



H\Y`bi a VYf`cZ`a cV]`Y`d\cbY`UWWW`ggcf]Yg
YbhYfdf]gYg`]g`]bWfYUg]b[`Uh`h\Y`gUa Y`h]a Yž`h\Y
]a UWgWfYYb`fYd`UW`a Ybh`a Uf`_Yh`]g`U`gc
YI dYf]YbW]b[`U`[fYUh`k Uj Y

-b`ZUWž`Zfca`h\Y`a cV]`Y`d\cbY`UWWW`ggcf]Yg`]bXi`ghfm`WUhy`[cfmž`W`Uf`[Yf`cf`f`gh`h\Y`h]d`cZ`h\Y
]WfVYf["

H\Y`fYgYUfW`Zci`bX`h\U`h`a cV]`Y`d\cbY`UWWW`ggcf]Yg`WU`b`VY`fci`[`\`m`X]j`]XYX`]bhc`Vi`]h]b`a cV]`Y`
d\cbY`UWWW`ggcf]Yg`UbX`YI`hYfbU`a cV]`Y`d\cbY`UWWW`ggcf]Yg`hk`c`WUhy`[cf]Yg`"6i`]h]b`a cV]`Y`
d\cbY`UWWW`ggcf]Yg`]bWi`XY`@78`gWfYYbž`hci`W`gWfYYbž`WUgYž`VUhhYfmž`\YUXgYhž`W`Uf`[Yfž`WUa`YfUž`
gk`]hW`_Ymž`cW`_Ymž`hci`W`dYbž`XUhu`]bYž`YhW`H\Y`YI`hYfbU`a cV]`Y`d\cbY`UWWW`ggcf]Yg`]bWi`XY`U`
a cV]`Y`d\cbY`WUgYž`dfchYWhj`Y`Z]`a ž`Ub`[Yfž`ghmi`gž`YhW`GdYW]Z]WU`mž`W`Uf`[Yfž`XUhu`]bYž`a cV]`Y`
dck`Yf`gi`dd`mž`a cV]`Y`d\cbY`VUhhYfm`WU`b`U`gc`VY`X]j`]XYX`]bhc`dck`Yf`gi`dd`m`UWWW`ggcf]Yg`/K`]fYX`
YUfd\cbYgž`6i`Yhcch`YUfd\cbYgž`gdYU`_Yfgž`YhWž`WU`b`VY`WUgg]Z]YX`Ug`YUfd\cbY`ghYb]b[`WUgg`"
-b`UXX]h]cbž`h\YfY`UfY`g\Y`U`bX`Wčj`Yf`dfchYWh]cb`gi`W`Ug`a cV]`Y`d\cbY`WUgYž`YI`hYfbU`Ybg`UbX`
ch\Yf`dYf]d\YfU`g`cZ`h\Y`YI`dUbg]cb`cZ`h\Y`WUhy`[cfmž`Ug`k`Y`Ug`UWWW`ggcf]Yg`gi`W`Ug`a cV]`Y`
d\cbY`dUk`bg"

5WwčfX]b[`hc`h\Y`XUhu`cZG`_m`9mYž`h\Y`W`ffYbhYbhYfdf]gY`bUa`Y`cf`Vi`g]bYgg`gWčdY`]b`7\]bU`
]bWi`XYg`a cV]`Y`d\cbY`UWWW`ggcf]Yg`ž`UbX`h\Y`bi`a VYf`cZ`a cV]`Y`d\cbY`UWWW`ggcf]Yg`fY`UhYX`
YbhYfdf]gYg`]b`cdYfUh]cbž`YI`]gh]b[ž`a`cj`]b[`]b`UbX`a`cj`]b[`ci`h]g`bYUf`m`(-`\$ž\$`\$`"5a`cb[`h\Ya`ž`
bYUf`m`+\$i`cZ`h\Y`fY`UhYX`YbhYfdf]gYg`k`YfY`YghUV`]g\YX`k`]h\]b`Z]j`Y`mY`Ufg`":`fca`h\Y`dYfgdYWhj`Y`
cZ`fY`[`cb`U`X]ghf]Vi`h]cbž`:`i`Ub[`Xcb[`Dfcj`]bW`U`g`h\Y`Uf`[`Ygh]bi`a`VYf`cZ`a`cV]`Y`d\cbY`
UWWW`ggcf]Yg]fY`UhYX`YbhYfdf]gYgž`UWwči`b]h]b[`Zcf`bYUf`m`%(\$ž\$ž\$ž`UWwči`b]h]b[`Zcf`&-`i`"

