



7 ci fgY`Cj Yfj ]Yk

GHJZ`7cbHJW`8YHJ]`g

7cbj Ybcfg

B Ua Y	8			

7ci fgY'8YHJ]`g

7fYX]hDc]bng`\*`

Gi a a UfmcZ\hY'7ci fgY

H\]g`Wci fgY`dfcj ]XYg`UXj UbWX`Yj Y`]bgfhi W]cb`]b`GdUb]g\`Ub[ i U[ Y`ghi XmiZca`U`Wca a i b]WU]j Y`UbX  
hUg`!VUgYX`UddfcUWk`"Mci`k`j`XYj Y`cd`mci`f`]ghYb]b[ `UbX`gdYU\_]b[ `g\_]`g`h\fc i [ \`U`bi a VYf`cZX]ZYfYbh  
UW]j ]hYgZ`Ug`k`Y`Ug`mci`f`fYUX]b[ `UbX`k`f]h]b[ `g\_]`g`]b`GdUb]g\`"J`cWUvi`UfmUbX`[ fUa`a`Uq]WU`ghfi`W`h`fYg  
UfY`dfYgYbhYX`]b`h`Y`Wcb`hY`hcZ`W`h`fU`mfY`Yj`Ubh]ggi`Yg`"5i`X]c!j`]gi`U`k`YV`VUgYX`a`Uq]f]U`]gi`gYX`Ug`Ub  
]bhfcXi`W]cb`h`c`j`cWUvi`UfmZ`[ fUa`a`Uf`ghfi`W`h`fYg`UbX`W`h`fU`mfY`Yj`Ubh]d]Wg`"Hcd]Wg`a`Um]bW`h`Y  
]bhYfW`h`fU`Wca`a`i`b]WU]h]cbZ`W`fYbhYj`Ybng`UbX`]ggi`Yg`]b`h`Y`GdUb]g\!gdYU\_]b[ `k`cf`X`"H\Y`a`YX]i`a`cZ  
]bgfhi`W]cb`]g`GdUb]g\`"

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

%`9I`Ua`]bY`cfU`UbX`k`f]hYb`hY`hg`]b`U`j`Uf]YhmcZa`YX]U`XYU`]b[ `k`]h`Wcb`hY`a`dcfUfmidfcV`Ya`g`h`U`h`UfY  
fY`Yj`Ubh]c`h`Y`<`]gdUb]Wk`cf`X`"  
&`8`YV`U`h`c`b`dfYdUfYX`gi`V`Y`W`g`k`]h`U`XY[`fY`c`Z`Zi`YbW`h`UbX`gdc`b`h`UbY]m]b`GdUb]g\`"  
'`" `DfcXi`W`WYUfZ`XYHJ]YX`k`f]hYb`UbX`gdc`\_`Yb`X]gW`gg]cbg`cb`U`k`]XY`fUb[`Y`c`Z`gi`V`Y`W`g`i`g]b[  
Y`Z`Y`W]j`Y`[`fUa`a`Uq]WU`XYj`]Wg`UbX`Uddfcdf]Uq]j`cWUvi`Ufm`  
(`I`gY`gi`]hUV`Y`YUfb]b[ `ghfUq]`[`]Yg`h`c`Wcb]h]i`U`mYb`UbW`UbX`Yi`dUbX`UW`e`i`]fYX`g\_]`g`"

HYUWk]b[ `GhfUq]`[`]Yg`

H\]g`Wci fgY`]g`XYg][`bYX`Zcf`gh`XYbng`k`c`\Uj`Y`Z]b]g\YX`h`hYfa`YX]Uq]`GdUb]g\`6`"H\Y`Wci fgY`gYY`g`h`c  
W`f`h`a`l`h`e`b`a`i`g`]`h`u`l`d`]`b`c`S`S`5`v`a`g`e`d`f`g`h`i`e`v`h`u`a`i`j`z`0`0`T`h`E`T`h`j`E`T`h`a`r`d`c`y`w`o`l`d`  
h`Y`f`c`k`b`d`U`W`Z`Z`c`k`]b[ `h`Y`f`c`k`b`]b`h`f`Y`g`h`g`" `h`]b`W`h`Y`g`]b`h`f`Y`g`h`b[ `Z`]b`h`f`i`W`h`f`U`f` %o

# 5ggYgga Ybh

GYY`A ccXY`Zf`a cfY`]bZfa UHcb"

