





7ci fgY`Cj Yfj ]Yk

GhJZ`7cbhJW`8YhJ]`g

7cbj Ybcfg

BUa Y	9a U]`	5j U]`UV]`]fm	@cW]h]cb	D\cbY
F cVYfhBcfXcb	<a href="#">f"bcfXcb4 i bgk "YXi "Ui</a>	9a U]`	F cca `) \$, ž @Yj Y` ) ž GUa i Y`g 6i ]X]b[	*%& - ' , ) \$ ) -

@YW`i fYfg

BUa Y	9a U]`	5j U]`UV]`]fm	@cW]h]cb	D\cbY
F YnU`5f[ \U	<a href="#">U"Uf[ \U4 i bgk "YXi "Ui</a>	Ya U]`		

GW\cc``7cbhJW`i`bZcfa Uh]cb

Gh XYbhGYfj ]W`g`W]b`VY`W`b]hJW`X`j ]U`i`[bgk "rc# YVZcfa g"](#)









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7 f]hY f]U	A Uf_
D Ufh]U`UbU`mg]g	\$")
`7 ca d`YhY`UbU`mg]g	%
f 7 f]hY f]U`Zcf`Vca d`YhY`UbU`mg]g.	






Ž'UXX]hcbU'UbU'mg]g'cf'fY]bYa Ybhc'f'j U'i Y!UXX'hc'h'Y' [ fci d'g'ci hdi hfg'j]XY'g\ck 'UbX'g\UfYX'a UH'f]U'Ł  
 WłbXi WYX Vmimci fgY'Z' f&'a Uf\_gŁ

7 f]h'f]U	A Uf_
8 cYg'bch'fYdcf'hk \Uhk Ug'g\UfYX'VY'fk YYb' [ fci d'a Ya VYfgž'UbX'UW_bck 'YX[ Yg h'Y' Włb'f]Vi h'cb'cZ]bX]j ]Xi U'a Ya VYfg	\$
F Ygc'j Yg'UXX]hcbU'a ]bc'f]ggi Yg'bch'gc'j YX'Vmi'h'Y' [ fci d'Y" [ "ž'Yb\UbW'g ]h'f]U' h'f'f'j ]Yk	%
F Ygc'j Yg'UXX]hcbU'a U'č'f]ggi Yg'bch'gc'j YX'Vmi'h'Y' [ fci d'Y" [ "ž'a cX]ž'YX Włb'f'c'Y'f'X'Yg] [ b'hc' ]b'W'Y'Ug'Y'dU'h'Y'bh'gi f'j ] U"	&

### 5ggYgga Ybh& . 'A U'č'f'hc'd]W'g'cb`]bY'ei ]nnYg

H\Y'f'k ]'VY' ) 'cb`]bY'ei ]nnYg'h'Uhk ]'UggYgg'g] [ bU'UbU'mg]g'h'Y'cfm'Wł'j Yf]b [ '%&@]bYUf'h'a Y! ]bj Uf]Ubh  
 gm'gh'Ya g'%&Ł@]bYUf'h'a Y! ]bj Uf]Ubh'gm'gh'Ya g'&' Ł: ci f]Y'f'Hf'Ubg'ž'fa '( Ł'8] [ ]h'U'G'Ua d']b [ ' ) Ł'N!h'Ubg'ž'fa  
 UbX'8] [ ]h'U' : ]h'f]b [ " H\Y'mik ]'VY'VUg'YX'i dcb'cb`]bY'YUf'b]b [ 'UW'j ]h'Yg'ž'f'YUW'c'Z'h'Yg'Y'a U'č'f'hc'd]W'g"  
 H\Y'cb`]bY'ei ]n'k ]'VY'VY'ž'f'Y'h'Y'UV'h'i hc'f]U'UbX'Y'W'h'f'Y'f'f'!%Ła Ł'cb'&, !GYdž) !C Włž'&!C Włž'&\*!C Włž'  
 %\*!B'c'j "

