

6U\ bhYWX bc`c []Y`XYf`Ni _i bZh.
GhfU» YbVU\b!G]a i `Uhc f`Ui Z`XYf
=bbcHfUbg`&\$&(

j YfZUggY`Y]bY`a YhU!VYgWX fY]Vi b[`Ui ZXYi hgWX`Z0f`Y]bYb
Ufh]_Y`"6YUWX hY`X]Y`F]WX h`b]Yb`Z0f`Y]bY`cdh]a U`Y`a YhU!
XYgWf]dh]cb`Z0f`; cc[`Y`"5fh]_Y`./ ei ch// ei ch// ei ch// `hX]j
WUgg1 / ei chWUfX/ ei ch`Ub[1 / ei chXY/ ei ch// [h/

.....

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.....

/ `hX]j `WUgg1 / ei ch/bc!ZcUh/ ei ch// [h// `h#X]j / [h/

.....

.....

.....

...../ `h/d/ [h// `h/#d/ [h// `h/d/ [h// `hV/ [hK]Y
: U\ fYfUgg]ghYbngmghYa Y`XYb`GhfU» YbVU\b] Yf_Y`f`g]WX YfYf
a UWXYbž`Äggh`g]WX`Ui Z`XYf` : UWXa YggY`=bbcHfUbg`]b`6Yf`]b
]b`Y]bYa `bYi Ufh][Yb`GhfU» YbVU\b!G]a i `Uhc f`Yf`YVYb`"5i Z
Y]bYa `C f][]bU`! : U\ fYfghUbX`_0bbYb`A YggYVYgi WX Yf`j]fhi Y`
0VYf`Y]bY`GhfY`W_Y`]b`A 0bWX Yb`ghYi Yfb`i bX`k YfXYb`XUVY]
Xi fWX`5gg]ghYbngmghYa Y`i bhYfgh0hnh`8Yf`HfUa`!G]a i `Uhc f
]gh`k`Ä\ fYbX`XYf`=bbcHfUbg`j ca`&(`"V]g`&+"GYdhYa VYf`&\$&(
Ui Z`XYa`56; !GhUbX`]a`7]hm`7i VY`5`#&(\$`ni`Z]bXYb"
/ `h#V/ [h// `h/#d/ [h// `h/d/ [h/8 Ug; Ya Y]bgWX UZhgd fC`Y`_h
k]fX`i bhYf`@Y]hi b[`XYf`=bXi ghf]YUb`U[Yb!
6Yhf]YVg[YgY`gWX UZh`a V<`f#56; E`Ui g`C`hncVfi bb`ni gUa`a Yb
a]h`XYb`?cbgc fh]U`dUfhbYfb`GhUXhk Yf_Y`A 0bWX Yb; a V<
fGK A E`i bX`XYf; 9F GMG; a V<`j cfUb[Yhf]YVYb`"8Yf
GWX k Yfdi b`_h`XYf`56; ``Y[h`Ui Z`XYf`5Vg]WX Yfi b[`bYi Yf
A cV]`]hÄhg`cbnYdhY`i bX`!hYWX bc`c []Yb`"; 9F GMGž`Y]b
J YfVi bXi bhYfbY`a Yb`XYf`<, 6B 9F!; fi ddYž]gh`Z0\ fYbXYf
5bV]YhYf`Z0f`=bghfi a Ybh]Yfi b[Yb`]a` : 0\ fYfghUbX`j cb

