



7 ci fgY`Cj Yfj JYk

GHJZZ'7cbHJW`8YHU]`g

7cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj]`m	@cWjhcb	D\cbY
DYHf`F cVYfng	d`^fcVYfng4 i bgk "YXi "Ui	Hi YgXUm &"\$\$da !("\$\$da	F cVYfh K YVghYf`&' %D	B #5

Hi hcfj

B Ua Y	9a Uj`	5j Uj`UVj]`m	@cWjhcb	D\cbY
A jfjUa `7 UVY`c	a "WVY`c4 i bgk "YXi "Ui	B #5	B #5	B #5
5g\`Ym'a W fUH	Ug\`Ym'a W fUH 4 i bgk "YXi "Ui	B #5	B #5	B #5

GWcc`7cbHJW`bZcfa Uhjcb

GWcc`cZH`Y`5fng`UbX`A`YXJU

F cca ` %&ž@Yj Y` ž F cVYfhK YVghYf`6i j`X]b[ `fj %Ł

D\cbY. `f\$&Ł`-` , ) `( , ) \*

9a Uj`. [gUa 4 i bgk "YXi "Ui](#)

K YVg]hY. [k.k.k "Ufng"i bgk "YXi "Ui #gUa](#)

H\Y`GWcc`cZH`Y`5fng`UbX`A`YXJU`k ci `X`\_Y`h`F YgdYWz `m5W\_bck`YX[ Y`h`Y`HfUX]hcbU`7 i g`h`X]Ubgž  
h`Y`6YXY[ U`f`P`Ybg]b[ h`c`b`W`a`d`i`g`Ł; UX][ U`f`7]mUbX`5f`h`v`8Yg][ b`7`Ua`d`i`g`Y`g`Ł`U`b`X`h`Y`B`[`i`b`b`U`k`U`  
d`Y`c`d`Y`f`b`i`g`h`f`U`]U`b`8`Y`Z`Y`b`V`W`:`c`f`W`5`W`X`Y`a`m`]b`7`U`b`V`Y`f`U`Ł`c`Z`h`Y`U`b`X`g`k`Y`f`Y`Y`U`W`W`a`d`i`g`c`Z`I`B`G`K`]g`  
`c`W`h`Y`X`"

7ci fgY'8YHJ]`g

7fYX]hDc]bHg`\*`

Gi a a UfmicZ`hY'7ci fgY

H\]g`Wci fgY`dfcj ]XYg`U`Wca dfY\Ybg]j Y`]bfcXi W]cb`fc`Di V`]WF Y`U]hcbg`UbX`5Xj Yfh]g]b[ `Df]bW]d`Yg`]b`Ub  
5i g]fU`]Ub`UbX`]bhYfbU]hcbU`Wcb]hY`h`Mci`k`j`YI Ua ]bY`hY`\]g]c]fmz[ fck`h`z`UbX`Wcb]hYa`dcfUfm]bZi`YbW`cZ  
Vc]h`X]g]W]d`]bYg`"H\Y`Zci`bXU]hcbg`cZDF`UbX`UXj`Yfh]g]b[ `UfY`gh`X]YXz`Ug`UfY`hY]f`]bZi`YbW`k`]h`]b`UbX  
ci`hg]XY`cf[ `Ub]g]U]hcbg]z`UbX`hY`]b\_U[ Yg`Vc]h`X]g]W]d`]bYg`\Uj`Y`]b`hY`"Wca`a`i`b]W]hcbg`a`]`"Mci`k`j`VY  
UV`Y`h`i`bXYfg]UbX`g]a`]Uf]mi`UbX`X]ZY`fYbW`VYh`YYb`DF`UbX`UXj`Yfh]g]b[ `]b`fY`U]hcb`fc`Wca`a`i`b]W]hcb  
g]fU]h[ m]fYgY`UfW`z`a`YX]U`fY`U]hcbg]z`]bXi`g]fm`UbX`dfcZ]gg]cbU`d`U]h`k`Um]g`"Mci`k`j`U`gc`[ `U]b`Ub  
UddfY`W]U]hcb`cZ`hY`Y`h]W`X]a`Ybg]cbg`UbX`]ggi`Yg`]b`U`]YX`Wca`a`i`b]W]hcb`X]g]W]d`]bYg`"

