



SOCW4017

GcWjU`K cf_DfUWjW`@Yj Y``(`D`UW`a Ybh5

HYfa `Hk c`#`&\$&%



7 ci fgY`Cj Yfj]Yk

GHJZ`7cbHJW`8YHJ]`g

7cbj Ybcfg

B Ua Y	9a U]	5j U]UV]]m	@cW]h]cb	D\cbY
>UbY`8Ybb]g	^UbY"XYbb]g4 i bgk "YXi "Ui	5j U]UV`Y`Zcf W`bgi `h]h]cb`Vm Uddc]b]ra Ybh	F cca `%+\$ A cfj Yb`6fck b 6i]X]b[\$(\$&`' \$% \$%%

GWXcc``7cbHJW`h]Zcfa U]h]cb

GWXcc``cZGcW]U`GWYbWg

F cca `%) -

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

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

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

7ci fgY'8YHJ]`g

7fYX]hDc]bqg`*`

Gi a a UfmcZ\hY'7ci fgY

Mci f'Z]bU'd'UW'a YbhU`ck g'mci 'hc 'Udd'mh.YcfYh]WU'UbX'g_]`g'VUgYX`YUfb]b['j]b'U'dfUW]W'gYH]b["'Mci k]`VY`]'b_YX'k]h'U'ei U']ZYX'gcW]U'k cf_Yf]'b'U'li a Ub'gYfj]W'g'U[YbW'ncZYf]b['dfUW]W'VUgYX`YUfb]b[ž]b'UW'W'fXUbW'k]h' h.Y'55GK 'DfUW]W'GhUbXUfXg"'H\]g`YUfb]b['YI dYf]YbW']g'gi ddcfYX'VmgcW]U'k cf_ gi dYfj]g]cb'dfca c]b['W]h]W'fYZYW]cb/]h'k]`[i]XY'mci 'h'fci [\ 'U'XYj Y'cda YbhU' dfcW'gg'ZcW'g]b['cb _bck`YX[Yž'g_]`g'UbX'j U'i Yg'fY'Yj Ubh'hc'h.Y'gcW]U'k cf_ dfcZ'gg]cb"'Mci 'UfY'W'cbgi 'h'X'UVci h'mci f d'UW'a YbhU'c'W]h]cb'gc'mci f'YUfb]b['[cU'g'UbX'dfcZ'gg]cbU']b'h'fY'g'g'UfY []j Yb'W'cgY'W'cbg]XYfU]cb" D'UW'a Ybh'g'c'W'W'f']b'X]j YfgY'W'cb'h'i]g'cZ'dfUW]W'gi W'U'g'\cgd]fU'gž'ghU'h' UbX'ZYXYfU' [c] Yfba Ybh XYdUf'ra Ybh'gž'UbX'bcbl [c] Yfba Ybh'W'ca a i b]m'VUgYX'cf[Ub]gU'h]cbg"'GcW]U'k cf_]b'h'fj Ybh]cbg'a Um]b'Wi XY'dc']W'ž'fY'gYUf'W'ž'W'ci bgY`]'b[ž'WU'gY'k cf_ 'UbX'W'ca a i b]m'k cf_'Mci 'k]`XYj Y'cd'[YbYfU'gcW]U' k cf_g_]`gž'fU'bgZYfU'V'Y'hc'U'`gcW]U'k cf_ 'W'cb'h'i]g"'H\Y'Z'fghdU'fh'cZ'd'UW'a Ybh'W'ca df]gYg'&' U'h'Y'bXUbW' XUmg'f'%'` \ci fg'U'UbX']g[YbYfU'mi bXYfU_Yb'Zci f'XUmg'dYf'k'YY_ 'Z'ca 'a]X'HYfa '&'H\Y'd'UW'a Ybh]g UW'W'ca dUb]YX'VmU'gYf]Yg'cZ' b'h' [fU]h]cb'GYa]bUfg'h'U'ghi ddcf'UbX'W'ca d'Ya Ybh'mci f'ZY'X'VUgYX`YUfb]b[ž k]h'Ub'Ya d\Ug]g'cb'h'Ycfm'dfUW]W']b'h' [fU]h]cbž'W]h]W'gcW]U'k cf_ 'UbX'W]h]W'fYZYW]cb"'H\]g'W'ci fgY']g DUfh'5'cZ'mci f'gY'W'cb'X':]Y'X'9Xi W]h]cb'd'UW'a Ybh'k \]W'W'cb'h]bi Yg']b'hc'HYfa ' ' U'h'h'Y'gUa Y'U[Yb'W'h]b'h'Y W'ci fgY'GcW]U'K cf_ 'DfUW]W' @]j Y` ('D'UW'a Ybh'6ž'U'h'h'Y'YbX'cZk \]W' [fUX]b[']g'Z]bU']nYX'Z'cf'V'ch' W'ci fgYg"

