

:]hbYggghi X]c`j g''<ca Y!K cf_ci hg. `J cf!
i bX`B UW\hY]`Y

⊕`XYf`\Yi h][Yb`; YgY``gW\UZh`]gh`X]Y`_ÖfdYf`]W\Y`; Ygi bX\Y]h
i bX`:]hbYgg`j cb`[fc»Yf`6YXYi hi b[``8U\Yf`gi W\Yb`]a a Yf`
a Y\f`A YbgW\Yb`bUW\`YZZY_h]j Yb`i bX`dfU_h]gW\Yb
A Ö[`]W\Y]hYbž`i a `]b`: cfa `ni `V`Y]VYb`i bX`]fY`:]hbYggn]Y`Y
ni `YffY]W\Yb``9]bY`gc`W\Y`A Ö[`]W\Y]h`]gh`XUg`HfU]b]b[`ni
<Ui gY`a `]h<`]ZY`j cb`Qf]h]WYSh]h`YQ`⊕`X]YgYa `5fh]_Y`k YfXYb
k]f`X]Y`5i gghUhi b[`i bX`J]Y`ZU`h`XYf`, Vi b[Ybž`XUg
NY]ha UbU[Ya Ybhi bX`X]Y`7cbj Yb]YbW`gck]Y`X]Y`gcn]U`Y
⊕hYfU_h]cb`i bX`A ch]j Uh]cbž`X]Y`Xi fW\`Qf]h]WYSh]h`YQ[YVchYb
k YfXYbž[YbUi Yf`i bhYf`X]Y`@ dY`bY\`a Yb``8i fW\`Y]bY
Y]b[Y\YbXY`5bU`mgY`X]YgYf`5gdY_hY`k YfXYb`k]f`X]Y`J cf!
i bX`B UW\hY]`Y`X]YgYf`HfU]b]b[ga Yh\cXY`VY`Yi W\hYb`i bX
a Ö[`]W\Y`9a dZY\`i b[Yb`ZØf`X]Y`5bk YbXi b[`Ui ggdfYW\Yb`
5i gghUhi b[`/ Ua d^Y``]d/



⌘`XYf`\Yi h)[Yb` ; YgY`gWUZh]gh`X]Y`_ŌfdYf`]WXY` ; Ygi bX\Y]h`i bX
:]hbYgg`j cb`[fc»Yf`6YXYi hi b[``8U\Yf`gi WXYb`]a a Yf`a Y\ f
A YbgWXYb`bUWX`YZZY_h]j Yb`i bX`dfU_h]gWXYb`A Ō[`]W_XY]hYbž`i a `]b
: cfa `ni `V`Y]VYb`i bX`]\fY` :]hbYggn]Y`Y`ni `YffY]WXYb``9]bY`gc`WXY
A Ō[`]W_XY]h`]gh`XUg`HfU]b]b[`ni `<Ui gY`a]h`<`]ZY`j cb`Ūfh]WYSh]h`YŌ
⌘`X]YgYa `5fh]_Y`k YfXYb`k]f`X]Y`5i gghUhi b[`i bX`J]Y`ZU`h`XYf
, Vi b[Ybž`XUg`NY]ha UbU[Ya Yb`hi bX`X]Y`7cbj Yb]YbW`gck]Y`X]Y
gcn]U`Y`⌘hYfU_h]cb`i bX`A ch]j Uh]cbž`X]Y`Xi fW_XY]hYbž`i a `]b

[YVchYb`k YfXYbž[YbUi Yf`i bhYf`X]Y`@ dY`bY\`a Yb``8i fW\`Y]bY
Y]b[Y\`YbXY`5bU`mgY`X]YgYf`5gdY`hY`k YfXYb`k]f`X]Y`J cfl`i bX
BUW\hY]`Y`X]YgYf`HfU]b]b[ga`Yh\`cXY`VY`Yi W\hYb`i bX`a Ò[`]W\Y
9a dZY\`i b[Yb`ZØf`X]Y`5bk YbXi b[`Ui ggdfYW\Yb"