7ci fgY`@YUfb]b[ `Ci hWca Yg

%`9i`d`U]b`hY`Z`bXUa`Yb]h`bU]h`fYg`cZDF`UbX`UXj`Yfh]g]b[ `z`]bW]i`X]b[ `hY`cf]Yg]z`Wcb]hYa`dcfUfm]dfU]W]W  
]b`U`k`]XY`j`Uf]Y`micZ`UfYbUg]z`UbX`Ya`Yf[ `]b[ `hY`bXg`"  
&`9j`U`i`U]h`Wcb]W`d]hg`cZ`di`V`]M]g`#U]i`X]YbW`g]z`fY`U]hcbg`\]dg`UbX`Y`h]W]i`dfU]W]W`"  
'`"5bU`mgY`c`W]i`UbX`]bhYfbU]hcbU`DF`W]gY`gh`X]Yg`"  
(`8Yd`cmi`bck`YX[ `Y`cZ`UbX`g\_]`g`]b`dfcZ]gg]cbU`k`f]h]b[`"

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

H\]g`Wci fgY`cZY`fg`gh`XYb]h`U`gc`]X`Zci`bXU]hcb`fc`hY`hY`cfmi`UbX`dfU]W]W`cZDF`UbX`UXj`Yfh]g]b[ `"]`h`]g]b[  
UW]X]Ya`]W]UbX`dfU]W]h]cbYf`dYfgdY]W]j`Yg`cb`dfca`ch]cbU`W`h`fY]z]h]k`]`[ `]j`Y`gh`XYb]h`]bg][ `h]g`]b]c`\ck`DF  
UbX`UXj`Yfh]g]b[ `dfcZ]gg]cbU`g`XYj`Y`cd`g]fU]h[ ]Yg`UbX`hU]W]W]g`h`UW]j]Yj`Y`cj`YfU]W]b[ `]c`U`g`UbX`gdY]W]Z]W  
cV`Y]W]j`Yg`"@Y]W]i`fYg`dfcj ]XY`YggYb]h]U`]bg][ `h]g`]b]c`\_Y]mi`hY`cf]Yg`UbX`W]gY`gh`X]Yg]z`Vi`]X]b[ `cb`UbX  
YI`h]bX]b[ `]XYUg`YbWci`bhYfYX`]b`hY`gYh]fYUX]b[ `g`"Hi`h]c]f]U`g`Ya`d`cmi`U]W]j`Y`YUfb]b[ `g]fU]h[ ]Yg]z`g]f]i`W]i`fYX  
U]fci`bX`[ `fci`d]!`U]gYX`h]Ug`g`fY`Yj`Ub]h]c`k`cf\_]b[ `]b`di`V`]W]fY`U]hcbg`UbX`UXj`Yfh]g]b[ `"]`G]h`XYb]h`fY]W]j`Y  
cb[ `c]b[ `gi`ddc]f]h]UbX`Z]YXVUW`cb`]b!`W]Ugg`k`cf`z`k`]Y`UggY]gga`Yb]h]fY`ZY]W]i`hY`]bhY[ `fU]hYX`UW]X]Ya`]W]UbX  
dfU]W]h]cbYf`dYfgdY]W]j`Yg`U]fci`bX`k`\]W]h`hY`Wci`fgY`]g`VUgYX`"

## 5ggYgga Ybh

H\]g'7ci fgY'Ci h]bY'dfcj ]XYg'cb`mi\Y'a cghVUg]W]bZ:fa Uh]cb'fY[ UfX]b[ 'hY'UggYgga Ybhg'"8YHJ]YX ]bghfi W]cbg'Zcf'U''UggYgga Ybhg'UfY'Uj U]UV'Y'cb'A ccX'Y"