### 5ggYgga Ybh' . '@UV'fYdcf'g

H\Y'f'k ]'VY' h'c'UV'fYdcf'g'f'f'Ł' i 'YUW'Ł'VUg'YX'cb'UbU'c [ i Y'UbX'X] [ ]h'U'g] [ bU'dfc'Wł'gg]b [ 'UV'g'"#]g  
 a UbX'U'hc'fm'hc'U'h'Y'bX'U'UV'cf'U'hc'f'm'd'f'U'W'W'g'Ygg]cbg'ž'W'W'!hc'ž'W'W' ]Zdcgg]V'Y'"M'ci 'k ]'VY'U'W'Ł' ]f]b [ ]  
 j U'i UV'Y'X'U'f]h'Uhk ]' [ 'c' ]b'ž'U'f'Ydcf'g": c'f'cb`]bY'c'j Yfg'Y'Ug'g'h'XY'bh'g'k'Y'k ]'d'fc'j ]XY'cb`]bY  
 XY'a cb'g'f]h'cb'g'Ygg]cbg'ž'f'f'ci 'hc'U'W'Ł' ]f'Y'h'Y'X'U'f]h'Y'UV'fYdcf'g"

: ci f]Y'f'Hf'Ubg'ž'fa 'UV'Xi Y'cb'% !C Wł'f'f'%) - 'da Ł'&'8] [ ]h'U'g'Ua d']b [ 'UV'Xi Y'cb'&) !C Wł'f'f'%) - 'da Ł'

### 5ggYgga Ybh( . 'C b`]bY'A U'h'F Yj ]g]cbg'E i ]n

8i Y'X'U'h'. '&+#\$- #&\$&&'%) - 'DA

H\Y'g'Y'ei ]nnY'g'k ]'UggYgg'A U'h'g'UbX'A Uh'UV'd'f'Y'f'ei ]g]h'g'ž'f'h'g'Wł'i fgY"

### 5ggYgga Ybh) . 'A U'č'f'Ugg] [ ba Ybh

8i Y'X'U'h'. '%) #%'#&\$&'%) - 'DA

A U'č'f'Ugg] [ ba Ybh



K YY_*.%+`C WtcVYf! &%C WtcVYf	; fci d`K cf_	; fci d`Zcfa Uhcbz`dfc`YWhgY`YW]cb`fji dd`]YXŁ`UbX U`c`WU]cb`cZfc`Yg`UbX`fYgdcbg]V`]fYg`5Wei`lg]fcb cZg][ bU`Zcf`hY`dfc`YWhfji dd`]YXŁ"
; fci d`K cf_	; fci d`K cf_	A YX]WU`8Yj`jW`8Yg][ b`fF`B`#`5Ł
K YY_+.`&(`C WtcVYf! &.`C WtcVYf	Hi H@JV	n!hfUbgZcfa`UbX`]bfcXi`W]cb`hc`X][`]hU`Z]`hYf]b[ " l`g]b[`A`UhUV`hc`XYg][`b`X][`]hU`Z]`hYfg`fF`5Ł
	Hi H@JV	9j`U`i`Uh]b[`n!Z`bW]cbg`cb`hY`i`b]hW]fWY`8:`H`k`]h nYfc!dUXX]b[`"9l`d`cfY`hY`YZZY`Wg`cZk`]bXck`]b[ " 5X!\cWZ]hYf`XYg][`b`UbX`X]ZY`fYbW`Yei`Uh]cb ]a`d`Ya`Yb]Uh]cb":`#`UbX`=#`Z]hYf`XYg][`b` fHi`hc]UŁ
K YY_`,`.`%C WtcVYf!(` Bcj`Ya`VYf	Hi H@JV	N]Y[`Yf]B`]Wc`g`h`b]b[`cZD`-`W`bfc`Yfg`fHi`hc]UŁ
	Hi H@JV	D`-`W`bfc`fF`5Ł"l`g]b[`A`UhUV`#G]a`i`]b_`hc`XYg][`b UbX`h`bY`W`bfc`gmg]hYa
	Hi H@JV	A`UhUV`YI`YfW]gYg`fD`fUW]WUŁ
K YY_`-`,`+`Bcj`Ya`VYf! %%Bcj`Ya`VYf	C`b`]bY`5W]j`]m	8][`]hU`gUa`d`]b[`cb`]bY`ei`jn`%\$!`%%Ua`f]i`Ł
	Hi H@JV	GUa`d`]b[`UbX`gdYWfU`UbU`mg]g`cZV]c`c[`]WU` g][`bU`g`fF`5Ł
fhi`hc]UŁ	Hi H@JV	DYf]cXc[`fUa`UbX`g`c`fh]a`Y`:`ci`f]Yf`hfUbgZcfa fhi`hc]UŁ