-h]g`k`cfh`a`Ybh]cb]b[`h\Uh]b`h\Y`dUgh`Z]j`Y`mY`Ufgž`h\Y`bi`a`VYf`cZ`a`cV]`Y`d\cbY`UWWW`ggcf]Yg]`
fY`UhYX`YbhYfdf]gYg`\Ug`Wčbh]bi`YX`hc`f]gYž`k`]h\`Ub`Ubbi`U`[`fck`h\`fUhy`cZ`a`cfY`h\Ub`%)`i`"

DYcd`Y`a`U]bhYbUbW`cZ`c`X!ZUg\]cbYX`Yei`]da`Ybh`a`UmU`gc`\Uj`Y`gYj`YfY`W`Ub`[`Yg`":`cf`hY`W`b]WU`
Wčbgi`h]b[`cf`a`cfY`]bZ`cfa`Uh]cb`UVci`h]a`UWgWfYYb`fYd`UW`a`Ybhž`gYbX`Ub`Ya`U`]
hc`[\]bZc4`cf\]k`\n`Wča`..](#)

5g`h\Y`a`Uf`_Yh`gWU`Y`Wčbh]bi`Yg`hc`YI`dUbXž`h\Y`]bXi`ghfm`dUhhYfb`]g`]bWfYUg]b[`m`WYUf`":`YbYFU`m`
gdYU`_]b[`ž`h\Y`W`ffYbh`a`cV]`Y`d\cbY`UWWW`ggcf]Yg`]bXi`ghfm`WU`b`VY`X]j`]XYX`]bhc`h\YfY`YW`Y`c`bgž`
g\ck`]b[`U`d`mfUa`]X`X]ghf]Vi`h]cb`"@c`WUhyX`Uh`h\Y`hcd`cZ`h\Y`d`mfUa`]X`]b`h\Y`Z]fgh`YW`Y`c`bž`]g`
D]bg\Yb[`ž`@]Ubž`GW`X`UbX`Ubch\Yf`fYdfYgYbHUh]`Y`cZ`h\Y`bUh]cbU`dfcXi`Wh`VfUbX`a`cV]`Y`d\cbY`
UWWW`ggcf]Yg`YbhYfdf]gYg`/`h]g`Z`c`k`YX`Vm`<`i`Uk`Y`ž`L`]Uca`]`UbX`ch\Yf`a`cV]`Y`d\cbY`
a`Ubi`ZUW`i`fYfg`gY`]b[`a`cV]`Y`d\cbY`UWWW`ggcf]Yg`/5`h`h\Y`V`ch`ca`cZ`h\Y`d`mfUa`]X`UfY`h\Y`j`Ugh`
bi`a`VYf`cZ`a`cV]`Y`d\cbY`UWWW`ggcf]Yg`k`\c`YgU`Yfg`cf`fYhU]`Yfg"

-b`hYfa`g`cZ`a`Uf`_Yh]g]nYž`Ub`cdYb`fi`Y`]g`h\Uh`h\Y`a`cV]`Y`d\cbY`fYdU]f`a`Uf`_Yh]g`%)`!`&`h]a`Yg`