7ci fgY'@YUfb]b['Ci h'W'ca Yg

%` ðYbh]ZmUbX'Yj U'i U'h']b_g'VY'hk YYb'gcW]U'k cf_ 'h'Ycfm'UbX'dfUW]W'"
&" I bXYfU_Y'gm]hYa U]h]W]bei]fmk]h'UbX'cb'VY\U'ZcZ]bX]j]Xi U'gž'W'ci d'Ygž'ZJa]]Ygž[fci dg'UbX'f' W'ca a i b]h]Yg"
' " J U']XU'h' h'Y]f'XYj Y'cd]b['dfcZ'gg]cbU']XYbh]m'fYZYW]j Y'm'h'fci [\ci h'h'Y'd'UW'a Ybh'
(" W'ca a b'g'h'U'h']b]h]h]j Y'UbX'f'Yg'dc'bg]V']h'fU'X'gž'W'g]g'da cb'g'h'HYfa Ybh'6]g'Z'g]Yg`

' " Mci f'XU]m8]UfmUbX'k YY_`mDfUWqWV`>ci fbU`fhYgY`Wcbhbi Y`Zcf`Vch`DUfh5`UbX`DUfh6`cZhY
d`UWYa Ybft"

(" Mci f@YUfb]b[`7cbfUWqXYj Y`cdYX`]b`Wcbgi`hUjcb`k]h`hY`:`]Y`X`9Xi WUrcf"

)" ̄hY[fUjcb`GYa]bUfg`Uhi b]j`Yfg]mXi f]b[`d`UWYa Ybftk \Yfy`k cf_`k]`VY`gYhUbX`h]a Y`U`cWUqYX`Zcf
]fg`Wca d`Yhcb"

5ggYgga Ybh&. 'bHY[fUhc b'GYa]bUf'UWvj]hYg

GHUfhXUHY. 'Bch5dd']WUV'Y

8YHU]`g.

5`fUb[Y`cZ]bHYfUWvj Y`UbX`k f]HYb`WUgg`UWvj]hYg`fYW]j Y`j YfVU`Z`YXVUW`]b`WUgg`Z`ca`h`Y`h`h`cfz`UbX`UfY`fUHYX`cj YfU`gUhgZJWc`fmc`f`i`bgUhgZJWc`fm`

5XX]hcbU`XYHU]`g.

GY`A`ccX`Y`Z`f`Z`f`HY`f`XYHU]`"

Hi`fb]hjb`gYHjb[. `H\]g`]g`bchU`Hi`fb]hjb`Ugg][`ba`Ybh

5ggYgga Ybh' . '@YUfb]b[`7`cbfUWv`

GHUfhXUHY. `8Um`%`cZd`UW`a`Ybh

@Yb[`h. `\$\$\$`k`cfXg`fYI`W`X]b[`h`a`d`UHY`L`

8YHU]`g.