5i gghUhh i b[`i bX`J]Y`ZU`h`XYf`, Vi b[Yb

8]Y`5i gghUhh i b[`Y]bYg`HfU]b]b[gdfc[fUa`a`g`gd]Y`h`Y]bY`k]W\h][Y
Fc``Y`VY]`XYf`A`ch]j Uh]cb`i bX`XYa``9fZc`[`XYf`HfU]b]YfYbXYb``9]b
VfY]hYg`GdY`hfi`a`Ub`, Vi b[Yb`i bX`HfU]b]b[g[Yf`ÅhYb`gc f[h`XUZØfž
XUgg`X]Y`HY]`bY\`a Yf`gck`c\``\fY`5i gXUi Yf`U`g`Ui W\`]\fY`?fUZh
hfU]b]YfYb`_ÖbbYb``Ni XYa`Yfa`Ò[`]W\h`Y]bY`j]Y`Z`Å]h][Y
5i gghUhh i b[`X]Y`J Uf]Uh]cb`XYf`K`cf`_ci hgž`k Ug`@Ub[Yk`Y]`Y
j`cfVYi [h`i bX`X]Y`HfU]b]YfYbXYb`a`ch]j]Yfh"

=a`a`cXYfbYb`:]hbYggghi`X]c`[]Vh`Yg`Y]bY`VfY]hY`DU`YhhY`Ub
; Yf`ÅhYbž`X]Y`hfU]b]b[gZc`_i gg]Yfh`i bX`VYbi`hnYfZfYi`bX`]W\`[YghU`hYh
g]bX``8Uni`[Y\`ÖfYb`@Ui`ZV`ÅbXYfž`7fcgghfU]bYfž`<UbhY`bž
?Yhh`YVY``gž`Fi`XYf[Yf`ÅhYž`HF`L`!6`ÅbXYf`i bX`j]Y`Yg`a`Y\`f``8]Y
J`YfZØ[VUf`_Y]h`X]YgYf`; Yf`ÅhY`V]YhYh`XYb`HfU]b]YfYbXYb`X]Y
A`Ò[`]W\`_Y]hž`\fY`K`cf`_ci hg`bUW\`]\fYb`]bX]j]Xi`Y``Yb`6YXØfZb]ggYb
i`bX`N]Y`Yb`ni`[YghU`hYb"

8UfØVYf`\]bUi`g]gh`X]Y`J]Y`ZU`h`XYf`j YfZØ[VUfYb`, Vi b[Yb
Yb`hgW\Y]XYbX``BYVYb`_Ugg]gW\Yb`?fUZh`i bX`5i gXUi YfØVi`b[Yb
_ÖbbYb`:]hbYggghi`X]cg`?i fgY`]b`Mc[Už`D]`UhYgž`Ni`a`VUž`Gd]bb]b[
i`bX`UbXYfYb`gdYn]Y``Yb`HfU]b]b[ga`Yh\`cXYb`UbV]YhYb``8]Y`J]Y`ZU`h
XYf`, Vi b[Yb`]gh`k]W\h][ž`i`a`X]Y`HfU]b]YfYbXYb`VY]`@Ui`bY`ni
\U`hYb`i bX`g]W\Yfni`ghY``Ybž`XUgg`Y`XYf`gY]bY`dYfgØb`]W\Yb`N]Y`Y
YffY]W\Yb`_Ubb"

8]Y`5i gghUhh i b[`i bX`J]Y`ZU`h`XYf`, Vi b[Yb`g]bX`Ui W\`Y]b
k]W\h][Yf`5gdY`h`VY]`XYf`Df`Åj`Ybh]cb`j`cb`J`Yf`Yhni`b[Yb``8i fW\`X]Y
VfY]hY`DU`YhhY`Ub`; Yf`ÅhYb`i bX`, Vi b[Yb`_ÖbbYb`HfU]b]YfYbXY
j`YfgW\]YXYbY`A`i`g`_Y`[fi`ddYb`hfU]b]YfYb`i bX`gc`a`i`g`_i``ÅfY
8mgVU`UbW\b`j`Yfa`Y]XYb``Ni XYa`Yfa`Ò[`]W\Yb`j`YfgW\]YXYbY
HfU]b]b[ga`Yh\`cXYb`X]Y`]bX]j]Xi`Y``Y`5bdUggi`b[`XYg
HfU]b]b[gd`Ub`g`Ub`X]Y`_ØfdYf`]W\Yb`J`cfUi`ggYhni`b[Yb`i bX`N]Y`Y

XYf`HY]`bY\`a Yf"

