b[Yb` XYf` Gd]Y` Yfk` YW\ gY`

Gd]Y` Yfk` YW\ gY` ž` k`]Y` XYf` j` cb` A` UfW` < U[Ya` Y]Yf` ni` f` G;` i` b]
;` fY]Zgk` U` X` #` @` c]h` nž` _` Ø` bYb` k` Y]hfY]W\ YbXY` 5i` gk`]f` _i` b[Yb` Ui` Z` X]Y`
HYUa` XmbUa`]_` \` UVYb` " < U[Ya` Y]Yf` k` Uf` b]W\ h` bi` f` Y]b` Hcf[UfUb` hž`
gc` bXYfb` Ui` W\` Y]b` YfZU\ fYbYf` Gd]Y` Yfž` XYggYb` 5V[Ub[X]Y`
C` ZYbg]j` _fUZh` j` cb` 9]b\Y]h` 8Ya` a`]b` _i` fnZf]gh][gW\` k` ÅW\Yb` _` Ø` bhY` "
8]Y` bYi` Yb` Gd]Y` Yf` k`]Y` i` i`];`]Yf` _Yž` @` Ui` f]b` 6YW\` Yf` i` bX` ž` b` ?` Ø\` Y`
Vf]b[Yb` Zf]gW\Yb` k`]bX` ž` a` ØggYb` g]W\` Y` X` c` W\` Yfgh]b` X` Ug`

VYghY\YbXY`HYUa`]bhY[f]YfYb"

K]Y`k]W`h][`X]Y`ϕhY[fUh]cb`bYi`Yf`Gd]Y`Yf`]ghž`nY][`h`g]W`c`Zh]b`XYf`
HYUa`Y]ghi`b["`9fZc`[`]a`<UbXVU``\`Àb[`h`ghUf`_`j`cb`XYf`7\Ya`]Y`]a`
HYUa`UV"Gd]Y`Yf`a`ØggYb`g]W`gck`c`\`Ui`Z`U`g`Ui`W`b`VYb`XYa`
Gd]Y`ZY`X`j`YfghY\Ybž`i`a`YfZc`[`fY]W`ni`gY]b"8Ug`HfU]b]b[`ž`XUg`
VYfY]hg`]a`đ`]`VY[`c`b`b`Y`b`\`Uhž`X]Y`b`h`b]W`h`b`i`f`XYf`d`\mg]gW`Y`b`
J`c`f`V`Y`f`Y]h`i`b[`ž`g`c`b`X`Y`f`b`U`i`W`X`Y`a`HYUa`Vi`]X]b[`ž`i`a`Y]b`Y`
_`c`\`À`f`Y`b`h`Y`Gd]Y`k`Y]gY`ni`Y`b`h`k`]W`Y`b"

9]b`6`]W`_`Ui`Z`X]Y`@[`U

8]Y`C`V`Y`f`][`U!A`Y`W`_`Y`b`Vi`f[`!J`c`f`d`c`a`a`Y`f`b`]gh`V`Y`_`U`b`b`h`Z`Ø`f`]\`f`Y`\`c`\`Y`
K`Y`h`h`V`Y`k`Y`f`V`g`Z`À`\][`_`Y]h"ϕ`XYf`j`Yf[`Ub[`Y`b`Y`b`GU]g`c`b`\`U`V`Y`b`X]j`Y`f`g`Y`
HYUa`g:[`Y`n`Y][`hž`X`U`g`g`U`i`W`j`Y`f`a`Y]b`h]W`g`W`k`À`W`Y`f`Y]b[`Y`g`W`À`h`h`Y`
A`U`b`b`g`W`U`Z`h`Y`b`]b`XYf`@U[`Y`g]b`X`ž` ,`V`Y`f`f`U`g`W`i`b[`Y`b`ni`Y`f`n]Y`Y`b`"
→XY`DU`f`h]Y`Y`f`Z`c`f`X`Y`f`h`a`U`i`]a`U`Y`?`c`b`n`Y`b`h`f`U`h]c`b`i`b`X`
9]b`g`U`h`V`Y`f`Y]hg`W`U`Z`h`k`U`g`X`Y`b`8`f`i`W`_`Ui`Z`X]Y`Gd]Y`Y`f`Y`f`\`Ò`h"8`Y`f`
?`U`g`g`Y`b`Y`f`\`U`h`]gh`U`g`c`Y]b`U`a`V]h]c`b]Y`f`h`Y`g`ž`U`V`Y`f`f`Y`U`]gh]g`W`Y`g`N]Y`
Z`Ø`f`X`Y`b`J`Y`f`Y]b"

8]Y`J`Y`f`Y]b`g`Z`Ø`\`fi`b[`Z`Ø`f`X`Y`f`h`U`i`W`X`Y`b`đ`[`Y`b`X`V`Y`f`Y]W`ž`k`U`g`
`Ub[`Z`f]gh][`X`U`g`N]Y`\`Uhž`HU`Y`b`h`Y`ni`Y`b`h`k`]W`Y`b`ž`X]Y]b`X]Y`Y`f`gh`Y`
A`U`b`b`g`W`U`Z`h`U`i`Z`gh`Y][`Y`b`_`Ò`b`Y`b"8]Y`g`]gh`V`Y`g`c`b`X`Y`f`g`k`]W`h][`ž`X`U`
↑`b[`Y`Gd]Y`Y`f`c`Zh`b]W`h`b`i`f`Z`f]g`W`Y`DY`f`gd`Y`_`h]j`Y`b`ž`g`c`b`X`Y`f`b`U`i`W`
A`c`h]j`U`h]c`b`i`b`X`→Y`b`h]Z`_`U`h]c`b`a`]h`X`Y`a`J`Y`f`Y]b`a`]h`V`f]b[`Y`b"

8YhU]`g

6Ygi`W`X`Y`b`G]Y`i`b`g`U`i`Z`b!U["XY