

6Ui\Uig!Ib] KY]a Uf. '9fghgYa YghYfghUfhYb 'a]h JF!6f] ``Y']b 'X]Y 'Ni_i bZh'

8]Y'6Ui \Ui g!I b]j Yfg]hÀh'K Y]a Uf'ghUhhYh'UV'K]bhYfgYa YghYf &\$&) #&* '\delta Zcfa Uh]_!9fghgYa YghYf'a]h'A YhU'E i Ygh'' 'JF! 6f]``Yb'Ui gž'i a ']a a Yfg]j Y'HYW\bc`c[]Yb']a 'Ghi X]i a 'ni ZÒfXYfb"



K Y]a Ufž'8 Yi hgW `UbX'!'8 Yf'K]bhYf'Ub'XYf'6Ui \Ui g!I b]j Yfg]hÀh K Y]a Uf'Vf]b[h'b]W h'bi f'_U`hY'HYa dYfUhi fYb'a]h'g]W ž'gcbXYfb Ui W\Y]bY'gdUbbYbXY'BYi Yfi b['ZØf'X]Y'9fghgYa YghYf'XYg ♣Zcfa Uh]_!6UW\Y`cfg.'5V'XYa '_ca a YbXYb'K]bhYfgYa YghYf &\$&) #&* 'Yf\À`h'YXYf'bYi Y'Ghi XYbh'Y]bY'Y][YbY'A YhU'Ei Ygh'' "8]YgY'♣]h]Uh]j Yž'X]Y'i bhYf'XYa 'H]hY`' JF'FYUXm'Zcf'Mci 'ghY\hž n]Y`h'XUfUi Z'UVŽ'XYb'Ni [Ub['ni ']a a Yfg]j Yb'HYW\bc`c[]Yb'ni Yf`Y]W\hYfb'i bX'XYfYb'♣bhY[fUh]cb']b'X]Y'Ghi X]YbdfUl]g'ni ZÒfXYfb"

a ÒW hYb i bgYfYb Ghi X]YfYbXYb UV XYa 'YfghYb 'HU['XYb 'Ni [Ub[ni 'a cXYfbghYf 'HYW bc `c[]Y 'Yfa Ò[`]W Yb ' 'gck c \``]b i bgYfYb @UVcfYb 'U`g'Ui W 'VYei Ya 'j cb 'ni '< Ui gY 'Ui g ž'gc ': fÒ\`]W "
8]Y 'A YhU 'E i Ygh'' ']gh'a Y\f'U`g'bi f'Y]b 'hY W b]gW Yg'Gd]Y`nYi ["'G]Y]gh'Y]bY '`Y]ghi b[gghUf_Y i bX 'Ui hUf_Y 'J F!6f]``Yž'X]Y 'Xi fW ']\fYb Ei U`Wca a 'L F &!; Yb &! 7\]d 'VYY]bXfi W_h'' Ni XYa 'Yfa Ò[`]W h'g]Y XUb_'XYf'DUggh\fci [\!? Ua YfUg'a]h'H]YZYbgYbgcfYb 'gc[Uf'A]I YX FYU`]hm!9f`YVb]ggY'': Øf'Y]bYb'DfY]g'j cb')) \$ '9i fc'k]fX'X]Y 'J F! 6f]``Y 'ni f'bYi Yb 'B cfa ']b 'XYb '@Y\fj YfUbghU`hi b[Ybž'VY] ; fi ddYbUfVY]hYb'i bX']bX]j]Xi Y``Yb'Dfc Y_hYb''

BYiYg`@YfbZcfa Uh`]a `=bZcfa Uh]_!GhiX]ia

9gʻ]ghʻ_Y]bʻ; Y\Y]a b]gž'XUggʻ@Udhcdgʻi bXʻHUVʻYhgʻUb
I b]j Yfg]hÀhYbʻa]hhʻYfk Y]ʻYʻni a '5``hU['[Y\ÒfYb"'8cW\'JF!6f]``Yb
[Yk]bbYbʻni bY\a YbXʻUbʻ6YXYi hi b[žk]YʻUi W\']bʻY]bYa '5fh]_Y`
j cbʻHfU]b]b['JFʻni '`YgYbʻ]gh"'J]fhi U``FYU`]hmʻYfa Ò[`]W\h
dfUl]gcf]Ybh]YfhYgʻi bXʻ]a a Yfg]j Ygʻ@YfbYbʻi bXʻ]ghʻY]bʻK Yf_nYi [ž
XUgʻX]YʻGhi X]YfYbXYbʻU_h]jʻ]bʻXYbʻ@YfbdfcnYggʻY]bV]bXYh"'A]hʻXYf
5i gghUhhi b['XYfʻ\bZcfa Uh]_ghi X]YfYbXYbʻa]hʻJF!6f]``YbʻYf\cZZh
g]W\'X]YʻI b]j Yfg]hÀhʻY]bYʻ: ÒfXYfi b['XYfʻ9][Yb]b]h]Uh]j Yʻgck]YʻXYf