F Ygci fWg

DfYgWf]VYX F Ygci fWg

5`a UHf]U`k ]`VY`dfcj ]XYX`j ]U`A ccX`Y`"HYUa g`hi hcf]U`g`k ]`VY`fYW`fXYX"

F YWca a YbXYX F Ygci fWg

85H9G`HC`BCH9

F YZf`hc`A m BGK`Zcf`[a dcfhUbh8UHg`](#)"`

D@5; =F €A

6Yk UfY`5b`Ugg][ ba YbhU`h]bW`i XYg`d`U[ ]Uf]gYX`a UHf]U`k ]`fYW]j Y`U`\$i` : ]`ž`UbX`gh` XYb`hg`k` \c` d`U[ ]Uf]gY`a` UmZ]`"h`Y`W`i` fgY`"G`h` XYb`hg`k` \c`d`U[ ]Uf]gY`k` ]`"U`j`Y`h`Y`f`b`Ua` Yg`Y`b`h`f`Y`X`c`b`d`U[ ]Uf]ga` fY[ ]g`h`f`U`b`X`k` ]`"VY`" ]U`V`Y`h`c`X`]g`W`d`"b`U`f`m`U`W`f`c`b`ž`]b`W`i` X]b[ `Y`I`W`i` g]c`b`Z`ca` `Y`b`f`c`a` Y`b`h`

h]g`Y`I` d`Y`W`Y`X`h`U`h`U`"gh`i` XYb`hg`a` i` gh`U`h`U`"h`a` Yg`gi` Va` ]h`h`Y`f`c`k`b`k`c`f`\_`Z`c`f`U`gg`Y`g`g`a` Y`b`h`G`i` Va` ]h]b[ `h`Y` k`c`f`\_`c`f`]X`Y`U`g`c`Z`g`c`a` Y`c`b`Y`Y`g`Y`k` ]h`c`i` h`W`Y`U`f`m`U`W`\_`b`c`k` `Y`X[ ]b[ `h`Y`g`c`i` f`W`c`Z`V`c`f`c`k` Y`X`a` U`H`f`]U`c`f`]X`Y`U`g`ž` ]g`d`U[ ]Uf]ga` "

5`"U`gg`Y`g`g`a` Y`b`hg`k` \]W`m`c`i` `U`b`X`]b`a` i` gh`U`j`Y`U` [B`c`b`D`U\[ \]Uf\]ga` `8`Y`W`U`f`U`h`c`b`7`c`j`Y`f`G`Y`Y`h`](#)"`H`h`g`" ]g`Z`c`f` V`c`h`]b`X`j` ]X`i` U`"U`b`X`[ `f`c`i` d`k`c`f`\_"`5`h`U`W`k` ]h`c`m`c`i` f`U`gg][ ba Y`b`h`V`Y`Z`c`f`Y`g`i` Va` ]h]b[ `]h`c`h`Y`7`c`i` fg`Y` 7`c`c`f`X`]b`U`h`c`f`c`f`U`h`h`Y`G`W`c`c`"C`Z`W`"