Mci 'a i ghW'a d`YH'UbX'gi Va ]hU''h'fYY'UggYgga YbhHJ\_g']b'cfXYf'hc'dUgg'h'Y'W'ci fgY"

### 5ggYgga YbhHJ\_g'

5ggYgga YbhHJ_g'	K Y][ \h	8i Y'8UH'	Gh XYbh@YUfb]b[ Ci hW'a Yg'5ggYggYX
7 Ua dU][ b'5bU'mg]g DfYgYbhHJ]cb'	' \$i	K YY_' ]b'WUgg	%ž&ž
7 ]YbhD]hW'8Yj Y`cda Ybh A ]Ygfcbyg'	&\$i	K YY_g') ž+ž, / '- ]b'WUgg	%ž&ž(
7 ]YbhD]hW'	) \$i	K YY_'%\$	%ž&ž(

### 5ggYgga Ybh8YHJ]`g

5ggYgga Ybh% '7 Ua dU][ b'5bU'mg]g DfYgYbhHJ]cb

GHUfhXUH'.

8YHJ]`g.

h' [ fci dg'cZ( žgh XYbhg'XY'j Yf%) !a ]bi h' dfYgYbhHJ]cbg'UW'W'a dUb]YX'Vmgi Va ]gg]cb'cZg']XYg'hc A ccX'Yžk ]h'k f]h'Yb'ZYXVUW\_dfcj ]YX"

5ggYgga Ybh& '7 ]YbhD]hW'8Yj Y`cda YbhA ]Ygfcbyg

GHUfhXUH'.

8YHJ]`g.

K YY\_'miHJ\_g'XYj Y`cd]b[ 'hY'ZbU''UggYgga YbhZcf'k \]W'gh XYbhg'gi Va ]hk cf\_]!b]dfc[ fYgg'UbX'fYW]j Y j YfVU'Z:fa Uh] Y'ZYXVUW\_]b'hi hcf]U"

5ggYgga Ybh' . '7 ]YbhD]hW'

GHUfhXUH'.

8YHJ]`g.

5 &ž) \$\$!k cfX'dfUW]W]k f]h]b[ 'hJ\_g'\_h.Uh]bW' XYg'U'W]YbhD]hW'UbX'W'bhYbhYI Ua d`Yg'gi Va ]h'X'hc Hi fb]h]bžk ]h'k f]h'Yb'ZYXVUW\_"

5 hYbXUbW F Yei ]fYa Ybhg

Gh XYbhg UfY gfcfb[ mYbWci fU[ YX'hc UhhYbX'U''WUggYg UbX'fYj ]Yk ''YWhi fY'fYWcfX]b[ g"

7 ci fgY'GWXYXi `Y

[J \]Yk WUgg'ha YhUVY](#)