H\Y`@YUfb]b[`7`cbfUWv]g`d`fYd`UfYX`]b`h`Y`Z`f`gh`k`c`k`YY`_`g`c`Z`h`Y`d`UW`a`Ybh`V`m`h`Y`g`h`i`X`Y`b`h`]b`W`c`b`g`i`h`U`h`c`b`k`]h`h`Y`f`:`]Y`X`9`X`i`W`h`c`f`i`g`]b[`h`Y`h`a`d`U`H`U`j`U`]U`V`Y`c`b`A`c`c`X`Y`" `H\Y`@YUfb]b[`7`cbfUWv]h`g`U`H`Y`g`h`Y`Y`U`f`b]b[`[`c`U`g`U`b`X`f`Y`U`H`Y`X`Y`U`f`b]b[`h`U`g`_`g`" `#`i`g`l`c`k`g`l`c`k`h`Y`g`Y`h`U`g`_`g`k`]"`]b`W`f`Y`U`g`Y`]b`W`c`a`d`Y`I`]h`m`c`j`Y`f`h`Y`g`Y`a`Y`g`h`f`z`[`]`Y`g`[`i`]X`U`b`W`v`c`b`h`Y`d`f`c`W`g`g`Y`g`c`Z`Y`U`f`b]b[`h`c`V`Y`i`h`]g`Y`X`z`W`U`f`]Z`Y`g`f`c`Y`g`U`b`X`f`Y`g`d`c`b`g`]V`]h`Y`g`U`b`X`Y`g`h`U`V`]g`l`Y`g`W`Y`U`f`Y`I`d`Y`W`U`h`c`b`g`Z`c`f`h`Y`Y`b`h`f`Y`d`U`W`a`Y`b`h`"

H\Y`@YUfb]b[`W`c`b`f`U`W`v]g`f`Y`j`Y`k`Y`X`V`m`h`Y`@]U]g`c`b`H`i`h`c`f`k`]h`]b`h`k`c`k`YY`_`g`c`Z`g`i`Va`]g`g`]c`b`" `Z`X`Y`h`f`a`]b`Y`X`h`c`V`Y`c`Z`g`U`h`g`Z`J`W`c`f`m`e`i`U`]h`m`i`U`f`g`U`h`g`Z`J`W`c`f`m`f`[`f`U`X`Y`]g`Y`b`h`f`Y`X`]b`A`c`c`X`Y`U`b`X`V`f`]Y`Z`W`c`a`a`Y`b`h`g`U`f`Y`Y`b`h`f`Y`X`V`m`h`Y`h`h`c`f`" `Z`X`Y`h`f`a`]b`Y`X`h`c`V`Y`]b`W`c`a`d`Y`H`i`c`f`i`bgUhgZJWc`f`m`h`Y`[`f`U`X`Y`]g`k`]h`h`Y`X`U`b`X`h`Y`g`h`i`X`Y`b`h`]g`W`c`b`h`U`W`v`X`V`m`h`Y`@]U]g`c`b`H`i`h`c`f`U`b`X`f`Y`e`i`Y`g`h`f`X`h`c`f`Y`j`]g`Y`U`b`X`f`Y`g`i`Va`]h`d`Y`f`h`Y`d`f`c`W`g`g`c`i`h`]b`Y`X`V`Y`c`k`"