D`U[ ]Uf]ga` ]g`h`Y`i` g`Y`c`Z`U`b`c`h`Y`f`d`Y`f`g`c`b`g`k`c`f`\_`c`f`]X`Y`U`g`U`g`]Z`h`Y`m`k` Y`f`Y`m`c`i` f`c`k`b`"K` \Y`b`]h`]g`b`Y`W`g`g`U`f`m`c`f` X`Y`g`]f`U`V`Y`h`c`i` g`Y`c`h`Y`f`d`Y`c`d`Y`g`a` U`H`f`]U`m`c`i` `g`l`c`i` `X`U`X`Y`e`i` U`H`m`i`U`W`\_`b`c`k` `Y`X[ Y`k` \c`g`Y`k`c`f`X`g`c`f`]X`Y`U`g`h`Y`m` U`f`Y`U`b`X`k` \Y`f`Y`m`c`i` `Z`c`i` b`X`h`Y`a` `f`[ ]j` ]b[ `h`Y`W`c`a` d`Y`h`f`Y`Z`Y`f`b`W` `X`Y`h`U`]g`ž`]b`W`i` X]b[ `d`U[ Y`b`i` a` V`Y`f`f`g`h`" `H`h`Y` @Y`U`f`b`]b[ `7`Y`b`h`f`Y`d`f`c`j` ]X`Y`g`Z` f`h`Y`f`]b`Z`c`a` U`h`c`b`c`b`k` \U`h`W`c`b`g`h`i` h`Y`g`D`U[ ]Uf]ga` `U`h`

[\`h`d`g`.#`g`h`i` XYb`h`i` b`g`k` "Y`X`i` "U`i` #`d`U\[ \]Uf\]ga`](#)

57589A ⇒ 58J ⇒ 9

@U`gh`m`Y`U`f`k` Y` \U`X`d`f`c`V`Y`a` g`k` ]h` `W`c`b`h`f`U`W`h`W`X`Y`U`h`]b[ `U`b`X`"g`U`f`]b[ `c`Z`U`gg][ ba Y`b`h`U`b`g`k` Y`f`g`k` \]W`k` U`f`Y`j` Y`f`m` g`Y`f`c`i` g`V`f`Y`U`W`X`Y`g`c`Z`U`W`X`Y`a` ]W`c`b`X`i` W`i`D`Y`U`g`Y`f`Y`U`X`h`Y` [g`h`i` XYb`h`V`c`b`X`i` W`i`d`c`\]W`h`i`U`b`X`h`Y` U`W`X`Y`a` \]W` a` \]g`W`c`b`X`i` W`i`d`f`c`W`X`i` f`Y`](#)"`h]g`Y`I` d`Y`W`Y`X`h`U`h`g`h`i` XYb`hg`U`h`Y`b`X`U`"Y`W`i` f`Y`g`U`b`X`h`i` h`c`f`]U`"g`Y`g`g`]c`b`g`"

5gg][ ba Y`b`hg`gi` Va` ]h`Y`X`U`Z`Y`f`h`Y`X`i` Y`X`U`h`k` ]h`c`i` h`d`f`c`f`b`c`h`]Z`W`h`]c`b`U`b`X`d`Y`f`a` ]g`g`]c`b`k` ]`"VY`gi` V`Y`W`h`c`U` X`Y`X`i` W`i`c`b`]b`a` U`f`\_`g`"