H]a YhUV`Y`




		]bZcfa YX`Vf]YZZca`h`Y`W]Ybh`H\]g`k`YY`ž`k`Y`cc`_`U`h`Vf]Y`Zg`UbX`h`Y`Vf]Y`Zb[`d`f`c`W`g`g`ž`h`Y`b`h`f`b`h`c`l`c`k`f`Y`g`Y`U`f`W`X`]`g`V`c`b`X`i`W`Y`X`U`b`X`V`c`b`g`]`X`Y`f`]`h`g`d`U`W`k`]`h`b`h`Y`d`f`c`W`g`g`" `F`Y`g`Y`U`f`W`X`Z`Y`g`[`c`c`X`d`U`b`b`]`b`[`ž`k`l`]`W`X`d`f`c`j`]`X`Y`g`h`Y`g`f`i`W`h`f`Y`c`Z`U`b`m`W`l`a`d`U`[`b`"
	Hi hcf]U`	K`Y`]`b`f`c`X`i`W`U`b`Y`k`a`c`X`Y`Z`c`f`h`Y`f`Y`a`U`]`b`]`b`[`W`U`g`g`Y`g`h`Y`5`[`Y`b`W`h`5`Z`Y`f`g`c`a`Y`V`f`]`Y`Z`X`]`g`W`g`g`]`c`b`c`Z`f`Y`U`X`]`b`[`g`U`b`X`V`c`b`W`d`h`g`ž`m`c`i`k`]`V`Y`[`]`b`k`c`f`_`c`b`h`Y`a`U`c`f`U`g`g`Y`g`g`a`Y`b`h`c`Z`h`Y`V`c`i`f`g`Y`!`h`Y`W`]`Y`b`h`d`]`h`W`"
K`YY`_)`.%&`C`W`c`V`Y`f`!`%*` C`W`c`V`Y`f`	@`Y`W`h`f`Y`	7`]`Y`b`h`6`f`]`Y`Z`]`b`[  H`\]g`Y`W`h`f`Y`]`g`V`c`a`d`i`g`c`f`m`U`b`X`k`]`b`c`h`V`Y`f`Y`W`c`f`X`Y`X`  #`h`l`g`k`Y`Y`_`g`Y`W`h`f`Y`ž`m`c`i`k`]`V`Y`V`f`]`Y`Z`Y`X`c`b`5`g`g`Y`g`g`a`Y`b`h`" `M`c`i`k`]`Y`U`f`X`]`f`Y`W`h`m`Z`c`a`h`Y`7`]`Y`b`h`U`V`c`i`h`h`Y`]`f`c`f`[`U`b`]`g`U`h`c`b`U`b`X`]`h`g`d`f`c`a`c`h`c`b`U`b`Y`Y`X`g`" `H`Y`f`Y`k`]`V`Y`U`b`c`d`d`c`f`h`i`b`]`m`h`c`U`g`_`e`i`Y`g`h`c`b`g`ž`X`Y`d`Y`b`X`]`b`[`c`b`h`Y`U`j`U`]`U`V`Y`h`j`a`Y`"
	Hi hcf]U`	#`h`h`h`c`f`]`U`g`ž`k`Y`k`]`Z`c`W`g`c`b`5`g`g`Y`g`g`a`Y`b`h`" `7`]`Y`b`h`D`]`h`W`" `K`Y`k`]`U`g`c`a`Y`Y`h`h`Y`Z`f`g`h`c`Z`c`i`f`X`Y`j`Y`c`d`a`Y`b`h`a`]`Y`g`h`c`b`Y`g`Z`c`f`h`Y`d`]`h`W`ž`Z`c`f`k`l`]`W`X`m`c`i`g`i`V`a`]`h`k`c`f`_]`b`!`d`f`c`[`f`Y`g`g`U`b`X`f`Y`W`]`j`Y`Z`c`f`a`U`h`j`Y`Z`Y`X`V`U`W`"
	5ggYgga Ybh	5ggYgga Ybh&`7`]`Y`b`h`D`]`h`W`8`Y`j`Y`c`d`a`Y`b`h`A`]`Y`g`h`c`b`Y`g`ž`]`b`W`U`g`g`
K`YY`_`*`.%`C`W`c`V`Y`f`!`&` C`W`c`V`Y`f`	F`Y`U`X`]`b`[	B`C`@`9`7`H`I`F`9`C`F`H`I`H`C`F`5`@`G`5`G`K`9`9`?`*`G`5`F`9`5`8`B`;`K`9`9`?`
K`YY`_`+`.&*`C`W`c`V`Y`f`!`\$` C`W`c`V`Y`f`	@`Y`W`h`f`Y`	9`Y`a`Y`b`h`g`f`h`E`G`h`f`U`h`[`m`U`b`X`H`U`W`]`W`g`  D`i`V`]`W`f`Y`U`h`c`b`g`U`b`X`U`X`j`Y`f`h`g`]`b`[`d`f`c`Z`Y`g`g`]`c`b`U`g`b`Y`Y`X`h`c`\$`%o`%o`