9]b J F!7`i V 'ni a '5i gdfc V]Y f Y b 'i b X 9b hk] W_Y `b

 $\pm 0. \\ J c f V Y f Y] hi b [`Ui Z'X] Y g Y `Ui Z f Y [Y b X Y `N Y] h `k] f X `Y] b `J F ! 7 `i V `] b g$

@YVYb'[Yfi ZYbž']b'XYa 'X]Y'Ghi X]YfYbXYb'[fi bX`Y[YbXY ?Ybbhb]ggY'@VYf'9I hYbXYX!FYU`]hm!GmghYa Y'Yfk YfVYb'i bX Y][YbY'Dfc'Y_hY'VYhfYi Yb'_ObbYb"'Gc'k]fX'XYf'HfUbgZYf'j cb H\Ycf]Y']b'X]Y'DfUl]g'[YZÒfXYfh'i bX'XYb'Ghi X]YfYbXYb'Yfa Ò[`]W\hž _ca d`Yl Y'GmghYa Y'gY`VghghÀbX]['ni 'Ybhk YfZYb'i bX'ni Yj U`i]YfYb"

8]Y'9]bV]bXi b['a cXYfbYf'HYW\bc`c[]Yb']b'X]Y'@Y\fY']gh'b]W\h'bi f nY]h[Ya À» ž'gcbXYfb'Ui W\'Y]b'GW\f]hh']b'X]Y'Ni _i bZh'' \delta bcj Uh]j Y @Y\fa Yh\cXYbž'X]Y'Ui Z'J F'VUg]YfYbž'gYhnYb'bYi Y'GhUbXUfXg']b XYf'6]`Xi b['i bX'a UW\Yb'I b]j Yfg]hÀhYb'UhhfU_h]j Yf'ZØf'bUW\\U`h][]bhYfYgg]YfhY'Ghi X]YfYbXY'''8]Y'A Ò[`]W_Y]hž'J F!6f]``Yb'ni 'bi hnYbž Yfa Ò[`]W\h'b]W\h'bi f'XUg'5i ZVUi Yb']bbcj Uh]j Yf'Dfc'Y_hYž'gcbXYfb Ui W\'dfUl]gbU\Y', Vi b[Yb']b'fYU`]hÀhgbU\Yb'GnYbUf]Yb''

±bhYfYgg]YfhY`_ObbYb`g]W\`UV`gcZcfh`ZØf`XUg`K]bhYfgYa YghYf
&\$&) #&* `VYk YfVYb`i bX`HY]``X]YgYf`ni _i bZngcf]Ybh]YfhYb
6]`Xi b[g]b]h]Uh]j Y`k YfXYbž`X]Y`k Y]h`ØVYf`XYb`_`Ugg]gW\Yb
I bhYff]W\h`\]bUi g[Y\h"`8]Y`: cfgW\i b[Yb`i bX`@Y\fa Yh\cXYbž`X]Y
Xi fW\`X]Y`bYi Yb`HYW\bc`c[]Yb`i bhYfghØhnh`k YfXYbž`ghUa a Yb`Ui g
Y]bYa `I a ZY`Xž`]b`XYa `X]Y`Ghi X]YfYbXYb`X]Y`A O[`]W_Y]h`\UVYbž
gY`VghghÀbX][`ni `dfcV]YfYb`i bX`X]Y`HYW\bc`c[]Y`ni `]\fYf`Y][YbYb
J cfhY]``ni `bi hnYb"`9[U``cV`]b`XYf`: fY]nY]h`cXYf`]a `Ghi X]i a ``JF
]gh`Ui Z`XYa `VYghYb`K Y[žY]b`i bj Yfn]W\hVUfYg`K Yf_nYi [`ZØf`X]Y
bÀW\ghY`; YbYfUh]cb`j cb`±bZcfa Uh]_Yfb`ni `k YfXYb"

8 YhU]`g	
Cfh	KY]a Ufž'8Yi hgWX`UbX
EiY``Yb	• k k k "\Y]gY"XY
	• k k k "i b]!k Y]a Uf"XY
	• k k k "hfU]b]b[!j f"XY

6Ygi WXYb G]Y i bg Ui Z. b!U["bYh