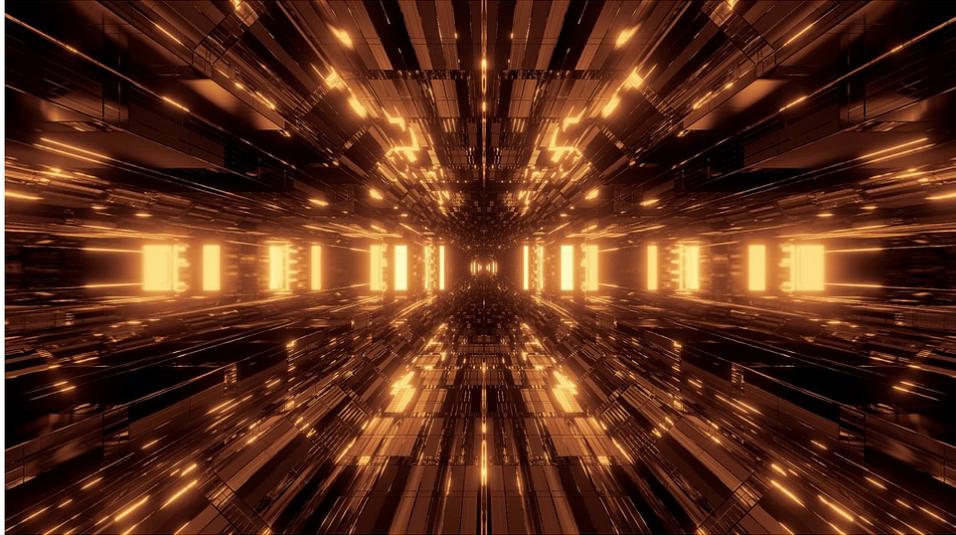
GW\ JYbYb! i bX`GcbXYfZU\fnYi [Yb"K Y]hYfYf`Dfc`Y_hdUfhbYf
]gh`X]Y` 8!J]gi U`]g]Yfi b[gZ]fa U`cdh]Zm; a V<`Ui g`8Ufa ghUXhž
X]Y`XYb`GhfYW_YbUVgW\ b]hh`XYf`HfUa`]b`A`ØbW\Yb
X][]hU`]g]Yfh`\Uh"/`h/#d/[h//`h/d/[h//`hW/[h/J`cfhfU[`ØVYf
Dfc`Y_hYf[YVb]ggY`i bX`6Ygi W\`Ui g`XYf
Dc`h]_`h/#/ [h//`h/#d/[h//`h/d/[h/`8]Y`DUfhbYf`ghY`Yb`X]Y
Dfc`Y_hYf[YVb]ggY`Ua`A`]h`k`cW`ž`&)"`GYdhYa`VYf`&`\$`&(ž`UV
`%`&"`\$`I`\f`Ua`7B5!; Ya`Y]bgW\UZhghUbX`ja`7]hm`7i`VY`5`#
&(`\$`j`cf"7\f]gh]Ub`6YfbfY]hYfž`6UmYf]gW\Yf`GhUUhga`]b]ghYf
ZØf`J`Yf_Y\`fž`k`]fX`g]W\`ni`j`cf`i`a`,"`\$`I`\f`Y]b`6]`X`j`ca`HfUa`!
7cW_d]h`XYf`Ni`_i`bZ`h`a`UW\Yb"
/`h/#d/[h//`h/d/[h//`hW/[h/J`Yf_Y\`fgi`bhYfbY\`a`Yb`U`g
J`c`ffY]hYf`]b`bc`j`Uh]j`Yf`A`cV`]h`h`g`_`c`bn`Y`dh`Y
/`h/#/ [h//`h/#d/[h//`h/d/[h/`5i`Z[`fi`bX`XYg`ni`bY\`a`Yb`XYb
: UW_f`À`ZhYa`Ub[Y`g`i`bX`ni`f`J`YfVYggYfi`b[`XYf`G]W\Yf\`Y]h
gY`h`h`g]W\`X]Y`ni`XYb`GK`A`[Y\`ØfYbXY`A`ØbW\`bYf
J`Yf_Y\`fg[YgY`gW\UZh`a`V<`f`A`J;`Ł`ZØf`X]Y`K`Y]hYfYb`hk`]W_i`b[
XYf`:`U\`fYfUfVY]hgd`À`h`n`Y`Y]b" `C`]j`Yf`;`UgYfž;`YgW\`À`Zh`g`ZØ\`fYf
i`bX`@Y]hYf`XYg;`YgW\`À`Zh`g`VYfY]W\`g`GW\]YbY`VY]`XYf`A`J;`ž
VY_f`À`Zh][`h`X]Y`b`c`h`k`Y`b`X][`Y`A`c`X`Y`f`b]g]Yfi`b[`i`b`X
8][]hU`]g]Yfi`b[`XYg`²`DBJ`!`6Yhf]YVYg`Xi`fW\`]b`bc`j`Uh]j`Y
A`c`V`]h`h`g`Ub[YV`ch`Y.`/`h/#/ [h//`ei`ch/5gg]ghY`b`ng`m`gh`Y`a`Y
V]Y`h`Y`b`X]Y`A`Ø[`]W\`_`Y]hž`X]Y`:`U\`fYf]b`b`Y`b`i`b`X`:`U\`fYf`VY]`]\`fYf
