

I b]cb '6Yf`]bg' bYi Yf' < c ZZbi b[ghfÀ[Yf.
Hca 'F ch\Y'i bX'gY]bY
5i Zgh]Y[g[YgW\]W\ hY

I b]cb '6Yf`]b'j YfghÀf_hig]W\ 'a]h'Hca 'F ch\Yž'Y]bYa
hU'Ybh]YfhYb'5i » Ybj YfhY]X][Yf" '6 @8 'VY'Yi W\ hYh'igY]bYb
K YfXY[Ub['i bX'DchYbh]U"

8Yf'K YW\gY`j cb'Hca 'F ch\Y'ni 'I b]cb '6Yf`]b'_ÒbbhY'X]Y'? UfhYb']b
XYf'6i bXYg`][U' bYi 'a]gW\Yb" '8Yf %- !À\ f][Y'5V k Y\fgd]Y'Yfž'XYf
Z0f'fi bX') 'A]`]cbYb'9i fc'j cb'6cfi gg]U'8cfha i bX'j YfdZ]W\ hYh
k i fXYž'Vf]b[h'Zf]gW\Yb'K]bX'i bX'j]Y`j YfgdfYW\YbXYg'HU'Ybh']b
X]Y 'A UbbgW\UZh"

8Yf'5i Zgh]Y['Xi fW\ '@Y]\gd]Y`

⊕'XYf`YmhYb'GU]gcb'a UW\hY'F ch\Y'VY]'< c`ghY]b'?]Y`U`g
@Y]\gd]Y'Yf'Ui Z'g]W\ 'Ui Za Yf_gUa "'GY]bY'6YhY']][i b['k Uf
YbhgW\Y]XYbX'Z0f'XYb'gYbgUh]cbY`Yb'5i Zgh]Y['XYg'J YfY]bg']b'X]Y
YfghY'6i bXYg`][U" '6YY]bXfi W_YbX']ghž'XUgg'gY]b'A Uf_hk Yfh
k À\ fYbX'X]YgYf'NY]h'j cb'' ž) 'A]`]cbYb'9i fc'Ui Z, 'A]`]cbYb'9i fc
a Y\ f'U`g'j YfXcddY'h'k i fXY" '8]Yg'nY][h'b]W\ h'bi f'gY]b
k UW\gYbXYg'HU'Ybhž'gcbXYfb'Ui W\ 'XUg'⊕hYfYggY'nU\`fY]W\ Yf
9fgh][]ghYb'Ub']\a "

9]b' bYi Yg'Ni \Ui gY'VY]'I b]cb '6Yf`]b

I b]cb '6Yf`]b'k Uf'b]W\ h'XYf'Y]bn][Y'J YfY]bž'XYf'Ub'F ch\Y
]bhYfYgg]Yfh'k Uf'/Ui W\ 'UbXYfY'9fgh][]ghYb'\UhhYb']\b'Ui Z'\fYf
K i bgW\`]ghY" '6cfi gg]U'8cfha i bXž'gY]b'V]g\Yf][Yf'J YfY]bž'\Uh
bUW\ '⊕Zcfa Uh]cbYb'XYf'6]'X!NY]hi b['gc[Uf'Y]bY'F ØW__Ui Zcdh]cb
[Yg]W\ Yfhž'k Ug'XUg'J YfhfUi Yb']b'X]Y'9bhk]W_ 'i b['XYg'Gd]Y'Yfg

i bhYfghfY]W\h"6Y]I b]cb`]ghYf`VYfY]hg`U`g`@]b_gUi » Yb`]a
[Yd`UbhYb`"!(!"!GmghYa`Y]b[Yd`Ubhi bX`_ÒbbhY`fUgW\`ni`Y]bYa
GhJa a gd]Y`Yf`Uj UbW]YfYb"