NY]ha UbU[Ya Ybh'i bX`7cbj Yb]YbW

8 Ug`NY]ha UbU[Ya Ybh']gh`Y]b`k]W`h[Yf`HY]`i bgYfYg`hÅ[`]W`Yb
@VYbg`i bX`VYhf]Zh`Ui W`i bgYfYb`HfU]b]b[gd`Ub``A]h
j YfgW]YXYbYb`J YfdZ]W`hi b[Yb`_Ubb`Yg`gW`k]Yf][`gY]bž
[YbØ[YbX`NY]h`ZØf`fY[Y`a Å»][Y`K cf`ci hg`ni `Z]bXYb``:]hbYgg!5ddg
i bX`!D`U`hZcfa Yb`V]YhYb`Y]bY`]XYU`Y`@Øgi b[`ZØf`X]YgYg`DfcV`Ya ž
XU`g]Y`Yg`6Ybi hnYfb`Yfa Ø[`]W`Ybž`\fY`HfU]b]b[gY]b\Y]hYb`ZYI]VY`
]b`]fYb`NY]hd`Ub`ni `]bhY[f]YfYb``8 UXi fW`k]fX`Yg`Y]bZUW`Yfž`XUg
HfU]b]b[`ni f`; Yk c`b`b`Y]h`ni `a UW`Yb`i bX`_cbh]bi]Yf`]W`XUVY]`ni
V`Y]VYb"

Ni gÅhn`]W`ni f`: `YI]V`]hÅh`V]YhYb`:]hbYgg!5ddg`Ui W`Y]bY
j YfVYggYfhY`7cbj Yb]YbW``Bi hnYf`_ØbbYb`YXYfnY]h`i bX`ØVYfU`
hfU]b]YfYbž`c`b`Y`Ub`Y]bYb`VYgh]a a hYb`Cfh[YVi bXYb`ni `gY]b"
8]Yg`Yfa Ø[`]W`h`Yg`]bYbž`\fY`HfU]b]b[gY]b\Y]hYb`]b`XYb`5`hU[
ni `]bhY[f]YfYbž`gY]`Yg`ni `Y]bYf`; YgW`ÅZhgfY]gY``8]YgY`: `YI]V`]hÅh`ghY][Yfh`X]Y
K U`fgW`Y]b`]W`_Y]hž`XUgg`6Ybi hnYf`]f`HfU]b]b[gdfc[fUa a
_cbgYei Ybh`Y]b`U`hYbž`k Ug`ni ``Ub[Zf]gh[Yb`[Ygi bX`Y]h`]W`Yb
JcfhY]`Yb`ZØ`fh"

9]b`k Y]hYfYf`5gdY`h`XYf`7cbj Yb]YbW`]gh`X]Y`J]Y`ZU`h`XYf
j YfZØ[VUfYb`, Vi b[Yb`i bX`HfU]b]b[gdfc[fUa a Y``:]hbYgg!5ddg
V]YhYb`6Ybi hnYfb`Ni [Ub[`ni `Y]bYf`VfY]hYb`DU`YhY`j cb`, Vi b[Ybž
XUfi bhYf`?fUZhfU]b]b[ž`7UfX]cž`Mc[Už`D]`UhYg`i bX`j]Y`Yg`a Y`f"
8 UXi fW`_ØbbYb`Bi hnYf`]f`HfU]b]b[`dYfgcbU`]g]YfYb`i bX`Ub`]fY
gdYn]Z]gW`Yb`:]hbYggn]Y`Y`i bX`Jcf`]YVYb`UbdUggYb"

8i fW`X]Y`JYfk YbXi b[`j cb`:]hbYgg!5ddg`g]bX`Bi hnYf`b]W`h`a Y`f
Ui ZZYghY`?i fgnY]hYb`cXYf`VYgh]a a hY`HfU]b]b[g[YfÅhY
Ub[Yk]YgYb``G]Y`_ØbbYb`]f`HfU]b]b[`bUW``]fYb`Y][YbYb
Jcf`]YVYb`[YghU`hYb`i bX`UbdUggYbž`k Ug`ni `Y]bYf`Yf`Ø`hYb
A ch]j Uh]cb`i bX``Ub[Zf]gh[Yb`HfU]b]b[g`cbh]bi]hÅh`ZØ`fh``8]Y
7cbj Yb]YbW`i bX`: `YI]V`]hÅhž`X]Y`:]hbYgg!5ddg`V]YhYbž`hfU[Yb
gca]h`k YgYb`h]W`XUni `VY]ž`XUgg`Bi hnYf`]fY`N]Y`Y`YffY]W`Yb`i bX`