5`f`VY]h`ni`i`b`h`Y`f`gh`Ø`h`n`Y`b`i`b`X`G`h`f`U`»`Y`b`V`U\`b`Y`b
k`Y]hYf`ni`Y`b`h`k`]W_Y`b" `A`]h`X`Y`a`G]a`i`U`h`c`f`\`U`V`Y`b`k`]f`X]Y
A`Ø[`]W\`_`Y]hž`j`Y`f`g`W\]Y`X`Y`b`Y`G`m`g`h`Y`a`Y`j`]f`h`i`Y`ni`h`Y`g`h`Y`b`i`b`X
U`b\`U`b`X`j`c`b`i`b`h`Y`f`g`W\]Y`X`]W\`Y`b`J`Yf_Y\`fgg]h`i`U`h]c`b`Y`b`ni
Y`f`d`f`c`V`Y`b" `8`U`g`\`]`Z`h`i`b`g`V`Y]`X`Y`f`9`b`h`g`W\`Y]X`i`b[`g`Z]b`X`i`b[`i`b`X
k`]f`X`X`Y`b`G`h`f`U`»`Y`b`V`U\`b`j`Yf_Y\`f`b`c`W\`g]W\`Y`f`Y`f
a`UW\`Y`b/`ei`ch//`h/#/ [h/ž`gc;`UgYf"
/`h/#d/[h//`h/d/[h//`hW/[h/D`f`c`h`c`h`m`d]b[`j`c`b
: U\`fYfUgg]ghY`b`ng`m`gh`Y`a`Y`b`ZØf`X]Y`b`À`W\`gh`Y`;`Y`b`Y`f`U`h]c`b`XYf
G`h`f`U`»`Y`b`V`U\`b/`h/#/ [h//`h/#d/[h//`h/d/[h/`5i`Z`X`Y`a`K`Y[
ni`a`j`c`Ui`h`c`b`c`a`Y`b`ž`ZU\`fYf`c`g`Y`b`G`h`f`U`»`Y`b`V`U\`b`V`Y`h`f]Y`V
g`W\`U`Z`h`X`U`g`D`f`c`Y`_`h`k`]W\`h][`Y`@`Ø`gi`b[`Y`b`ZØf`\`Y`i`h][`Y
5`b`Z`c`f`X`Y`fi`b[`Y`b" : U\`fYf`k`Y`f`X`Y`b`a`]h`5`gg]ghY`b`ng`m`gh`Y`a`Y`b
i`b`h`Y`f`gh`Ø`h`h`i`b`X`X`U`X`i`f`W\`l`b`Z`À`Y`g][`b]Z`_`U`b`h`f`Y`X`i`n]Y`f`hž
Y`f`_`À`f`h`-56;`!;`Y`g`W\`À`Zh`g`ZØ\`fYf`H\`c`a`U`g`?`Ø\`Y`f.
/`h/#/ [h//`ei`ch/`a`6YfY]W\`XYf`5gg]ghY`b`ng`m`gh`Y`a`Y`Y`b`h`k`]W_Y`b
k`]f`a`c`X`Y`f`b`gh`Y`@`Ø`gi`b[`Y`b`ž`X]Y`X`U`g`:`U\`f`d`Y`f`g`c`b`U`a`]h
Ni`g`U`h`n]b`Z`c`f`a`U`h]c`b`Y`b`j`Y`f`g`c`f[`Y`b" ?`U`a`Y`f`U`g`i`b`X`@]85F!
G`Y`b`g`c`f`Y`b`U`a`:`U\`f`n`Y`i`[`Y`f`_`Y`b`b`Y`b`<]b`X`Y`f`b]ggY`ja`:`U\`f`k`Y[
g`c`k`]Y`fi`b`X`i`a`X`U`g`:`U\`f`n`Y`i`[`\`Y`fi`a`i`b`X`k`U`f`b`Y`b`Z`f`Ø\`n`Y]h][