		<p>a YUb]b[ !a U_]b[ 'UbX'dYfgi Ug]cb'UFY'hc'di V`]W  fY`Uh]cbg'UbX'UXj Yfh]g]b[ "'H\]g'k YY_žk Y'Wcbg]XYf  \ck 'hc'WcbbYWk ]h'Ub'Ui X]YbW' ]b'dfUW]W"'#fg  fUFY'mYbci [ \ 'hc'\Uj Y'U'k ]hmiU[ ``]bY'cf'WYj Yf  ]a U[ Y. 'mci 'bYYX'hc'hY''U'ghcfmUbX'mci 'bYYX'hc  ghU[ Y'hUhY''b[ "K Y'k ]''cc_'Uh\ck 'ghcfmY''b[  k cf_gžZca 'ghfi Wñ f]b[ 'bUffU]j Yg'hc'dck YfZ `  k f]h]b[ "'6i hk Y'k ]''U'gc'Ug_'\ck 'ghcf]Yg'UFY'ghU[ YXž  k ]h'U'dUfh]W'Uf'ZcW'g'cb'h'Y'hYbX'hc'k UfXg  Yl dYf]Ybh]U'W]a dU][ bg"</p>



5ggYgga Ybh

5ggYgga Ybh' . 7 `]YbhD]hX `Xi Y`%\* "\$žBcj Ya VYf  
&\$`

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

BchUj U]UV`Y

F YWca a YbXYX`F Ygci fWg

BchUj U]UV`Y

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

K Y`UfY`Wca a ]hYX`hc`ja dfcj`]b[ `A 8-5%\$\$` `UbX`\Uj Y`VYbY]hYX`[ fYUhm]ca`ghi XYbhZYXVUW`cb`hY`  
Wci fgY`" `b`UXX]h]cb`hc`hY`A m9I dYf]YbW`gi fj Yng`WcbXi`WYX`UhY`YbX`cZYUW`gYa YghYfz`hYfY`k`]"`VY`Ub`  
cddcfh`b]m]cf`ZYXVUW`a`]X!gYa YghYf`Mci`UfY`U`gc`k Y`Wca Y`hc`Ya U]`cf`j`]g]ha YzDYHf`F`cVYfngz`UhUbm`  
dc]bh`hc`fU]gY`gdYW]Z]WcbW`fbg"

Gh XYbhZYXVUW`\_]g`Yj U`i UhYX`]b`fY`Uh]cb`hc`hY`"YUfb]b[ `cV`YW]j` Yg`cZ`hY`Wci fgY`UbX`WX`Ub[ Yg`UfY`  
]a d`Ya YbhYX`hc`ja dfcj`Y`hY`YI dYf]YbW`UbX`ci`hWca Yg`Zcf`ghi XYbhg`": cf`YI Ua d`Yz]b`&\$%+`hY`Z]bU`  
UggYgga Ybhk Ug`fYXi`WX`]b`k`Y][` \h`UbX`Vfc`\_Yb`]b`hc`hk`c`Wca`dcbYbhg`VUgYX`cb`ZYXVUW`\_]ca`ghi XYbhg`]b`  
&\$%\*"