5`d`]Y`W`v`g`c`Z`k`c`f`_]b`G`C`7`K`(`\$`%`+`U`f`Y`l`i`f`X`Y`f`Y`e`i`]f`Y`a`Y`b`h`g`X`i`Y`h`c`h`Y`d`f`c`Z`Y`g`g`]c`b`U`d`f`U`W`v]W`f`Y`e`i`]f`Y`a`Y`b`h`g`c`Z`h`Y`6`U`W`v`Y`c`f`c`Z`G`c`W`U`K`c`f`_`f`k`c`b`g`l`d`f`c`[`f`U`a`" `Z`h`Y`@YUfb]b[`7`cbfUWv]g`b`ch`X`Y`h`f`a`]b`Y`X`V`m`h`Y`7`c`i`f`g`Y`7`c`b`j`Y`b`c`f`h`c`V`Y`c`Z`U`g`U`h`g`Z`J`W`c`f`m`g`h`U`b`X`U`f`X`z`g`h`i`X`Y`b`h`g`k`]"`U`j`Y`c`b`Y`c`d`d`c`f`h`b`]h`m`i`c`f`Y`j`]g`Y`U`b`X`f`Y`g`i`Va`]h`h`Y`U`g`g`Y`g`g`a`Y`b`h`h`U`g`_]b`W`c`b`g`i`h`U`h`c`b`k`]h`h`Y`7`c`i`f`g`Y`7`c`b`j`Y`b`c`f`U`b`X`z`k`l`Y`f`Y`U`d`d`f`c`d`f`]U`H`z`h`Y`@]U]g`c`b`H`i`h`c`f`U`b`X`:`]Y`X`9`X`i`W`h`c`f`" `F`Y`g`i`Va`]g`g`]c`b`a`i`g`h`V`Y`g`i`d`d`c`f`h`X`V`m`h`Y`7`c`i`f`g`Y`7`c`b`j`Y`b`c`f`" `I`b`Y`g`g`h`Y`f`Y`U`f`Y`W`c`a`d`Y`]"`[`f`c`i`b`X`g`z`h`Y`g`h`i`X`Y`b`h`k`]"`b`c`h`l`U`j`Y`h`Y`c`d`d`c`f`h`b`]h`m`i`c`f`Y`g`i`Va`]h`k`l`Y`f`Y`h`Y`f`U`h`]b[`g`U`b`X`W`c`a`a`Y`b`h`g`Z`c`a`h`Y`:`]Y`X`9`X`i`W`h`c`f`]b`X`]W`h`Y`h`Y`g`h`i`X`Y`b`h`g`d`Y`f`z`c`f`a`U`b`W`v`]g`i`bgUhgZJWc`f`m`" `H\Y`X`Y`U`X`]b`Y`Z`c`f`f`Y`g`i`Va`]g`g`]c`b`k`]"`V`Y`U`[`f`Y`Y`X`i`d`c`b`V`m`h`Y`7`c`i`f`g`Y`7`c`b`j`Y`b`c`f`z`h`Y`@]U]g`c`b`H`i`h`c`f`U`b`X`h`Y`:`]Y`X`9`X`i`W`h`c`f`" `H\]g`c`d`d`c`f`h`b`]h`m`]g`U`j`U`]U`V`Y`h`c`U`" `g`h`i`X`Y`b`h`g`Y`b`f`c`" `Y`X`]b`G`C`7`K`(`\$`%`+" `H\Y`c`d`d`c`f`h`b`]h`m`]Z`c`f`f`Y`!`g`i`Va`]g`g`]c`b`k`]"`b`c`h`l`U`j`Y`U`b`Y`Z`Y`W`h`c`b`K`5`A`U`g`G`C`7`K`(`\$`%`+"`]g`[`f`U`X`Y`X`g`U`h`g`Z`J`W`c`f`m`#`bgUhgZJWc`f`m`c`b`m`"

5XX]hcbU`XYHU]`g.

5 hYbXUbW F Yei]fYa Ybhg

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

7`YU_< /`K]gcb`>f&\$%-E`A U_]b[`h`Y`A`cghcZ:]Y`X`D`UW`a`Yb`h`H`fX`9X]hcb``7`Yb[U[Y`@YUfb]b[ž
5i`ghfU`]U"

<YU`m? /`A`i` \c`UbX`>f&\$%-E`K`f]h]b[`G_]`g`Zcf`GcW]U`K`cf`Yfg`ž`H`fX`9X]hcb`ž`GU[Y`Di`V`]W]hcbg`žI`?"

7`ci`fgY`Ci`h]bY`GC`7`K`(\$%+`g`lci`X`VY`fYUX`]b`Wc`b`bW]cb`k`]h`7`ci`fgY`Ci`h]bY`GC`7`K`(\$%`!`GcW]U`
K`cf`_`DfUW]W`@Yj`Y``(`D`UW]a`Ybh6"

h]g`h`Y`fYgdcbg]V])micZU``gh`XYbhg`h`fYUX`h`Y`D`UW`a`Ybh`A`Ubi`U`df]cf`h`h`Y]f`d`UW`a`Ybh`H`g
XcW`a`Ybh]g`Uj`U]UV`Y`]b`A`ccX`Y`"

F YWca`a`YbXYX`F Ygci fWg

5XX]hcbU`fYUX]b[g`UfY`Uj`U]UV`Y`cb`]b`h`Y`GC`7`K`(\$%+`#GC`7`K`(\$%`A`ccX`Y`G]hY"