j cf'Y]bYf?c``g]cb" a '9fbghZU``Y]hYb'X]Y'GmghYa Y
gY'VghghAbX]['A U» bU\ a Yb'Y]b'i bX'j Yf\]bXYfb
VY]gd]Y`gk Y]gY'Xi fW\ 'Y]bY' BchVfYa gi b[
DYfgcbYbgW\AXYb"/ ei ch// `h/#/ [h'/BYVYb'a Y\ f'G]W\Yf\Y]h
Yf\cZZYb'g]W\X]Y'Dfc'Y_hdUfhbYf'Ui W\YfghY
9fZU\fi b[gk YfhY'ZOf'X]Y'5i hca Uh]g]Yfi b['i bX'j YfbYhni b[
XYg'^2 DBJ "'i bhYf'9]bVYn]Y\i b['XYf': U\ f[ÀghY'gc`Yb
a U» [YgW\ bY]XYfhY'5i hca Uh]g]Yfi b[g`Ògi b[Yb'_cbn]d]Yfh
i bX'a]h\]ZY'U[]Yf'9bhk]W'_i b[ga Yh\cXYb'X]fY_h'Y]b[YgYhnh
i bX'[YhYghYhik YfXYb"'5i W\k Ybb'Yg'VYfY]hg'nU\ 'fY]W\Y
9fdfcVi b[Yb'[]Vhž'gc']gh'XYf'Ui hcbca Y'GhfU» YbVU\ bVYhf]YV
b]W\h'ni 'Yhnh'Ui Z[fi bX'cZZYbYf'Ni 'Uggi b[gZfU[Yb']b'XYb
bÅW\ghYb'`Y\ fYb']b'8Yi hgW\ 'UbX'bcW\ 'b]W\h'UVni gY\Yb"
/ `h/#d/ [h// `h/d/ [h// `h/W/ [h/G]a i 'Uh]cb']b'?ca V]bUh]cb'a]h
<UfXk UfY / `h/#/ [h// `h/#d/ [h// `h/d/ [h/'?YfbY'Ya Ybh'XYg
G]a i 'Uhc'fg']gh'XYf'j]fhi Y`Y'GhfU» YbVU\ bVYhf]YV'a]h
fj cf!Ł]a d'Ya Ybh]YfhYb': U\ fYfUgg]ghYbngmghYa Yb'i bX'XYb
A i `h]Zi b_h]cbgX]gd`Umg'j cb'; 9F GMG'U'g'X][]hU'Y
GW\ b]hghY`Y"'8Ug'i bhYfbY\ a Yb'a]h'G]hn']b'K c'ZfUhg\Ui gYb
VY]A ØbW\Yb'Ybhk]W_Y'h'6cfX[YfÅhY'ZOf'XYb
GW\]YbYbj Yf_Y\ f'i bX'[Y\ Òfh'\]Yf'ni 'XYb
`bcbj Uh]cbghfY]VYfb"/ `h/ [h// ei ch/ bgyfY <UfXk UfY
gW\ UZh'X]Y'J cfUi ggYhni b[ži a '_i bXYbgdYn]Z]gW\Y
5bk YbXi b[Yb'i bX'5dd`_Uh]cbYb']a '7cW_d]h'Y]bYf
GhfU» YbVU\ b'UVni V]'XYb/ ei ch// `h/#/ [h/ž'gU[h
/ `h/W/ [h/H\cfghYb'GdfYb[Yfž'; 9F GMG!
; YgW\ ÅZh'Y]hYf/ `h/#/ [h"'6Y]'XYf' `bcbHfUbg'dfÅgYbh]Yfh
; 9F GMG'gY]bY'i a Zub[fY]W\Y'DfcXi _hdU'YhhY'Ui ZXYa 'GhUbX
XYf'< , 6B9F!; fi ddY']b'<U`Y`%&ž'GhUbX`%&\$"
/ `h/#d/ [h// `h/d/ [h/' a 'G]a i 'Uhc'f'ZOf'XUg'HfUa !7cW_d]h'XYf
Ni _i bZi'g]bX'XfY]'GmghYa Y'j cb'; 9F GMG']bhY[f]Yfh'nk Y]
A i `h]Zi b_h]cbg!8]gd`Umg'fk A `gŁ'XYf'HmdYb'67&- , \$'i bX
67) (, \$'gck]Y'XYf/ ei chY'Y_hfcb]gW\Y
F ØW_ZU\fgd]Y[Y/ ei ch/'JA %) \$\$'fU]XYca cb]hcfŁ"'8]Y
[fUZ]gW\Yb'8]gd`Umg'_ØbbYb'Yhk U'U_hi Y`Y'hYW\ b]gW\Y'K YfhY
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ØVYfhfU[Yb"'Gc``]YZYfh'; 9F GMG'VYfY]hg
A i `h]Zi b_h]cbgX]gd`Umg'i bX'Y'Y_hfcb]gW\Y
/ ei ch/F ØW_gd]Y[Y/ ei ch/'ZOf'X]Y'Ua 'Dfc'Y_h'VYhY][]hYb
GhUXhk Yf_Y'A ØbW\Yb"/ `h/ [h// ei ch/8Ua]h'g]Y\h'XYf
GhfU» YbVU\ bZU\ fYf']b'9W\ hnY]hž'k Ug'fi bX'i a 'gY]b': U\ fnYi []
dUgg]Yfh/ ei ch// `h/#/ [h/ž'Yf'_Àfh/ `h/W/ [h/H\cfghYb
GdfYb[Yf/ `h/#/ [h/' / `h/#d/ [h// `h/d/ [h// `h/W/ [h/G]a i 'Uhc'f