I`BGK` \U`g`U`k` ]X`Y`f`U`b[ Y`c`Z`g`h`i` XYb`h`g`i` d`d`c`f`h`g`Y`f` ]W`g`" `H`h`Y`f`Y`g`c`i` f`W`g`" ]g`h`Y`X`V`Y`c`k` `g`l`c`i` `X`V`Y`i` g`Y`X`V`m` g`h`i` XYb`hg`b`Y`Y`X`]b[ `U`gg`]g`h`U`b`W` `f`Y`U`h`X`h`c`U`g`d`Y`W`g`c`Z`h`Y`f`c`j` Y`f`U`"I` b`j` Y`f`g`]m`Y`I` d`Y`f`]Y`b`W`" `G`d`Y`W`]Z`W`X`Y`d` f`Y[ U`f`X`]b[ `h`]g`W`c`i` fg`Y`W`b`V`Y`g`c`i` [ \h`Z`ca` `h`Y`W`c`i` fg`Y`W`c`f`X`]b`U`h`c`f`"

[\`h`d`g`.#`k`k`k` "g`h`i` XYb`h`i` b`g`k` "Y`X`i` "U`i` #`](#)

[\`h`d`g`.#`a`m`i` b`g`k` "Y`X`i` "U`i` #`g`h`i` XYb`h`a`c`k`X`c`\]#`c`k`8`c`-SA`U`\]b`DU`\[`Y`" `h`a` `](#)

[\hd.##k k "Wci bgY"b\["i bgk "YXi "Ui #](#)

H\cgY'ghi XYbfg'k \c\Uj Y'U'X]gUV] ]mHUhifYei ]fYg'gca Y'UX↑ gra Ybh]b'h.Y]f'hYUW]b[ 'cf'YUfb]b[ Ybj ]fcbā YbhUFY'YbWci fU[ YX'hc'X]gW gg'h.Y]f'ghi XmbYYXg'k ]h'h.Y'Wci fgY'Wc'cfX]bUhc'f'df]cf'hc'ž'cf'Uhih.Y Wca a YbW'a YbhcZ'h.Y]f'Wci fgYž'cf'k ]h' [8\]gUV\] \]mGi ddcfhGYfj \]Wg](#)" -ggi Yg'hc'VY'X]gW ggYX'a Um ]bWi XY'UW'W'gg'hc'a UHYf]U'gžg][ bYfg'cf'bchY!hU\_Yfgž'h.Y'dfcj ]g]cb'cZgYfj ]W'g'UbX'UXX]h]cbU'YI Ua 'UbX UggYgga YbhUffU]b[ Ya Ybhg""9Ufmbch]Z]W]h]cb' ]g'YggYbh]U'hc'YbUV'Y'UbmibYW'ggUfmUX↑ gra Ybfg'hc'VY a UXY""

Zmci 'VY'Yj Y'h.Uhmcī f'dYfZcfa UbW' ]b'Ub'UggYggUV'Y'Wca dcbYbhcZ'h.Y'Wci fgY'\Ug'VYyb'UZYW'X'Vm ]'bYgg'cf'UbchYf'i bYI dYW'X'W'f'W a ghU'W'Z'mci 'g\ci 'X'a U\_Y'Ub'Udd']W]h]cb'Zc'f'gdYW]U'Wc'bg]XYfU]h]cb'Ug gccb'Ug'dcgg]V'Y'UZ'f'h.Y'Yj YbhVmj ]g]h]b[ 'I BGK 'Gh XYbh7YbhfU""D'YUgY'hU'\_hc'h.Y'Wci fgY Wc'cfX]bUhc'f'Ug'k Y""UbX'bchY'h.Uh'Wc'bg]XYfU]h]cb'UfY'bch[ fUb'h'X'Ui hca Uh]W""m'

I BGK '\Ug'gh]W'hc' ]W'g'UbX'YI dYW]h]cb'g'f'Y'Uh]b[ 'hc'CW'W' dU]h]cbU'< YU'h'UbX'GUZYhm'f'c < Gē'UW'W'ggYX Uh'[\hd.##k k k "Wci bgY"b\["i bgk "YXi "Ui #](#)