7`ci`fgY`9j`U`i`Uh]cb`UbX`8Yj`Y`cda`Ybh

Gh`XYbhZYXVUW_]g`k`Y`Wca`Y`h`fci`[` \ci`h`h`Y`h`fa`"

h`UXX]hcb`ž`gh`XYbhg`UfY`gi`fj`Ym`X`UVci`h`h`Y]f`YI`dYf]YbW`U`h`h`Y`YbX`c`Z`h`Y`d`UW`a`Ybh`UVci`h`h`Y`ei`U])micZ
h`Y]f`YI`dYf]YbW`c`Z`gi`dYf]`]g]cb`UbX`YUfb]b[``H`Y`m`UfY`U`gc`YbWc`i`fU[YX`h`c`Wca`d`Y`h`h`Y`A`m9I`dYf]YbW
gi`fj`Ym`f`

DfYj`]ci`g`gh`XYbhZYXVUW_]`Ug`dfca`d`h`X`f`Y!]a`U[]b]b[`UbX`f`Y!XYj`Y`cda`Ybh`c`Z`h`Y`7`Uf`Y`Y`fg`Gma`dcg]i`a`ž
d`UW`a`Ybh`XcW`a`Ybhg`UbX`g`Ya`]bUf`a`U`h`f]U`g"

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

Hifb]hb'Gi Va]gg]cb

Ẓmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UH'Ya dh]b['hc'gi Va]hmc'i f'Ugg][ba YbhiH'fci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'- ' ,) " ' ' %cf'Ya U] 'H'Ya 'cb'YI HYfbU'HY'gji ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY' , .\$\$Ua '—%\$.\$\$da 'cb'k YY_XUmgi'UbX'-. .\$\$Ua '—) .\$\$da 'cb'k YY_YbXg'f1 *) 'XUmgi'U'm'UfL" Ẓmci
UfY'i bUV'Y'hc'gi Va]hmc'i f'Ugg][ba YbhiXi Y'hc'U'Zi 'hk]H'Hi fb]hb' mci 'a UmiUdd'm'Zcf'Ub'YI HYbg]cbž'Vi hmc'i
a i ghfYH]b' mci f'h]W'Yhbi a VYf'Z'ca '9I HYfbU'Gi ddcfhfU'cb['k]H'Ubmich'Yf'fY'Yj UbhXcW a Yb'gk'hc
]bWi XY'Ug'Yj]XYbW'hc'gi ddcfhmci f'YI HYbg]cb'Udd'j]W]h]cb" Ẓmci 'Ya U]'9I HYfbU'Gi ddcfhmci 'k]`

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

D`U[]Uf]ga `]g`i g]b[`hY`k cfXg`cf`]XYUg`cZc`hYfg`UbX`dfYgYbh]b[`hYa `Ug`mci f`ck b``#WUb`hU`Y`a Ubm
Zcfa gZ`Zca `XY`]VYfU`h`V`X`Y`U`h]b[`hc`UW`Y`X`Y`b`U`m`W`c`d`m]b[`Zca `U`gci f`W`k]h`ci hUW`bck `YX[Ya Yb`h`

I BGK `[fci dg`d`U[]Uf]ga `]bhc`hY`Zc`ck]b[`W`h`Y[cf]Yg.

7 cdm]b[.`i`g]b[`hY`gUa Y`cf`j Yfmg]a]Uf`k cfXg`hc`hY`cf][]bU`hY`hcf`]XYU`k]h`ci hUW`bck `YX[]b[`hY`

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wcdmf][\hžI BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5Ww'dhUV'Y'I gY'cZ I BGK '⇒H'F Ygci fW'g'Dc`]Wn
- VY'Uk UfY'cZh'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dYW'X'cZYj Yfmcby`]b'h'Y'I BGK 'Wca a i b]m
- `cWJh'gYfj]Wg'UbX'j]bZcfa Uh]cb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZh'YgY'UfYUg'k]`VY'ZJa]]Uf'hc'mci ž'ch'Yfg'k]`VY'byk "; U]b]b['U'gc`X'i bXYfghUbx]b['cZU`h'Y fY'UH'X'UgdYW'g'cZ9@G9'k]`Y'd'mci 'a U_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\hd. #gj V'YWf i \]XYg" \]VfUfm'i bgk "YXi "Ui #` \]gY#JVci h' \]gY](#)

5 WUXYa]W=Zcfa Uh]cb

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`tc.