Uf[YfVUgYX'cb'h\Y'bi a VYf'cZ\UbXgYhg'h'ck bg" b'ch\Yf'k cfXgž'a cgh'Wcbgi a Yfg'W ffYbh'mi gY
a cV]Y'd\cbYg'k]h\ 'a cfY'h\Ub'cbY'XUu'WUV'Yž'WUf[Yf'\YUXž'd\cbY'WUgY'UbX'ch\Yf
UWwggcf]Yg" H\Y'd\cbY'X]X'bch'WU b[Yž'h\Y'bi a VYf'cZ'XUu'WUV'Yg'a UmfYUW'Z] Y'cf'g]l "

H\Y'UVcj Y' dmfUa]X'X]ghf]Vi h]cb"]g'U'VYhYf'gi a a UfmcZ'h\Y'W ffYbh'g]hi Uh]cb'cZ'Xca Ygh]W
a cV]Y'd\cbY'UWwggcf]Yg'YbhYfd]gYg"<Y'U'gc'dc]bhYX'ci h'h\Uh'k \]Y'h\Y'bi a VYf'cZ
YbhYfd]gYg']b'h\Y'a cV]Y'd\cbY'UWwggcf]Yg']bXi ghfm]g]bWfYUg]b[ž'h\Y'a Uf_Yh]g'U'gc
YI dYf]YbW]b['U'[fYUh'k Uj Y'cZgUbX"

H\Y'bi a VYf'cZ'a cV]Y'd\cbY'UWwggcf]Yg'YbhYfd]gYg']g]bWfYUg]b['Uh'h\Y'gUa Y'h]a Yž'h\Y']a UW
gWfYyb'fYd'UWw'a Ybh'a Uf_Yh]g'U'gc'YI dYf]YbW]b['U'[fYUh'k Uj Y"

H\Y'['cVU'Wcbgi a Yf'Y'YWhfcb]Wg'fYdU]f'UbX'a U]bhYbUbW'a Uf_Yh]g'YI dYWHYX'hc'[fck 'Zfca ' ' , "\$%V']']cb]b'h\Y'Z]fgh\U'ZcZ&\$&%&'hc'' - ") 'V']']cb]b'h\Y'gYWcbX'\U'ZcZ&\$&ž'k]h\ 'U
Wcbh]bi ci g'mf]g]b['Wca dci bX'Ubbi U' [fck h\ 'fUhy' f75; F' "H\Y']bWfYUgY'k Ug'df]a Uf]m'Xi Y'hc
cdYfUh]cbU'WU'Yb[Yg'Ug'j Uf]ci g]a UWgWfYyb'fYd'UWw'a Ybh'Wca dUb]Yg'fYUffUb[YX'h\Y]f
cdYfUh]cbg'UbX'fYWc] YfYX'Zfca 'h\Y']a dUWh'cZ'7CJ -8!%- ž'k \]W'YUf]Yf'YX'hc'fYghf]Wh]j Y
WcbhU]ba Ybh'a YUgi fYgž]bWi X]b['gcW]U'X]ghUbWw'gž'fYa chY'k cf_ž'UbX'h\Y'Wcgi fY'cZ'Wca a YfW]U
UWh]j]h]Yg" H\Y'a Uf_Yh]g'YI dYWHYX'hc'fYUWw' ' &%"* 'V']']cb 'Vm'&\$&) ž'k]h\ 'U'75; F' 'C: ', "%a "