## 5ggYgga YbhHUg\_g`

5ggYgga YbhHUg_	K Y][ \h	8i Y`8UH`	Gh XYbh@YUfb]b[ Ci hWta Yg`5ggYggYX
; fUa a Uf`E i`]n`	' \$i	k YY_) `UbX`k YY_`%\$	'
C fU`	&\$i	cb[ c]b[ `k YY_`" `hc`k YY_`-	&Z ž(
F YUX]b[ #K f]h]b[ `	&\$i	k KYY_%\$	%Z ž(
5i X]c] ]gi U`UW]j ]hYg`	' \$i		

C b`]bY`WUW]b[ `` \$'a ]bi h'g'dYf\*`gYgg]cbg""Gh XYbhg`k ]``gdYU\_žXYVUH`UbX`]bhYfUW`b`GdUb]g\`"C fU`  
]bhYfUW]cb`k ]``VY`fYW`fXYX`UbX`[ fUXYX`UW`fX]b[ `hc.`ei U`]micZgdc\_Yb`GdUb]g\`UbX`i`gY`cZUddfcd]UH`  
X]gV`i`fgY"

fYgi `hg:cZmci f'gi Va ]hYX'k cf\_"

Hi fb]hb'gYhb[ . 'H\]g]g'bchU'Hi fb]hb'Ugg][ ba Ybh

5 HbXUbW F Yei ]fYa Ybhg

Gh XYbhg UfY gfc b[ mYbWci fu[ YX hc UthYbX U WUggYg UbX fYj ]Yk YW h fY fYWcfX]b[ g"

7 ci fgY GWYXi Y

[J Yk WUgg ha YhUV Y](#)

Hja YhUV Y

8 UhY	HmdY	7 cbhYbh
K YY_%%(GYdhYa VYf! %GYdhYa VYf	Hcd]W	'7^Ugdea [VWS^ DUfhY%9I dfYg]cbYg'XY'cd]b]i b Wcb ]bX]WU]j c' mgi V^ bh] c' fdYgYbhY 'Y' ja dYfZYWcE"
K YY_&.&%GYdhYa VYf! &)GYdhYa VYf	Hcd]W	'7^Ugdea [VWS^ DUfhY'&'C fUW]cbYg'XY'fY'Uhj] c'Wcb UXj YfV]c'c' dfYdcg]W] b"
K YY_.".&'GYdhYa VYf! &'C Wc VYf	Hcd]W	'6WTgW da^a' DUfhY%9I dfYgUf\YWcg'fYU'Ygz dcg]V'Yg'c' dfcVUV'Yg"; fUXcg'XY' dfcVUV] ]XUX' fU'UJZ a YX]UzVU^U
K YY_(.)'C Wc VYf!' - C Wc VYf	Hcd]W	'6WTgW da^a' DUfhY'&'9gfi Wi fUg'dUfU'YI dfYgUf ]bWYXi ]XUXZUW YfXcz'XYgUW YfXc' midUfU'\U'U[ Uf" 7i Ubh]Z]WUXcfYg'midUfhW' Ug'dUfU'gi Uj ]nUf cd]b]cbYg'bY[ Uhj] Ug'mdcg]h] Ug"
K YY_).%&'C Wc VYf!'%* C Wc VYf	Hcd]W	9b^U'YW h fU'fYdUgc'YW]cbYg%'( "'E i ]n%Yb^U hi hc]f]U
K YY_*.%'C Wc VYf!'& C Wc VYf	F YUX]b[	F 958 B; !@97HI F 5
K YY_+.'&'C Wc VYf!' \$ C Wc VYf	Hcd]W	'H[SWe k ShW fgdSe' DUfhY%'Dfcbca VYg'XY cV'Yhc'X]fYWc' mXY'cV'Yhc' ]bX]fYWc"'9I dfYg]i b'XY ]bj]c'i bhUf]YXUX'Wcb'G9"
K YY_,'.&'Bcj Ya VYf!'* Bcj Ya VYf	Hcd]W	'H[SWe k ShW fgdSe' DUfhY'&'C fUW]cbYg WcbX]W]cbU'Yg.'g]'Z'ja dYfZYWc'XY'gi V^ bh] c"'I gc XY ]bZ]b]h] cZ' dfYgYbhY 'Y' ja dYfZYWc'XY'gi V^ bh] c dUfU'XUf'WcbgY'cg"
K YY_-'.'Bcj Ya VYf!	Hcd]W	"F dm_ [fW^' DUfhY%'I gcg'XY'dcf'm

% `Bcj Ya VYf		dUfU"9I dfYg]cbYg j U`cfUhj Ug'HYghCF 5@Z]bU`
K YY_`%\$.`%* `Bcj Ya VYf!	Hcd]W	"F dm_ [fWb`"DUfY`&!`9gh]c`]bX]fYWtc.`i fXYbYg`Y ]bgfii W]cbYg" F YdUgc `W fgc `Z `E i `]n`&"
&\$`Bcj Ya VYf		