‘Ub[Zf]gh)[‘[Ygi bX‘i bX‘Z]h‘V‘Y]VYb"

Gcn]U‘Y‘≡bhYfU_h]cb‘i bX‘A ch]j Uh]cb

8]Y‘gc n]U‘Y‘≡bhYfU_h]cb‘gd]Y‘h‘Y]bY‘k]W h][Y‘F c‘‘Y‘]b‘‘YXYa
:]hbYggdfc[fUa a ‘‘K Ybb‘A YbgWXYb‘ni gUa a Yb‘hfU]b]YfYbž
_ÒbbYb‘g]Y‘g]W h][Y[YbgY]h][‘a ch]j]YfYb‘i bX‘i bhYfghØhnYb“‘8]Yg
_Ubb‘VYgcbXYfg‘\]‘ZfY]W h‘gY]bž‘k Ybb‘Yg‘XUfi a ‘[Y‘hž‘gW h‘k]Yf][Y
cXYf‘i bUb[YbY‘\a Y‘, Vi b[Yb‘Xi fW h‘ni ZØ\ fYb“‘J]Y‘Y
:]hbYggghi X]cg‘V]YhYb‘?i fgY‘Ubž‘VY]‘XYbYb‘X]Y‘HY]‘bY‘\a Yf
ni gUa a Yb‘hfU]b]YfYb‘i bX‘g]W h‘[Y[YbgY]h][‘a ch]j]YfYb‘_ÒbbYb"

8UfØVYf‘\]bUi g‘_ÒbbYb‘gc n]U‘Y‘≡bhYfU_h]cbYb‘Ui W h‘ni ‘Y]bYf
dcg]h]j Yb‘9]bghY‘‘i b[‘[Y[YbØVYf‘XYa ‘HfU]b]b[‘VY]hfU[Yb“‘≡XYa
a Ub‘g]W h‘a]h‘UbXYfYb‘Ui ghUi gW h‘i bX‘9fZU\ fi b[Yb‘hY]‘hž‘_Ubb
a Ub‘bYi Y‘DYfgdY_h]j Yb‘[Yk]bbYb‘i bX‘g]W h‘]bgd]f]YfYb‘‘UggYb"
8]Yg‘_Ubb‘XUni ‘VY]hfU[Ybž‘XUgg‘a Ub‘VY]a ‘HfU]b]b[‘V‘Y]VYb‘i bX
gY]bY‘N]Y‘Y‘YffY]W h‘Yb‘a ØW hY"

9]b‘k Y]hYfYf‘5gdY_h‘XYf‘gc n]U‘Yb‘≡bhYfU_h]cb‘]gh‘X]Y‘A Ô[‘]W h‘_Y]hž
g]W h‘a]h‘; ‘Y]W h‘[Yg]bbhYb‘ni ‘j YfbYhnYb“‘J]Y‘Y‘:]hbYggghi X]cg
V]YhYb‘7ca a i b]hml9j Ybhg‘i bX‘; fi ddYbU_h]j]hÅhYb‘Ubž‘VY]‘XYbYb
g]W h‘A]h[‘]YXYf‘hfYZZYb‘i bX‘g]W h‘_YbbYb‘YfbYb‘_ÒbbYb“‘8]Yg‘_Ubb
ni ‘‘Ub[Zf]gh)[Yb‘: fYi bXgW h‘UZhYb‘ZØ\ fYb‘i bX‘Y]b‘i bhYfghØhnYbXYg
BYhmk Yf_‘V]YhYbž‘XUg‘ØVYf‘XUg‘:]hbYggghi X]c‘\]bUi g[Y‘h"