: UWc'fg'h\Uh-UZZYWh'h\Y'Wc'gh'cZ]a UWgWfYyb'fYd'UWw'a Ybh

H\Y'7CJ -8!%- 'dUbXYa]W\Ug'\UX'U'a U'cf]a dUWh'cb'h\Y'Wcbgi a Yf'Y'YWhfcb]Wg'fYdU]f'UbX']a UW
gWfYyb'fYd'UWw'a Ybh]bXi ghf]Ygž'Ug'[cj Yfba Ybhg'Ufci bX'h\Y'k cf'X'\Uj Y']a d'cgYX'V'cW_UXYg'UbX
fYghf]WhYX'bcblYggYbh]U'gYfj]W'g'hc'dfYj Ybh'h\Y'gd'fYUX'cZ'h\Y'j]fi g" F'YdU]f'UbX'a U]bhYbUbW
gYfj]W'g'UfY'\YUj]m'XYdYbXYbh'cb''UVcfž'UbX'h\Y'Uj U]UV']]hmcZ'UVcf'Xi f]b['gi W'U'dUbXYa]W]g
U'\i [Y'WU'Yb[Y" 'A U]bhYbUbW']bXi ghf]Yg']b'h\Y']b]hYX'GhUhgž'h\Y']b]hYX'?]b[Xca ž; Yfa Ubmž
-H'U'ž'h\Y'A]XX'Y'9Ugh'UbX' -bX]U'\Uj Y'U'gc'gYyb']bWfYUgYX''UVcf'Wc'ghg'Xi Y'hc''UVcf'g\cfhU[Yg
Xi f]b['h\Y'V'cW_UXY''C'b'5j YfU[Yž'H\Y'F'YdU]f' -bXi ghfm'F'YdU]fg'5Vci h'&) 'A]']cb '9'YWhfcb]W
8Yj]W'g']b'5' 'A cbh'ž'6i h'6YWU] gY'cZ@cW_Xck bg'UbX'GcW]U''8]ghUbWw' 'B'cfa gž'H\Y'DfcXi W'g'5fY
9I dYWHYX'hc'D]Y'I d'Zcf'F'YdU]f"

H\Y']bWfYUgY']b'Yei]da Ybh'ZU]i fY'fUhg'UbX'h\Y'Wc'gh'VYbYZ]h'cZ'gYfj]W]b['c'X'Yei]da Ybh'fUh\Yf
h\Ub'X]gd'cg]b['cZ'c'X'Yei]da Ybh]g'YI dYWHYX'hc'Xf]j Y'h\Y']a UWgWfYyb'fYd'UWw'a Ybh'fYdU]f'UbX
a U]bhYbUbW' 'a Uf_Yh]'6'fUbXYX'UbX'bcblVfUbXYX'ck !Wc'h]a UWgWfYyb'fYd'UWw'a Ybh'cZhYb'ZccX
h\Y'a Uf_Yh'UbX'fYei]fY'fYdU]fg'Xi Y'hc'dccf'a UhYf]U'ei U']hmc'f'fY[i 'Uf'a U]bhYbUbWw''<ck Yj Yfž
fYgYUfW'g\ck g'h\Uh'a Ubm'a YfW'Ubhg'UfY' bck 'hU_]b['U'X]ZZYfYbh'UddfcUW'ž'Vi]'X]b['d'fcXi W'g
h\Uh'UfY'YUgm'hc'Z]i ž'Ug'Z]i]b[']a UWgWfYyb'fYd'UWw'a Ybh'd'fcV'Ya g]g'U'k Umg'a cfY'Wc'gh'YZZYWh]j Y
h\Ub'Vi m]b['bYk 'd'fcXi W'gž'h'i g'ghfYb[h\Yb]b['W'ghca Yf'f'hi gh': cf'hYW'W]WU'Wcbgi 'h]b['cf'a cfY
]bZcfa Uh]cb'UVci h]a UWgWfYyb'fYd'UWw'a Ybhž'gYbX'Ub'Ya U]hc: [\]bZc4 cf\]k \\]h'Wca](#)

: UWc'fg'UZZYWh]b['h\Y'df]W'cZ]a UWgWfYyb'fYd'UWw'a Ybh



5g'hLY'a cgh'k]XY'mi gYX'X][]hU'dfcXi Wng'za cV]Y'd\cbYg'UbX'hUV'Yhg'UfY'VYWca]b['a cfY
UZcfXUV'Yz'Vi h'a U]bhYbUbW'Wc'ghg'fYa U]b'\][\'"5a cb['U''hLY'fYUgcbg'Zcf'a cV]Y'd\cbY
ZU]i fYz'UW]XYbH'gWfYYb'XUa U[Y'WU] gYX'Vm'ZU''b['cf'\]hh]b['jg'hLY'a cgh'Wca a cbz'Vi h'gi W
UW]XYbH'gWfYYb'XUa U[Y]g'bch[i UfUbhYX'Vm'Ubma cV]Y'd\cbY'VfUbXz'UbX'hLY'Wc'ghcZ
fYd'UW]b['hLY'gWfYYb]g'cZnYb'VYmcbX'hLY'YI dYWUh]cbg'cZ'Wc'bgi a Yfg"