V]YhYh'6`]W_Y`Ui gi bhYfgW]YX`]WYb
DYfgdY_h]j Yb/ `h/#/ [h// `h/#d/ [h// `h/d/ [h/'K]Y`XUg`]b`XYf
DfUI]g`Zi b_h]cb]Yfhž`j YfUbgWUi `]W`h`XYf`HfUa !G]a i `Uhc f
Y]bXfi W_gj c`": Øf`Y]bYb`a Ò[`]W`gh`fYU`]gh]gWYb`i bX
XYhU]`[YhfYi Yb` : U\ fVYhf]YV` \ Uh`C dh]Zm`Y]bYb`A J ; !
gdYn]Z]gWYb`GhfYW_YbUVgW`b]hh`]b`Y]b` " 8!
I a [YVi b[ga cXY`ØVYfZØ\fh` ð`Ni gUa a YbUfVY]h`a]h`XYf
-56; `k i fXY`gcZhk UfYgY]h][`Y]b`_ca d`YI Yf
G]a i `Uh]cbgj YfVi bX`Yb`hk]W_Y`h`zi a `XYb`ZUW`hhYb`fY]WYb
GhfU» YbVU\`bVYhf]YV`]b`j YfgW]YXYbUfh][Yb
J Yf`_Y\fgg]hi Uh]cbYb`UVni V]`XYb`"Ni g`À`h`]W`ni f`DYfgdY_h]j Y
Ui g`XYa ` : U\ fYfghUbX`_ØbbYb` ð`hYfYgg]YfhY`Ui Z`XYf
ðbcHfUbg`a]h`]\Z`j`cb`J]fhi U`!FYU`]hm!6f`"Yb`Ui W`]b`X]Y
Fc`"Y`Y]bYg` : U\ f[Ughg`cXYf`UbXYfYf`J Yf`_Y\fgH`Y`bY`a Yf
gW`ØdZYbž`i a `YI hYfbY`A YbgW`!A UgW`]bY`!GW`b]hhghY`"Yb`ni
Yf`VYb`"/ `h/#d/ [h// `h/d/ [h// `hV/ [hN]Y`i bX`Bi hnYb`XYg
HfUa !G]a i `Uhc fg/ `h/#/ [h// `h/#d/ [h// `h/d/ [h/'A]h`XYa
5bk YbXYf`]a ` : c_i gžk]fX`XYf`HfUa !G]a i `Uhc f`X]Y
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j`cb`5gg]ghY`bngmghYa Yb`]b`XYf`GhfU» YbVU\`b`XYf`Ni`_i bZh
gY]b`"A]h`XYb`gc`[Yk`cbbYbYb` ð`Zcfa Uh]cbYb`]b`X`X]Y
Dfc`Y`_hdUf`hbYf`]b`XYf`@U[Yž`VY`UghVUfY`i bX`j`Yf]Zn]YfhY
5bZcfXYfi b[ggdYn]Z]_Uh]cbYb`ni f`Zi bX]YfhYb`5i ggW`fY]Vi b[
VYbØh][hYf`5gg]ghY`bngmghYa Y`ni`[YbYf]YfYb`"
6YhfY]VYf[YgY`gW`UZhYb`_ØbbYb`gc`XUg`F]g]_c`j`cb
: Y\`VYghY`i b[Yb`a]b]a]YfYb`i bX`?cghYb`Y]bgdUfYb`"
/ `h/#d/ [h// `h/d/ [h// `hV/ [h/-56; `p`ðXi ghf]YUb`U[Yb!
6Yhf]YVg[YgY`gW`UZh`a V</ `h/#/ [h// `h/#d/ [h// `h/d/ [h/'8]Y
ðXi ghf]YUb`U[Yb!6Yhf]YVg[YgY`gW`UZh`a V<`f!56; `Ł]gh`Y]b
ZØ\`fYbXYg`Yi fcd`À]gW`Yg`HYW`bc`c[]Y!I bhYfbY`a Yb`a]h`XYb
?Yfb`_ca dYhYbnYb`5bU`mgYž`G]a i `Uh]cb`/ Ua d/Ua d`/HYgh
i bX`5b`U[YbVYhf]YV`"8Yf`6Y[f]ZZ/ ei ch/G]WYf`Y]h`ei ch/
V]`XYh`XUVY]`XUg`h`Ya Uh]gW`Y`8UW`XYg`@Øgi b[gdcfhZc`]cg.
G]WYf`Y]h`bYi`Yb`hk]W_Y`hYf`<][\hYW`!DfcXi`_hY`i bX
J Yf`_Y\fga]hY`gck]Y`G]WYf`Y]h`j`cb`GhUUhž`K]fhgW`UZh`i bX
; YgY`gW`UZh` ð`X]YgYa `?cbhYI hYfVf]b[h`X]Y`-56; `hYW`b]gW`!
k]ggYbgW`UZh]W`Y`8]Ybgh`Y]ghi b[Yb`ZØf`df]j UhY`i bX
ØZYbh]W`Y`?i bXYb`]b`XYb`6fUbW`Yb`5i hca`ch]j Yž`6U\`b
/ Ua d/Ua d`/GW`]YbYž`9bYf[]YhYW`b]_ž`2 ZZYbh]W`Yf`GY`hc fž
@ Zh`i bX`FUi a ZU\`fh`gck]Y`J`YfhY]X][i b[/ `h/#d/ [h// `h/d/ [h/
8]Y`-56; `VYgW`ÀZh][h`%`&\$\$`cW`ei U`]Zn]YfhY
A]hUfVY]hYf]bbYb`i bX`A]hUfVY]hYf`Ua`GhUa`a`g]h`]b
C hchVfi bb`gck]Y`]b`_i bXYbbU`Yb`]b!`i bX`Ui g`À`bX]gW`Yb

