

F Ài VYf]gW\ Yf'8]YVghU\ ``]b`Hfc]gXcfZ. A Ubb`ZØW\ hYh`bUW\ `6YXfc\ i b[°

⊕`Hfc]gXcfZ`_Ua`Yg`ni`Y]bYa`fÀi VYf]gW\ Yb`8]YVghU\ ``]b
Y]bYa`@YVYbga`]hY`[YgW\`ÀZh`XYf` *!`À\ f][Y`k`i`fXY
j`cf`Ài`Z][`ZYgh[Ybca`a`Yb"



⇒a`?`]fW\`hU`ž`)'` ,` (`\$`Hfc]gXcfZ`Ž`8`Yi`hgW\`UbX`!`⊕`Y]bYa
@YVYbga`]hY`[YgW\`ÀZh`]b`Hfc]gXcfZ`_Ua`Yg`Ua`A`cbhU[`bUW\`a`]hU[
ni`Y]bYa`XfUa`Uh]gW\`Yb`J`cfZU`.`9]b`'`*!`À\ f][Yf`A`Ubb`gW\`bUddhY
g]W\`GWc`_c`UXY`i`bX`U`_c\`c`]gW\`Y` ;`Yhf`Ab`_Y`i`bX`ZØW\`hYh`Y`c`\`bY
ni`VYnU\`Yb`"9]bY`Ui`Za`Yf`_gUa`Y`?`i`bX]b`VYcVUW\`hYh`Y`XYb
8]YVghU\``i`bX`]bZcfa`]YfhY`XUg`DYfgcbU`ž`XUg`]b`j`cf`XYa`@UXYb
ni`f`FYXY`ghY`hY`"8`Yf`J`YfX`ÅW\`h][Y`fYU[]YfhY`YXcW\`U[[fYgg]j`ž
VY`Y]X][hY`Y]bY`k`Y]hYfY`?`i`bX]b`i`bX`a`UW\`hY`g]W\`gW\`bY`Ui`g`XYa
GhUi`V"

8]Y`Dc`nY]`_c`bbhY`XYb`ZØW\`h][Yb`H`ÅhYf`k`Yb][`gd`ÅhYf`]a` :`cmYf
Y]bYg`bU\Y[Y`Y[YbYb`?`fUb`_Yb\`Ui`gYg`ZUggYb`"8`cW\`X]Y`GUW\`Y
V`Y]Vh`b]W\`h`c`\`bY`?`cbgYei`YbnYb.`8`Yf`A`Ubb`k`i`fXY`j`XYbh]Z]n]Yfh

i bX`VYZ]bXYhg]W`bi b`]b`Y]bYa`GhfUZ] YfZU\ fYb`k Y[Yb
 fÀi VYf]gWYb`8]YVghU\`gž`6YXfc\i b[`i bX`K]XYfghUbX`[Y[Yb`X]Y
 Dc`]nY]"BUW`XYb`dc`]nY]"WYb`A U» bU\ a Yb`k i fXY`Yf`ni bÅW`gh
 YbhUggYbž`XcW`X]Y`fYW`h]WYb`GW`f]hhY`[Y[Yb`]\ b`g]bX`VYfY]hg`]b
 j`c`Ya` ; Ub[Y"

8YhU]`g	
J`c`f`ZU``	8]YVghU\`ž`F`U`i`V`
C`f`h`	⇒`?`]fW`hU`ž`)'` ,` (`\$`H`f`c`]g`X`c`f`Z`ž`8`Y`i` h`g`W`h`U`b`X`
:`Y`g`h`b`U`\`a`Y`b`	%

6Ygi W`Yb`G]Y`i`b`g`U`i`Z`.'b!U["XY