7\]bU'ja UWgWfYYb'fYd'UW'a Ybh'a cV]Y'd\cbY'UW]ggcf]Yg'a Uf_Yh'z]bWi X]b['ja UWgWfYYb
fYd'UW'a Ybh'z]g'YI dYW]X'hc'fYUW') \$'V]''cb'mi Ub']b'gU'Yg'Vm'&&&Z'UW'cfX]b['hc'U'ZcfYUW]gh'Vm
7\]bU'7YbhfU'HY'Yj]g]cb'ja UWgWfYYb'fYd'UW'a Ybh'Z]bUbW]U'W'UbbY''-b'hLY'Wc'bhYI'hcZ['cVU'') ;
Wca a YfW]U'nUh]cbz'hLY'bYI h') 'mYUfg'k]''VY'hLY'dYf]cX'cZ'hLY'fUd]X['fck h\cZ'hLY') ; ']bXi ghfm"
8f]j Yb'Vm'Wc'bh]bi YX['fck h\ca Ybh'a 'UbX'U'fUd]X'm'XYj Y'cd]b[') ; 'YWc'gmghYa z'hLY'bi a VYf'cZ
) ; 'i gYfg'k cf'Xk]XY'k]''fYUW' ' 'V]''cb']b'hLY'bYI h'Z]j Y'mYUfgz'UW'cfX]b['hc'7ca A G'hYW'bc'c[m
YI dYfh'9f]W'ggcb''5bX'Vm'hLY'YbX'cZ'&&) z') ; 'k]''Wc'j Yf'+) 'dYfW'bh'cZ'hLY'k cf'X'ja UWgWfYYb
fYd'UW'a Ybh'dcdi 'Uh]cb'UbX'\UbX'Y' () 'dYfW'bh'cZ'hLY'k cf'X'ja UWgWfYYb'fYd'UW'a Ybh'a cV]Y
XUHu'hfUZZ]W

HLY'fUd]X'XYj Y'cda Ybh'cZ) ; 'k]''a U_Y'hLY'XYa UbX'Zcf'U'bYk ' [YbYfUh]cb'cZa cV]Y'd\cbY
UW]ggcf]Yg'U'gc['fck "'HLY'Zcfk UfX]'cc_]b[']bXi ghfm'fYgYUfW']bgh]hi hY'YI dYW]h'hUh]b'&\$*z
hLY'a Uf_Yh'XYa UbX'Zcf'hLY'a cV]Y'd\cbY'UW]ggcf]Yg']bXi ghfm'UbX'ja UWgWfYYb'fYd'UW'a Ybh
a Uf_Yh'k]''a U]bhU]b'U' \ [\ ['fck h\ 'fUhz'Vi h'hLY' ['fck h\ 'fUhz'k]'' [fUXi U'm'XYW]bY'k]h\ hLY
[fUXi U'dcdi 'Uf]nUh]cb'cZ) ; "'-h]g'YI dYW]X'hUh]b'&\$*z'hLY'gU'Yg'j c'i a Y'cZ'hLY'a UW]bY
dUfhg']bXi ghfm]g'YI dYW]X'hc'YI WYX'&"%hf]''cb'mi Ub"