B]YXYf`Uggi b[Yb"/ `h/#d/ [h// `h/d/ [h// `hW/ [h/k k k "]UV["XY
/ `h/#/ [h// `h/#d/ [h// `h/d/ [h// `hW/ [h/GK A `p`GhUXhk Yf_Y
A ØbWXYb'; a V</ `h/#/ [h// `h/#d/ [h// `h/d/ [h/'8]Y`GK A
`U`hYb`A ØbWXYb`fi bX`i a `X]Y`l `f`Ua `@Ui ZYb.`5`g`Y]bYg`XYf
[fØ» hYb`_ca a i bU`Yb`l bhYfbY`a Yb`8Yi hgW`UbXg`ghY`Yb
X]Y`GK A `ZØf`Y]bY`g]WXYfY`J Yfgcf[i b[`a]h`9bYf[]Y`ž`Y]bY
ghUXh[YfYW`hY`A cV`]h`hž`ZØf`ni _i b`ZhgZ`A`][Y
HY`Y`_ca a i b]_Uh]cbg`Y]ghi b[Yb`i bX`VYghYg`Hf]b`_k UggYf`Ui g
XYa `VUmYf]gWXYb`J cfU`dYb`UbX`A]h`i bgYfYb`@Y]ghi b[Yb
g]bX`k]f`Y]b`k]W`h][Yf`HY`]`XYf`_ca a i bU`Yb
8 UgY]bgj cfgcf[Y`i bX`Y]ghYb`Y]bYb`[fc» Yb`6Y]hfU[`ZØf`X]Y
K]fhgW`UZhg`fUZh`i bX`@YVYbgei U`]h`h`i]b`A ØbWXYb`i bX`XYf
FY[]cb"/ `h/#d/ [h// `h/d/ [h/'8]Y`A cV`]h`h`hg`hc`W`hYf`A J; `]gh
j YfUbhk cfh]W`ZØf`l !6U`bž`6i gž`HfUa `i bX`A J; `FUX`8]Y
GK A `[Y`ØfYb`a]h`ØVYf`%`%`\$\$\$`A]hUfVY]hYf]b`bYb`ni `XYb
[fØ» hYb`5fVY]h[YVYfb`A ØbWXYbg"/ `h/#d/ [h// `h/d/ [h// `hW/
[h/k k k "gk a "XY/ `h/#/ [h// `h/#d/ [h// `h/d/ [h// `hW/ [h/; 9F G
MG; a V<`pY]b`l bhYfbY`a Yb`XYf`< , 6B 9F!
; fi ddY/ `h/#/ [h// `h/#d/ [h// `h/d/ [h/'5`g`ZØ`fYbXYf`5bV]YhYf
ZØf`bghfi a Ybh]Yfi b[Yb`]a `: Ø`fYfghUbX`j cb`GW]YbYb!`i bX
GcbXYfZU`fnYi [Yb`Ybhk]W`_Y`h`i bX`ZYfh][h; 9F GMG
ni j Yf`Àgg][Y`C`b!6cUfX!9`Y`_hfc]b]_k]Y`[fUd`]\]gWXY`8]gd`Umg
fk A #8 l #A A #`Ni f`DfcXi _hdU`YhhY`XYg`6U`bhYW`b]_!
l bhYfbY`a Ybg[Y`ØfYb`i bhYf`UbXYfYa `: U`fnYi [fYW`bYf
gck]Y`5bnY][Y!`i bX`: U`fYfUgg]ghYbngmghYa Y`Ui Z`6Ug]g`XYf
6U`bbcfa Yb`9B) \$%))`i bX`9B() () ž`X]Y`g]W`Xi fW`c`Y
E i U`]h`h`i bX`VYgcbXYfY`@Ub[`YV][_Y]h`Ui gnY]W`bYb`8 Ug]b
&\$%\$[Y[fØbXYhY`l bhYfbY`a Yb`U`h`gY]bYb`G]h`i]b
K c`ZfUhg`Ui gYb`VY]`A ØbWXYb`i bX`VYgW`ÀZh][h`Ua `GhUbXcfh
Yhk U`) \$`A]hUfVY]hYf]b`bYb`i bX`A]hUfVY]hYf"
/ `h/#d/ [h// `h/d/ [h/'GY]h`&\$%-`]gh`X]Y; 9F GMG; a V<`Y]bY
`i bXYfhdfcnYbh][Y`HcW`hYf`XYf`< , 6B 9F!; fi ddY`ž`Y]bYa
[`cVU`Yb`GmghYa UbV]YhYf`ZØf`X]Y`A cV`]h`h`gVfUbW`Yž`X]Y
bXi ghf]Y`gck]Y`@]Z`GW]YbW`g`i bX`K]ggYbgW`UZh`K Y`hk Y]h
ZØ`fYbX`]gh`< , 6B 9F`]a `6YfY]W` , VYf[Ub[ggmghYa Y`ZØf
GW]YbYbZU`fnYi [Y`i bX`6i ggY`gck]Y`XUfØVYf`]\]bUi g
5bV]YhYf`ZØf`: U`fk Yf`_hYW`b]_`i bX`7cW`d]h!8]gd`Um!
@Øgi b[Yb`i bX`HØfX]W`hi b[g!`i bX`G]W`Yf`Y]hgd`fc]Y`"BYVYb
XYa `<Ui d]h]h`i]b`? UggY`]gh`< , 6B 9F`a]h`fi bX`"`) \$\$
6YgW`ÀZh][hYb`Ub`ØVYf`" \$`GhUbXcfhYb`fi bX`i a `XYb`; `cVi g
df`ÀgYbh"/ `h/#d/ [h// `h/d/ [h/
/ `hW/ [h/k k k "[Yfgmg"XY/ `h/#/ [h// `hW/ [h/'p`k k k "`i VbYf!
[fci d`Wca / `h/#/ [h// `h/#d/ [h/'`