Gi Va ]gg]cb 'cZ5ggYgga YbhiHUg\_g

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

Ʒmci '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'ggi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh  
\ci fg'UfY', .\$\$Ua '—%\$.\$\$da 'cb'k YY\_XUmg'UbX'-. \$\$Ua '—) .\$\$da 'cb'k YY\_YbXg'fl \*) 'XUmg'U'mYUfl" Ʒmci  
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 UmUdd'm'Zc'f'Ub'YI HYbg]cbž'Vi hmc i  
a i ghfYHU]b'mci f'h]W\_Yhbi a VYf'Z'ca '9I HYfbU'Gi ddcfhfU'cb[ 'k ]H'UbmcH'Yf'fY'Yj UbhXcW a YbHg'k'hc  
]bWi XY'Ug'Yj ]XYbVW'hc'gi ddcfhmc i f'YI HYbg]cb'Udd'jW]h]cb" Ʒmci 'Ya U] '9I HYfbU'Gi ddcfhmc i 'k ]  
Ui 'ca UH]WU'm'fYW]j Y'U'h]W\_Yhbi a VYfž'Vi h]Zmci 'HY'Yd\cbY'mci 'k ]'b'YX'hc'gdYW]Z]WU'mUg\_ 'Zc'f'cbY"  
Hi fb]h]b'U'gc'dfcj ]XYg'i dXUH'g'cb'H'Y]f'gmgh'Ya 'ghU'g'cb'Hk ]HYf"

; YbYfU'mž'UggYgga YbhiHUg\_g'a i ghVY'gi Va ]HYX'Y'YW'fcb]WU'mj ]U'Y]H'Yf'Hi fb]h]b'cf'U'A ccX'Y  
Ugg][ ba YbH' 'b]bg]UbVW'g'k \YfY'H'lg ]g'bc]hdccg]V'Yž]hk ]'VY'gh'UH'X'cb'mci f'Wci fgY'g'A ccX'Y'g]H'k ]H  
U'HYfbUH] Y'gi Va ]gg]cb'XYHU]g"

: cf]bZ'fa UH]cb'cb'\ck 'hc'gi Va ]hUgg][ ba YbHg'cb]bYj ]U'A ccX'Y. \h'hdg.#gh XYbH'i bgk "YXi "Ui #ck!  
gi Va ]hUgg][ ba YbH'a ccX'Y

## 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[ `h`U`W`Y`X`Y`b`U`m`W`c`d`m]b[ `Z`ca `U`gci f`W`k ]h`ci h`U`W`b`c`k `Y`X[ `Y`a `Y`b`h`

I B G K ` [ fci dg`d`U[ ]Uf]ga `]b`h`c`h`Y`Z`c`ck ]b[ `W`U`h`Y` [ cf]Yg.

7 cdm]b[ .`i`g]b[ `h`Y`g`U`a `Y`cf`j`Y`fmg]a ]U`f`k`cf`X`g`h`c`h`Y`cf][ ]b`U`h`Y`h`cf`]X`Y`U`k ]h`ci h`U`W`b`c`k `Y`X[ ]b[ `h`Y`

- i bXYfghUjX'mci f'f][ \hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[ ]Uf]ga ž'Wc'dmf][ \hžI BGK 'Gh XYbh7cXY'cZ7cbXi W'UjX'5W'W'dhUV'Y'I gY'cZ I BGK '⇒H'F'Ygci f'W'g'Dc`]W'h
- VY'Uk UfY'cZ'Y'gh'UjX'Uf'X'g'cZVY\Uj ]ci f'YI dY'W'X'cZYj Yf'mc'Y'j'b'h'Y'I BGK 'W'a a i b]m
- `cW'U'Y'g'Y'fj ]W'g'UbX'j'b'Z'c'f'a U'h'c'b'U'V'c'i h'I BGK 'UbX'I BGK '@]V'f'U'f'm

Gca Y'cZ'Y'g'Y'U'f'Y'U'g'k ]`VY'Z'Ja ]]U'f'hc'mci ž'c'h'Y'f'g'k ]`VY'b'Yk "; U]b]b[ 'U'gc`X'i bXYfghUjX]b[ 'cZU`h'Y fY'U'h'X'U'gd'Y'W'g'cZ9@G9'k ]`Y'd'mci 'a U\_Y'h'Y'a c'g'h'cZ'mci f'g'h X]Y'g'U'hl BGK ""

[\h'c'.#g'i V'Y'W'i \]X'Y'g"\]V'f'U'f'm'i b'g'k "Y'X'i "U'i #' \]g'Y'#U'V'c'i h'Y' \]g'Y](#)