8]Y‘gc n]U‘Y‘≡bhYfU_h]cb‘_Ubb‘Ui W h‘X]Y‘A ch]j Uh]cb‘ZØfXYfbž‘]bXYa
g]Y‘Y]b‘; YZØ\‘‘XYf‘J YfUbhk cfh]W h‘_Y]h‘gW h‘UZh“‘K Ybb‘a Ub‘g]W h‘a]h
UbXYfYb‘j YfUVfYXYh‘\Uhž‘i a ‘[Ya Y]bgUa ‘ni ‘hfU]b]YfYbž‘]gh‘a Ub
Y‘Yf‘XUni ‘[YbY][hž‘g]W h‘Ub‘gY]bY‘J YfUVfYXi b[Yb‘ni ‘\U‘hYb‘i bX
fY[Y‘a Å»][‘ni a ‘HfU]b]b[‘ni ‘YfgW h‘Y]bYb“‘8]YgY‘5fhXYf
J YfdZ]W h‘i b[‘_Ubb‘XUni ‘VY]hfU[Ybž‘XUgg‘a Ub‘Ua ‘6U‘‘V‘Y]Vh‘i bX
gY]bY‘:]hbYggg]Y‘Y‘b]W h‘Ui g‘XYb‘5i [Yb‘j Yf‘]Yfh"

Ni gÅhn‘]W h‘ni ‘XYb‘gc n]U‘Yb‘≡bhYfU_h]cbYb‘V]YhYh‘XUg‘:]hbYggghi X]c
cZh‘Ui W h‘dfcZYgg]cbY‘‘Y‘l bhYfghØhni b[‘]b‘: cfa ‘j cb‘DYfgcbU‘
HfU]bYfb‘i bX‘:]hbYggYl dYfhYb“‘8]YgY‘_ÒbbYb‘]bX]j]Xi Y‘‘Y
HfU]b]b[gd‘ÅbY‘YfghY‘‘Ybž‘F UhgW h‘Å[Y‘ni f‘9fbÅ\ fi b[‘[YVYb‘i bX

XUVY]\Y`ZYbž`N]Y`Y`ni`gYmYb`i bX`ni`YffY]WXYb``8]YgY
dfcZYgg]cbY``Y`l bhYfghØhni b[`_Ubb`X]Y`A ch]j Uh]cb`ghY][Yfb`i bX
g]WXYfghY``Ybž`XUgg`XUg`HfU]b]b[`YZZY_h]j `i bX`g]WXYf`]gh"

`: Un]h. `:]hbYggghi X]c`j g``<ca Y!K cf_ci hg`

⊕g[YgUa h`V]YhYb`gck c``XUg`:]hbYggghi X]c`U`g`Ui WXY`<ca Y!
K cf_ci hg`J cf!`i bX`B UWXYhY]`Y``8]Y`5i gk U``Ub`; YfÅhYb`i bX`X]Y
J]Y`ZU`h`XYf`, Vi b[Yb`g]bX`ja `:]hbYggghi X]c`a Y]gh`i a ZUb[fY]WXYfž
k Å\fYbX`<ca Y!K cf_ci hg`Xi fWXY`NY]hYfgdUfb]g`i bX`7cbj Yb]YbW
di b_hYb``Gcn]U`Y`⊕hYfU_h]cb`i bX`A ch]j Uh]cb`g]bX`k Y]hYfY
k]WXYh][Y`: U_hcfYbž`X]Y`VY]a `HfU]b]b[`Y]bY`F c``Y`gd]Y`Yb"
@YmhYbX`]WXY`]gh`X]Y`9bhgWXY]Xi b[`ZØf`XUg`Y]bY`cXYf`XUg`UbXYfY
ghUf_`j cb`]bX]j]Xi Y``Yb`J cf`]YVYbž`6YXØfZb]ggYb`i bX`N]Y`Yb
UV\Åb[]["

9[U`ž`ZØf`k Y`WXY`C dh]cb`G]Y`g]WXY`YbhgWXY]XYbž`k]WXYh][`]ghž`XUgg
fY[Y`a Å»][Y`_ØfdYf`]WXY`5_h]j]hÅh`YfZc`[hž`i a `X]Y`Y][YbY
; Ygi bX\Y]h`i bX`:]hbYgg`ni`ZØfXYfb``6Y]XY`A Ò[`]WXY`Y]hYb`UVYb
]\fY`6YfYWXYh][i b[`i bX`gc``hYb`Y`bUWXY`@YVYbggh`]i bX
DfÅZYfYbnYb`]b`6YhfUWXYh[Ync[Yb`k YfXYb"

8YhU]`g

6Ygi WXYb`G]Y`i bg`Ui Z.`a Y]b!Z]hbYgg"bYh