.....
.....
...../ `h/X]j `WUgg1 / ei ch/bc!
ZcUhx ei ch// [h// `h/#X]j / [h/
...../ `h/#X]j / [h// `hVf/ [h/6Yf`]b#C hrcVfi bb`VY
A ØbWYb/ `hVf/ [h// ei ch// ei ch// ei ch/A YhU!8YgWf]dh]cb.



⊕`XYf`A Yhfc dc`Y`6Yf`]b`k]fX`Y]b`UVgc`i h`VU`bVfYWYbXYg`Dfc`Y`_h
Ui ZXYf`cW`_Uf`h][Yb`⊕bcHfUbg`&\$&(`df`gYbh]Yfh`J ca`&(`V]g
&+`GYdhYa VYf`_ØbbYb`6Ygi WYf`XYg`=56; !GhUbXg`ja`7]hm`7i VY
5`#&(\$`XYb`bYi Ufh][Yb`GhfU»YbVU`b!G]a`i`Uhc`f`Yf`YVYbž`XYf
: U`fYfUgg]ghYbngmghYa`Y`_Ui`hbU`Yf`YVVUf`a`UW`h`9g`]gh`X]Y
Ni`_i`bZh`XYg`GhfU»YbVU`bj`Yf`_Y`fgž`X]Y`_Y]f`j`]fhi`Y`ni`a`@YVYb
Yfk`YW`_hk`]fX`i`bX`XUg`a`]h`Y]bYa`Cf][`]bU`ZU`fYfghUbX`8]Y
A YggYVYgi WYf`_ØbbYb`b]W`h`bi`f`ghYi`Yfbž`gcbXYfb`k`YfXYb`Ui`W
Xi`fW`]bbc]`Uh]j`Y`5gg]ghYbngmghYa`Y`i`bhYfgh`hnhž`X]Y`X]Y
G]WYf`Y`h`Ui`Z`XYb`GW`]YbYb`fYj`c`i`h]cb]YfYb"

9]b`YW`hYf`Di`V`_i`a`ga`U[`bYhž`XYbb`i`bhYf`XYf`@Y]hi`b[`XYf
⊕Xi`ghf]YUb`U[`Yb!6Yhf]YVg[`YgY`gW`UZhi`a`V<`f!56;`L`Ui`g`C`hrcVfi`bb
k`]fX`X]YgYg;`Ya`Y]bgW`UZhd`fc`Y`_h]b`Ni`gUa`a`YbUfVY]h`a`]h`XYb
GhUXhk`Yf`_Yb`A`ØbWYb`i`bX`XYf;`9FGMG;`a`V<`j`cfUb[`Yhf]YVYb"
8]Y`56;`_U`h]g]W`_Ui`Z`X]Y`9bhk`]W`_i`b[`i`bX`5Vg]WYfi`b[`bYi`Yf
A`cV]`]h`hg`_cbnYdhY`gdYn]U`]g]Yfhž`k`À`fYbX;`9FGMGž`Y]b
I`bhYfb`Y`a`Yb`XYf`<`,`6B9F!;`fi`ddYž`U`g`ZØ`fYbXYf`5bV]YhYf`ZØf

HYW\bc`c[]Yb`ja`6YfY]W\XYf`GW]YbYbZU\fnYi [Y`[]`h`Ni`gÅm`]W
]gh`X]Y`8!J]gi`U`g]Yfi`b[gZ]fa`U`cdh]Zm; a`V<`Ui`g`8`Ufa`ghUXh
VYhY`][hž`X]Y`XYb`A`ØbW\ bYf`GhfY_W_YbUVgW\ b]h`X][]hU`fYU`g]Yfh
\Uh`9]bY`[YVU`hY`@UXi`b[`Ub`9I`dYfh]gY`

F cUXa Ud`ni`f`J`Yf`_Y`f`gg]W\Yf`_Y]h

8]Y`DfÅgYb`hUh]cb`XYf`Dfc`Y`_hYf[YVb]ggY`Z]bXYh`Ua`A`]h`k`c`W`ž`XYb
&)"`GYdhYa`VYf`&\$&(ž`i`a`%&.`\$`I`\f`Ua`7B5!
;`Ya`Y]b`gW\UZhgg`hUb`X`ghUhh`5i`W`7`\f]gh]Ub`6Yfb`fY]hYfž
6UmYf]gW\Yf`GhUUhga`]b]ghYf`ZØf`J`Yf`_Y`f`ž`k`]fX`Y]bYb`6`]W`_`]b`XUg
Ni`_i`b`Zhg!7c`W_d]h`k`YfZYb`i`bX`XUVY]`gY`VghghÅbX][`YfZU`fYb`ž`k`]Y
X]Y`bYi`Yb`HYW\bc`c[]Yb`X]Y`GhfU»`YbVU`b`g]W\Yf`_Y]h`j`YfVY`ggYfb
_Øb`bYb`"9g`]gh`Y]b`GW`f]h`i]b`X]Y`f]W`h][`Y`F`]W`h`i`b[`ZØf`X]Y`i`fVUbY
A`cV]`]hÅh`

8]Y`A`ØbW\ bYf`J`Yf`_Y`f`g[YgY`g`W`UZh`a`V<`f`A`J;`E`gYhnh`Ui`Z`X]YgYf
≠bcj`Uh]cb`gk`Y`Y`Ui`Zi`bX`hfY]Vh`X]Y`A`cXYfb]g]Yfi`b[`XYf
:`U`fYfUfVY]hgd`ÅhY`j`c`fUbž`i`a`[`Y[`Yb`XYb`XfÅb[`YbXYb
:`UW`_f`Å`ZhYa`Ub[`Y`i`bX`ZØf`a`Y`f`G]W\Yf`_Y]h]a`J`Yf`_Y`f`
Ubni`[`Y`_Yb`";`YgW\ÅZhgzØ`fYf`C`j]Yf`;`UgYf`VYhc`b`h`X]Y`6YXYi`hi`b[
j`cb`i`bhYfghØhni`b[`ggmghYa`Yb.`A`]h`X`Ya`G]a`i`Uhc`f`_Øb`bYb`k`]f
j`YfgW\]YXYbY`GmghYa`Y`j`]fhi`Y`hYghYb`i`bX`i`bhYfgW\]YX`]W`Y
J`Yf`_Y`f`gg]hi`Uh]cb`Yb`Ui`gdfcV]YfYb`"8Ug`_`]`Zhi`bg`VY]`XYf
9bhgW\Y]Xi`b[`gZ]bXi`b[`i`bX`k`]fX`XYb`GhfU»`YbVU`b`j`Yf`_Y`f`
g]W\YfYf`a`UW`Yb`

