

GWX cd Z\ Y]a Yf 'GWX UhnghØV`]. '9]b 'C fh 'X Yf GWX Àhn Y 'i b X '6 Y[Y[bi b[Yb °

9bhXYW_Yb^G]Y^XUg^5K C^GWXUhnghØV^]^]b^GWXcdZ\Y]a .^9]b bUWX\U^h][Yf^Cfh^a]h^j]Y^ZÀ^h][Ya^K UfYbUb[YVch^i bX gcn]U^Yf^6YXYi hi b["



< Ui d hghf U» Y '%&+Už'+-*) \$ 'GW\ c d Z\ Y]a ž'8 Yi hgW\ `Ub X'! '\delta
GW\ c d Z\ Y]a '[]Vh'Yg'Y]b'[Ubn'VYgcbXYfYg'; YgW\ À Zhž'XUg'b]W\ h'bi f
ni a 'GhÒVYfb'Y]b` À Xhž'gcbXYfb'Ui W\ 'Y]b'k]W\ h][Yf'gcn]U`Yf
HfY ZZdi b_h']gh'' 8 Ug'5 K C 'GW\ UhnghØV`]ž'XUg'g]W\ ']b'XYf
< Ui d hghf U» Y '%&+U'VYZ]bXYhž']gh'VY_Ubbh'ZØf'gY]b'j]Y`Z\ `h][Yg
K UfYbUb[YVch'ni '_`Y]bYb'DfY]gYb''' <]Yf'Z]bXYb'?i bXYb'cZh'8]b[Yž
X]Y'g]Y'gW\ cb'`Ub[Y'[Ygi W\ h'\UVYb'cXYf'X]Y'bcghU`[]gW\ Y
9f]bbYfi b[Yb'kYW_Yb''; YfØW\ hYb'ni Zc`[Y'\UVYb'gW\ cb'gc
a UbW\ Y'GW\ AhnY'XYb'K Y['ni fØW_'ni ']\fYb'i fgdfØb[`]W\ Yb
6Yg]hnYfb'[YZ|bXYb''</pre>

8 UgʻGW\UhnghØV`]'\Uhʻg]W\']b'XYfʻGhUXh'Y]bYbʻgc`]XYbʻFiZ YfUfVY]hYh'''9gʻX]Ybh'b]W\h'bif'U`gʻJYf_UiZgghY``YžʻgcbXYfb'UiW\ U`g`C fh`XYf`? ca a i b]_Uh]cb i bX`XYg`5i ghUi gW\Yg"`@Ui h`Y]bYa 6Yf]W\hij cb `\Ji a Ubb `g]bX`gck c\``bYi Y`6Ygi W\Yf`U`g`Ui W\`Y]b ZYghYf`? fY]g`j cb `GhUa a _i bXYb`Ubni hfYZZYb"`8]Y`Y\fYbUa h`]W\Yb <Y`ZYf`i bX`X]Y`ZYghUb[YghY``hYb`A]hUfVY]hYf`Yb[U[]YfYb`g]W\`\]Yf a]h'<YfnV`i hž`i a `XYb`6Yhf]YV`Ua `@Ui ZYb`ni `\U`hYb"`8UVY]`k]fX XUg`? cbnYdh`XYg`GW\UhnghØV`]g`U`g`bUW\\U`h][`i bX`i bhYfghØhnYbX VYgW\f]YVYbžk Ug`XYb`@UXYb`bcW\`UhhfU_h]j Yf`a UW\h"

9\fYbUa h`]WXYI bhYfghØhni b[i bX GdYbXYf

9]b 'nYbhfU`Yf '5 gdY_h 'XYg 'GW\ UhnghØV`]g 'g]b X 'X]Y 'j]Y`Yb 'GdYb XYfž X]Y 'ni f'K UfYbj]Y`ZU`h 'VY]hfU[Yb" \Rightarrow fY 'GW\ À hnY '[YVYb 'XYa 5b[YVch'Y]bYb 'Vi bhYb 'A]I 'i b X 'c Zh']gh 'ZØf' 'YXY '5`hYfg[fi ddY Yhk Ug 'XUVY]" '8 Ug 'a UW\ h 'XUg 'GhÒVYfb 'ni 'Y]bYa 'VYgcb XYfYb 9f`YVb]g" '8]Y '\Y`ZYb XYb '< Àb XYž'X]Y 'g]W\ ']a '<]bhYf[fi b X Yb[U[]YfYb z'nY][Yb z' XUgg 'X]Y'; Ya Y]bgW\ UZh'\]bhYf'X]YgYa gcn]U`Yb '? Ui Z\ Ui g 'ghY\ h'i b X 'Yg 'ZØf'U``Y'ni 'Y]bYa 'C fh' XYg [Ya Y]bgUa Yb 'A]hY]bUb XYfg 'a UW\ h"