F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

9LD97H98`H9LHG.`5; 9B7`5`9@9`(`BYk`YX]h]cb`5@Z9>`"HYI hUbX`YI YfW]gY`Vcc\_`"

K Y`k`j`i`gY`h`]g`Vcc\_`Zcf`5Xj`UbW`5`UbX`6

Mci`f`9DCFH: C@C`žk`YY`mk`cf`ž`UbX`fYgci`fWg`UfY`]b`mci`f`hYI`hUbX`YI`YfW]gY`Vcc`gž`h`YfY`ZcfY`mci`b`YXX`h`YgY`Vcc`g`cb`XUmicb`Y`k`YY``%"`

6chž`h`Y`X][`]hU`hYI`hUbX`YI`YfW]gY`Vcc\_`ž`WghU`hc`hU`cZ`~`&`\*`Uddfci`fi`GŁ`"

%"`Di`fWUgY`h`Y`X][`]hU`Vcc`g`cb`h`hdg`#g`cd`V`]b`YUfb]b[`"Wca`#@cc\_`Zcf`5; 9B7`5`9@9`(`BYk`YX]h]cb`5@Z9>

`&`C`bW`mci`Uj`Y`h`Y`Vcc`g`c`b`ci`f`WUgg`5J`5BN58CG`5`k`]h`h`Y`Zc`ck`]b[`WcXY`7@%`),`\*,`(``"

`""`9I`d`cfY`h`Y`Vcc`g`hc`[`YhZJa`]]Uf`k`]h`U`h`Y`UW]j`]hYg`"H\`]g`g]hY`[`]j`Yg`mci`UW]gg`hc`h`Y`f]W`hc`c`g`UbX`fYgci`fWg`Uj`U]UV`Ym`ZJa`]]Uf`k`]h`U`h`Y`UW]j`]hYg`"H\`]g`g]hY`[`]]]]]]`

=

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'hgi 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'Ubmc'h'Yf'f'Yj UbhXcW a Yb'g'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 U]W]m'f'YW]j Y'U'h]W\_Yhbi a VYfž'Vi h]Zmci 'HY'Yd\cbY'mci 'k ]'b'YX'hc'gd'YW]W]m'Ug\_ 'Zc'f'cbY"  
Hi fb]h]b'U'gc'dfcj ]XYg'i dXUH'g'cb'h'Y]f'gmgh'Ya 'ghU'g'cb'Hk ]h'Yf"

; YbYfU'mž'UggYgga YbhiHUg\_g'a i ghVY'gi Va ]h'YX'Y'YW'f'cb]W]m'j ]U'Y]h'Yf'Hi fb]h]b'cf'U'A ccX'Y  
Ugg][ ba Yb'h' 'b]bg]h'UbVW'g'k \YfY'h'g ]g'bc'h'dcgg]V'Yž'hk ]'VY'gh'U'YX'cb'mci f'Wci fgY'g'A ccX'Y'g]h'k ]h  
U'HY'fbU]h] Y'gi Va ]gg]cb'XYhU]g"

: cf]bZ'fa U]cb'cb'\ck 'hc'gi Va ]h'Ugg][ ba Yb'g'cb]b'Yj ]U'A ccX'Y. \h'hdg.#gh XYb'h'i bgk "YXi "Ui #ck!  
gi Va ]h'Ugg][ ba Yb'ha ccX'Y

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

D`U[ ]Uf]ga `]g`i`g]b[ `h`Y`k`c`f`X`g`c`f`]X`Y`U`g`c`Z`c`h`Y`f`g`i`U`b`X`d`f`Y`g`Y`b`h]b[ `h`Y`a` `U`g`m`c`i`f`c`k`b`" `#`W`U`b`h`U`\_`Y`a` `U`b`m`  
Z`c`f`a`g`Z`Z`c`a` `X`Y`]V`Y`f`U`h`Y` `W`X`Y`U`h]b[ `h`c` `U`W`W`Y`X`Y`b`h`U` `m`i`W`c`d`m]b[ `Z`c`a` `U`g`c`i`f`W` `k` ]h`c`i`h`U`W`\_`b`c`k` `Y`X[ `Y`a` `Y`b`h`

I`B`G`K` `[`f`c`i`d`g`d`U[ ]Uf]ga `]b`h`c` `h`Y` `Z`c` `c`k` ]b[ `W`U`h`Y`[`c`f`]Y`g.

- 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`]Wm
- VY'Uk UfY'cZh'Y'ghUbxUfXg'cZVY\Uj ]ci f'YI dYW'X'cZYj Yfmcby'j]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 ""

[\hhd.##ji 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.