8 Yf`G]a`i`Uhc`f.`9]b`A`Y]ghYfk`Yf`_`XYf`HYW\ b]_`

8Yf`G]a`i`Uhc`f`]gh`Y]b`YW`hYg`<][`\`][`\h`9f`V]YhYh`b]W`h`b`i`f`Y]bYb
j]fhi`Y`Yb`GhfU»`YbVU`b`VYhf]YVž`gcbXYfb`Ui`W`_]bhYfU`_h]`Y
9f`YVb]ggY`XUb`_`a`cXYfbghYf`;`9FGMG!HYW\bc`c[]Y`"8]Y
A`i`h]Zi`b`_h]cb`gX]gd`Umg`i`bX`XYf`Y`Y`_hfcb]gW`Y`F`Ø`W`ZU`f`gd]Y[`Y`
\`U`hYb`X]Y`:`U`fYf`]b`9W`h`nY]h`ØVYf`U`Y`k`]W`h][`ghYb`DUfUa`YhYf
]bZcfa`]Yfh`H`c`fghYb`GdfYb[`Yfž;`YgW\ÅZhg`Y]hYf`j`cb`;`9FGMGž
Yf`_`Å`fh`ghc`n.`I`bgYfY`<`UfXk`UfY`Zc`f`XYfh]bX]j]Xi`Y`Y
5bk`YbXi`b[`Yb`i`bX`5VV]Xi`b[`Yb`]a`7c`W_d]h`

K]Y`Ui ZfY[YbX`XUg`j]b`dfUI]Zi b_h]cb]Yfhž`k]fX`ja`G]a i`Uhc f
Y]bXfi W_gj c``XYa`cbghf]Yfh`C dh]Zm`Uh`Y]bYb`gdYn]Z]gWYb`A J ; !
GhfYW_YbUVgW`b]hh`U`g` 8!A cXY``[YghU`hYh`8 Ua`]h`X]Y`6Ygi W`Yf
XYf`ϕbcHfUbg`Ui W`]b`X]Y`F c``Y`UbXYfYf`J Yf_Y`fghY`]bY`a Yf
gW`ØdZYb`_ØbbYbž`ghY`Yb`J]fhi`U`!F YU`]hml`6f`Yb`VYfY]h`HUi W`Yb
G]Y`Y]b`]b`X]Y`K`Y`h`XYg`a`cXYfbYb`GhfU» YbVU`bVYhf]YVg`

8]Y`DUfhbYfgW`UZh`XYf`Dfc`Y`_hhY`]bY`a Yf`ni`f`9bhk]W`_i`b[`XYg
HfUa`!G]a i`Uhc fg`]gh`b]W`h`bi`f`VU`bVfYW`YbXž`gcbXYfb`Ui W`
j]g]cb`Äf`8]Y`[Yk`cbbYbYb`8 UhYb`i`bX`ϕg][`hg`Ui`g`XYf`G]a i`Uh]cb
k YfXYb`Yg`XYb`6YhfY]VYf[YgY`gW`UZhYb`Yfa`Ø[`]W`Ybž`df`Än]gY`i`bX
j Yf`Ägg]W`Y`5bZc`fXYfi`b[gg`dYn]Z]_Uh]cbYb`ni`[YbYf]YfYbž`X]Y
: Y`VYghY``i`b[Yb`a`]b]a]YfYb`i`bX`gca`]h`?cghYb`gdUfYb`8 Ua`]h`]gh
XYf`HfUa`!G]a i`Uhc f`XYf`GW`ØggY`ni`f`J YfbYhni`b[`i`bX
5i`hca`Uh]g]Yfi`b[`XYg`ØZZYbh]W`Yb`BU`j Yf_Y`fg`

8]Y`56; ž`U`g`ZØ`fYbXYg`HYW`bc`c[]Yi`bhYfbY`a`Ybž`gck]Y`X]Y
GhUXhk Yf_Y`A`ØbW`Yb`i`bX` ; 9FGMG`ghY`Yb`i`bhYf`6Yk`Y]gž`XUgg`XYf
GhfU» YbVU`bj Yf_Y`f`a`]h`]bhY``[YbhYf`HYW`bc`c[]Y`g]W`YfYfž
YZZ]n]YbhYf`i`bX`ni`_i`bZh`gZ`Ä`][Yf`[YghU`hYh`k`YfXYb`_Ubb`8]Y
A`cV`]h`Äh`j`cb`a`cf[Yb`VY[]bbh`Y]Yf`i`bX`Y`hnh`GY]Yb`G]Y`XUVY]ž
k`Ybb`]b`6Yf`]b`X]Y`Ni`_i`bZh`XYg`J Yf_Y`fg`df`ÄgYbh]Yfh`k]fX`

8YhU]`g

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