8]Y`GhÅf`_Yb`Ui Z`XYa`D`Uhn

F ch\Yž`a]hY]bYf`i; fÒ» Y`j cb`%ž`-`' a ž]ghY]b`Yhk Ug`i bhmd]gW\Yf
5i » Ybj YfhY]X][Yf`Hfc`m`gY]bYf`VYY]bXfi W_YbXYb`? ÒfdYf[fÒ» Y
nY]W\ bYh`Yf`g]W\`Xi fW\`GW\ bY`][_Y]hi bX`Y]bY`\c\Y
@Ui ZVYfY]hgW\UZh`Ui g" ð`XYf`j Yf[Ub[YbYb`GU]gcbž`]b`XYf`Yf`
Nk Y]h`][Ugd]Y`Y`ZØf`?]Y`UVgc`j]YfhYž`Yfn]Y`hY`Yf`j]Yf`HcfY`i bX
VYfY]hYhY`nY\ b`HcfY`j cf`"8]Yg`a UW\h`]\b`ni a`hcf[YZÅ`\`]W\ ghYb
5Vk Y\fgd]Y`Yf`XYf`@[U`i bX`_Åggh`X]Y`i: Ubg[YgdUbbh`Ui Z`gY]bY
@Y]ghi b[Yb`VY]I b]cb`k UfhYb"

DYfgÒb`]W\ Yg`i bX`gdcfh`]W\ Y`JcfV`]XYf

8Yf`[YVØfh][Y`GW\`Ygk][!<c`ghY]bYf`\Uh`gY]bY`K i fnY`b`]b
<Ua Vi f[žk c`gY]bY`i: Ua`j]Y`YVh`i ð`gY]bYf`i: fY]nY]h`k]Xa`Yh`g]W\
F ch\Y`Ui W\`UbXYfYb`GdcfhUfhYbž`j cf`U`Ya`6Ug_YhVU`"GY]b
[fÒ» hYg`gdcfh`]W\ Yg`≠c`]gh`B65!GhUf`N]cb`K`j`]Ua`gcbž`k Ug`gY]bY
j]Y`gY]h][Yb`gdcfh`]W\ Yb`i ð`hYfYggYb`k]XYfgd]Y[Y`h`8UfØVYf`\]bUi g
\Uh`F ch\Y`XYb`HfUi a`ž`a]h`XYf`XYi hgW\Yb`BUh]cbU`a`UbbgW\UZh
K`Y`ha`Y]ghYf`ni`k`YfXYb`"GY]bY`Jcf`]YVY`ZØf`Ug]Uh]gW\Y`?ØW\Yž
]bgVYgcbXYfY`Gi g\]ž`nY][h`ni XYa`Y]bY`k`Y]hYfY`i: UW\hY`gY]bYf
DYfgÒb`]W_Y]h"

6YXYi hi b[`ZØf`X]Y`@[U`i bX`X]Y ; Ya`Y]bgW\UZh

8Yf`HfUbgZYf`j cb`Hca`F ch\Y`ni`I b]cb`6Yf`]b`_Ubb`Ui W\`U`g`HY`
Y]bYg`[fÒ» YfYb`HfYbXg`]b`XYf`6i bXYg`][U`[YgY\Yb`k`YfXYbž`k`c
↑ b[Y`HU`Yb`hY`j`YfghÅf`_h`[YZØfXYfh`k`YfXYb`"8]YgY`GhfUHy`[]Y
_ÒbbhY`b]W\h`bi f`XYb`Y]bnY`bYb`Gd]Y`Yfb`\Y`ZYbž`g]W\`ni
Yb`hk]W_Y`bž`gcbXYfb`Ui W\`X]Y`[YgUa`hY`@[U`ghÅf`_Ybž`]bXYa`g]Y
ZØf`Zf]gW\Yb`K`]bX`gcf[h`i bX`XUg`B]j`YUi`Yf\Ò`h`I b]cb`6Yf`]b
gd]Y`h`XUVY]Y]bY`k`]W\h][Y`F`c`Yž`]bXYa`g]Y`↑ b[Yb`Gd]Y`Yfb`k`]Y

Fch\Y`Y]bY`D`UhhZcfa`V]YhYhzi`a`i`\fY`:\`A`\][`_Y]hYb`ni`nY][`Yb`i`bX
g]W`k`Y]hYfni`Yb`hk`]W`Y`b`"

ϕg[`YgUa`h`_`ObbhY`X]YgYf`K`YW`gY`b]W`h`bi`f`Z`f`i`b]cb`6Yf`]b`j`cb
6YXYi`hi`b[`gY]b`z`gcbXYfb`Ui`W`Z`f`X]Y`[`YgUa`hY`@[`Uz`XU`Yf`X]Y
J]Y`ZU`hi`bX`XUg`DchYbn]U`↑`b[`Yf`HU`YbhY`]b`XYb`J`cfXYf[`fi`bX
fØW`h`"

8YhU]`g

6Ygi`W`Yb`G]Y`i`bg`Ui`Z.`a`Y]b!VYf`]b`bYh