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

Gh XYbhZYXVUW'\Ug'\Y'dYX'hc'g\UdY'UbX'XYj Y'cd'h.]g'Wci fgYž' ]bWi X]b[ 'ZYXVUW'cV]h]bYX'Zca 'cb! ]'bY'Yj U'i Uh]cb'g'Ug'dUf'hcZI BGK 'g'7ci fgY'UbX'HYUW]b[ '9j U'i Uh]cb'UbX' -a dfcj Ya Ybhif'[A n9I dYf\]YbW](#)ž dfcW'gg""Hc'X]gWci fU[ Y'W'YU]h]b[ 'UbX'YbWci fU[ Y' ]bXYdYbXYbhdfcVYa !gc'j ]b[ 'g\_]`gžk Y'\Uj Y' ]bW'YUgYX h.Y'dYf'W'bh]U[ Y'cZUggYgga YbhWc'bf]Vi h'X'Vm'h.Y'Z]bU'YI Ua "

# Gi Va ]gg]cb'cZ5ggYgga YbhiHUg\_g

@UVcfUhcfmfYdcfhg'UbX'a U'cf'Ugg][ ba Ybht'k ]''fYei ]fY'U' [Bcb'D'U\[ \]Uflga'8YWUfUhc'7cj Yf'G\YYH'](#)

5gg][ ba Ybht'g\ci 'X'VY'gi Va ]hYX'cb'hja Y''5'XU]mdYbU'hmcZ) i 'cZhY'a Uf\_g'Uj U]UV'Y'Zcf'hUh  
Ugg][ ba Ybhk ]''Udd'mZcf'k cf\_'fYW'j YX'UZf'hY'Xi Y'XUH''5bmiUgg][ ba Ybhia cfY'hUb') 'XUmj''UH'k ]''bch  
VY'UWV'dh'X''H\Y'cb'mYI Ya dh]cb'k ]''VY'k \Yb'df]cf'dYfa ]gg]cb'Zcf''UH'gi Va ]gg]cb'\Ug'VYYb'[ fUbh'X'Vm  
hY'7ci fgY'W'cfX]bUhc'f''9I hYbg]cbg'k ]''VY'[ fUbh'X'cb'mcb'a YX]WJ'cf'W'ca dUgg]cbUH'[ fci bXg'i bXYf  
YI hfYa Y'W'fW'a ghUb'W'g''

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

D@5; =F =GA

6Yk UFY`5b`Ugg][ ba YbhUUh]bWl XYg`d`U[ ]Uf]gYX`a UHYf]U`k ]`fYW]j Y`U`\$i : U]žUbX`gh XYbhtg`k \c  
d`U[ ]Uf]gY`a UmZ]`hY`Wti fgY`Gh XYbhtg`k \c`d`U[ ]Uf]gY`k ]`\Uj Y`hY]f`bUa Yg`YbHYfYX`cb`U`d`U[ ]Uf]ga  
fY[ ]ghYf`UbX`k ]`VY`]UV`Y`hc`X]gW]d`]bUfmiUW]cbž]bWl`X]b[ `Yl`Wl`g]cb`Zca`Ybfc`a`Ybh`  
#]g`Yl`dYWYX`hUUhU`gh XYbhtg`a`i`ghUhU`h]a`Yg`gi`Va`]hY]f`ck`b`k`cf`\_`Zcf`UggYgga`Ybh`Gi`Va`]h]b[ `hY`  
k`cf`\_`cf`]XYUg`cZgca`YcbY`Y`gY`k`]h]ci`hWYUfmiUW\_bck`YX[ ]b[ `hY`gci`fW`cZVcffck`YX`a`UHYf]U`cf`]XYUg`]g  
d`U[ ]Uf]ga`"  
5`UggYgga`Ybhtg`k`\]W`mci`U`UbX`]b`a`i`gh`\Uj`Y`U`[B.cb`D`U\[ \]Uf\]ga`8YWUfU\]cb`7cj`Yf`G`YYh`H\\]g`\]g`Zcf](#)

5WUXYa ]W=Zcfa Uh]cb

7CI FG9'9J5@! 5H€B'5B8'89J9@CDA 9BH