8 Ugʻ5 K CʻGWX UhnghØV`]ʻ\UhʻUi WXʻZYghYʻ² ZZbi b[gnY]hYb.ʻA]hhk cWXgV]gʻZfY]hU[gʻj cbʻ%\$ʻV]gʻ%, ʻI\fʻi bXʻgUa ghU[gʻj cbʻ%\$ʻV]gʻ%(ʻI\f g]bXʻX]YʻHØfʻi bXʻXUa]hʻX]YʻA Ò[`]WX_Y]hʻni a ʻGWXÀhnYʻZ]bXYb
YXYfnY]hʻc ZZYb"ʻI bhYfʻXYfʻBi a a Yfʻ\$+*&&ʻ#-\$'(, **`cXYfʻdYfʻ9!
A U]`i bhYfʻgWX Uhnghi YV`]4 Uk c!`cYffUWX "XYʻYffY]WXYb

\$\DanksymbYfYgg]YfhY`XUgʻZfYi bX`]WXYʻHYUa `XYgʻ<Ui gYg"

BUWX\U`h][_Y]h'i bX'gcn]U`Y'JYfUbhk cfhi b[

8 Ugʻ?cbnYdhʻXYgʻGWX UhnghØV`]gʻd Ugghʻk i bXYfVUfʻ]bʻX]Y
F U\a YbVYX]b[i b[YbʻXYfʻI B!BUWX\U`h][_Y]hgn]Y`YžʻX]YʻgY]hʻ&\$%)
k Y`hk Y]hʻj YfZc`[hʻk YfXYb"'<]YfVY]ʻk]fXʻ]bʻ8 Yi hgWX`UbXʻXi fWX
gcn]U`Yʻ? Ui Z\Ai gYfʻk]YʻXUgʻGWX UhnghØV`]ʻj cfʻU``Ya ʻXUgʻN]Y`
j YfZc`[hžʻ5fa i hʻni ʻj Yff]b[Yfbʻgck]Yʻ; fi bXV]`Xi b[ʻi bXʻgcn]U`Y
: A\][_Y]hYbʻni ʻZÒfXYfb"'8]YgYʻk]WXh][YbʻDi b_hYʻhfU[Ybʻni f
J Yff]b[Yfi b[ʻj cbʻI b[`Y]WX\Y]hYbʻVY]ʻi bXʻk]f_Ybʻgca]hʻUi WXʻXYa
gcn]U`Ybʻ: f]YXYbʻYbh[Y[Ybž'k]YʻUi ZʻXYfʻD`UhhZcfa ʻGcn]U`!
B UWX\U`h][!; i hʻXUf[YghY``hʻk]fX"

#D'XYf'FY[]cb'\Uh'XUg'GW\UhnghØV`]'Y]bY'VYgcbXYfY'6YXYi hi b[ž XU'Yg'b]W\h'bi f'Xi fW\'XYb'JYf_Ui Z'j cb'K UfYb'bUW\\U`h]['k]f_hž gcbXYfb'Ui W\'gcn]U`Yg'9b[U[Ya Ybh'ZÒfXYfh" a a Yf'a Y\f A YbgW\Yb'Yf_YbbYbž'XUgg'g]Y'a]h']\fYa '9]b_Ui Z'b]W\h'bi f'g]W\gY`Vgh'Yhk Ug'; i hYg'hi bž'gcbXYfb'Ui W\'X]Y'; Ya Y]bgW\UZh i bhYfghØhnYb"'9g'`c\bh'g]W\ž'Y]bYb'6Ygi W\']a 'GW\UhnghØV`] Y]bni d`UbYb'i bX']b'Y]bYf'XYf'j]Y`Yb': UWYhhYb'XYg'5b[YVchg'XUg Y]b'cXYf'UbXYfY'GW\a Ub_Yf`ni 'YbhXYW_Yb"

@UggYb'G]Y'g]W\']bgd]f]YfYb'i bX'_ca a Yb'G]Y'j cfVY]' a $\tilde{O}[`]W$ Yfk Y]gY'k UfhYh' \Rightarrow f'[Ubn'dYfg \tilde{O} b`]W\Yf'GW\Uhn'Ui Z'G]Y'

8 YhU]`g	
Cfh	< Ui dhghfU» Y˙‰++Už˙+-*)\$˙GW\cdZ\Y]a ž
	8 Ying W.`Ub X
EiY``Yb	• k k k "j Yf`U[g\ Ui g! 'Ui a Ubb"XY
	Uk c!`cYffUW\"XY
	k k k "gcn]U`!bUWX\U`h][![i h"XY

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z 'bU[!Vk "XY