Mci f'a cV]Y'd\cbY'a cXY'XYhYfa]bYg'hLY'ja UWgWfYYb'fYd'UW'a Ybh'WUf[Y

HYWb]WU'dYfgcbbY'']b'mci f'cWU''ja UWgWfYYb'fYd'UW'a Ybh'WU'fYdU]f'U''a U'cf'VfUbXg'cZ
a cV]Y'd\cbYg'z']bWi X]b['5dd'Yz'<I 5K 9z'A 4 z'GUa gi b[z'@' 'UbX'ch\Yf'VfUbXg''<YfY'UfY'U'ZYk
ZUW'c'fg'hUh'WU'UZZYWh'hLY'Wc'ghcZ'fYdU]f]b['U'd\cbY"

: cf'gca Y'fYdU]fgz'df]M]b['k]''j Ufm'XYdYbX]b['cb'hLY'a U_Y'UbX'a cXY'cZ'mci f'd\cbY"

BYk Yf'd\cbY'a cXY'g'hYbX'hc'VY'a cfY'YI dYbg]j Y'hc'fYdU]f"

5g'd\cbY'a cXY'g'U[Yz'a U]bhYbUbW'Wc'ghg'hmd]WU''miZU''"

-Z'mci '\Uj Y'U'dUfh]W'Uf'mc'X'd\cbYz'h]h]g'U['ccX']XYU'hc'Wc'bhUW'h'mci f'bYUfYgh'fYdU]f'g'cd'hc
a U_Y'gi fY'hLYm'\Uj Y'hLY'dUfhg'hLYm'bYX'hc'Z]l ']h"

7\ccg]b['hLY'f][\h'gi dd']Yf'cZ'hLY'ja UWgWfYYb'fYd'UW'a Ybh]g'U'gc'ja dcfhUbh

[Cf\]k \ \]n'fG\Ybn\Yb'8cb\[mY'HYb\[ZY\]'9'YWfcb\]W7c"z'@hX' \]g'U'dfcZYgg\]cbU'' \]D\cbYz' \]DUXz'A UW
6cc_z'L \]Uca \]z'<i Uk Y\]z'GUa gi b\[z'Gcbmz'@ z'5gi g'fYdU\]f'dUfhg'UbX'fYdU\]f'hcc'g'gi dd'\]Yf'k \ \]W](#)



\ Ug'gYfj YX'h\ci gUbXg'cZfYdU]f'g\cdg'k]h\ 'k \c`YgU`Y`dUfhg`UbX`\i bXfYXg'cZ'h\ci gUbXg'cZ
]bX]j]Xi U`W ghca Yfg'k]h\ 'h\Y`dUfhg`bYYXYX'hc`Z]i 'h\Y]f'ck b`]D\cbYž]DUXž'A UW6cc_ž'UbX'ch\Yf
X][]hU`XYj]W'g"

Cf]k \]n"Wca`i bXYfghUbXg'h\Uh'h\YfY`]g`Wca`dYh]h]cb`]b'h\Y`a Uf_Yhd`UW`cZZYf]b[`ck Yf'df]Wgž
Vi`h'k]h\ `ck Yf'df]W'g`Wca`Yg`ck Yf'ei U`]m`Cf]k \]n'hYUa`U]a`g'hc'dfcj]XY`h\Y`VYgh'ei U`]m
W`d\cbY`fYd`UW`a`Ybh'dUfhg`UbX`fYdU]f'hcc`g`hc`U`W`ghca`Yfg`"

Cf]k \]n'dfcj]XYg`Wca`dfY\Ybg]j`Y`gc`i`h]cbg`Zcf`W`d\cbYgž`X][]hU`XYj]Wgž`7ca`di`hYf`F`YdU]f
G\cdg'k]h\`Dck`YfZi`UbX`<`UbXm`7Y`W`Y`W`_`F`YdU]f`DUW_U[]b[ž`F`YdU]f`Hcc`gž`UbX`F`YdU]f
A`UW`]bYg":`cf`hY`W`b]WU`W`bgi`h]b[`cf`a`cfY`]bZcfa`Uh]cb`UVci`h]a`UWgWfY`Yb`fYd`UW`a`Ybhž`gYbX
Ub`Ya`U]`hc` [\]bZc4`cf\]k` \ \]n"Wca`](#)