



AERO4620

8 mbUa]Wg'cZ5YfcgdUW'J Y\]WYgž'GmgHya g'UbX'5j]cb]Wg

HYfa `Cby`##`&\$&%

GWcc`cZA YWUbjWU`UbX`A Ubi ZUWf]b[`9b[]bYYf]b[`##`I BGK `9b[]bYYf]b[

7 ci fgY'8YHJ]`g

7 fYX]hDc]bhtg '*`

Gi a a UfmicZ`h\Y'7 ci fgY

Dck Yfz'a Ugg'UbX`]bZcfa UHcb`fUbgZyf": `i]X]Mza YWUb]WU`UbX`Y`YWf]WU`gmgHya g`]b`UYfcgdUWw`j`Y\]WYg/
Ybj]fcba YbhVcbfbc""5j]cb]Wg`UbX`UXj UbVWX`U]fWUZhgmgtYa g/Vca di hYf!U]XYX`j`Y\]WY`a`UbU[Ya Ybh`
5j]cb]Wg`fYei]fYa Ybhtg/Uj]cb]Wg`]bhY [fUhc"5]fVcfbY`gYbgcfcg"BUj] [Uhcb"GHUV]]miUbX`Vcbfbc`gmgHya g"
7 cW_d]hYbj]fcba Ybh`GHU]WUbX`XmbUa]WgHUV]]micZUha cgd\Yf]Wj`Y\]WYg": `] [\hVcbfbc""< UbX`]b [`UbX`
Zm]b [`ei U`]hYg"

7 ci fgY'5]a g

8mbUa]Wg`cZ5YfcgdUW`J`Y\]WYgZ`GmgHya g`UbX`5j]cb]Wg`]g`U`\ [\Yf`Yj`Y`5YfcgdUW`9b []bYYf]b [`Wci fgY
]b`k` \]W`h\Y`Z`bXUa YbhU`VcbW`dhtg [fUgdYX`]b` fX`mY`Uf`UfY`]bhY [fUH`Xz`Udd`YX`UbX`YI`hYbXYX"

H\]g`Wci fgY`ZcW`gYg`cb`ck`h\Y`U]fWUZhVY\Uj`Yg`Ug`U`hja`Y!XYdYbXYbhGMGH9A ""`hU]a`g`fc`hYUW`mci

WUggfccca 'hYUW]b['k]'VY'gi ddcfhYX'Vm'YWñi fY'bcfhg'Uj U]UV'Y'cb']bY''H\Ymk]'Wc'bfU]b'Vf]YZci h]bYg'cZ hY'a cgh]a dcfhUbdhc]b]hg'Ug'k Y''Ug'']b_g'fc'hY'a cfY'XYhU]YX'gci fWg"

5XX]h]cbU'7ci fgY' ðZcfa Uh]cb

H\]g']g'U' * 'i b]hcZ'WYX]hfl c7'É'Wc'i fgY'UbX']bj c'j Yg'gYj Yb' \ci fg'dYf'k YY_'f\# É'cZ'ZUW'!hc!ZUW' Wc'bfUWñi

H\Y'bcfa U'k cf_'cUX'Yi dYWU]h]cbg'cZU'gh XYbhUFY'Uddfc]]a UH'm&) '\ci fg'dYf'hYfa 'Zcf'YUW'] C7ž]bWi X]b['WUgg'Wc'bfUWñi\ci fgž'c'hYf'YUfb]b['UW]j]h]Ygž'dfYdUFU]h]cb'UbX'h]a Y'gdYbhcb'U''UggYggUV'Y k cf_"

Mci 'g\ci 'X'U]a 'fc'gdYbX'UVci h%&' \# 'cb'h\]g'Wc'i fgY''H\Y'UXX]h]cbU'h]a Y'g\ci 'X'VY'gdYbh]b'a U_]b[gi fY'hUhmci 'i bXYfghUbX'hY'YWñi fY'a UH'f]U'ž'Wc'a d'Yh]b['hY'gYhUgg][ba Yb]gž'Z f\hYf'fYUX]b[ž'UbX fYj]g]b['Zcf'UbmYi Ua]bU]h]cbg"

: cf'YUgY'cZa UbU[Ya Yb]ž'hY'Wc'i fgY']g'cf[Ub]gYX']b]hc'h'fY'gYdUFU]h' dUf]g. '5YfcgdUW'Gmg]hYa gž 5j]cb]W]g'UbX':][\h8mbUa]W]g/hYmk]'Zcfa 'A cXi 'Yg'5ž'6'UbX'7' fYgdYW]j Y'm'A cXi 'Y'5'k]'fi b']b K YY_g'%'-' 'UbX'A cXi 'Yg'6'UbX'7']b'K YY_g'(' -'%'\$"' ð'UXX]h]cbž'hYfY']g'Ub']bX]j]Xi U'Z][\hg]a i 'Uh]cb YI YfV]gY"

H\Y'5YfcgdUW'Gmg]hYa g'dUfhXYU'g'k]h'hY'gc!WU'YX'U]fZ]Ua Y'gmg]hYa g'Ug'k Y''Ug'hY]f'YZZ'Wñicb U]fWUZh'g'dYfZcfa UbW''H\Y'5j]cb]W]g'Y[a Yb]h]g] X]Yg'U]fWUZh'Y'Wf'cb]Wgmg]hYa g'Ug'k Y''Ug'c'hYf gmg]hYa g'hU]hX]fY'Wñi]b]hYfZUW'k]h'Y'Y'Wf'cb]W]g''H\Y':][\h8mbUa]W]g'Wc'j Yfg'X]Z]fYbhUgdYW]g'cZU]fWUZh ghUV]]m]UbX'hY'dUFUa YH'fg'hU]hUZZY'Wñi]h'H\Y'k]bX'h' bbY'Yi dYf]a YbhXYa cbgfhU]h'g'hY'`cb[]h'X]bU' ghUV]]mž'i bXYfghUbX]b['cZk \]W\]g'Wñi W]U'Zc'f'Z][\h'Wc'bf'c'gmg]hYa g'' ð'U'gc' d'fcj]XYg'U'']b_'VY'k YYb'hY :][\h8mbUa]W]g'UbX'5j]cb]W]g'a cXi 'Yg':]bU'mž'hY'Z][\hg]a i 'Uh]cb'Yi dYf]a YbhXYa cbgfhU]h'g'hY cdYfU]h]cbg'cZUi hc!d]c]hg'UbX'j Uf]ci g'bUj][Uh]cb'UbX'Wc'a a i b]WU]h]cb'gmg]hYa g"

59F C (*&\$']g'Ub']a dcfhUbdh]g'dd]b['g]rcbY']b'UYfcgdUW'Yb[]bYYf]b['YXi WU]h]cb''H\Y' _bck 'YX[Y'UWc'i]fYX Xi f]b['h\]g'Wc'i fgY']g'X]fY'WñiUdd']WU'Y'fc'hY' [fci d'XYg][b']b'59F C (%&\$" 'C b'hY'c'hYf'\UbXž'A cXi 'Y'7 cZ'h.]g'Wc'i fgY'X]fY'Wñi'fY'UH'g'fc'hY'dYfZcfa UbW' dUfh'cZ59F C' **\$/Uh'hY'gUa Y'h]a Y'hY'g]hUV]]m UbU'm]g]g'cZ'Zm]b['j Y\]WYg'dfYgYb]h'X']b'h\]g'a cXi 'Y']g'VUgYX'cb'a Y'h'cXg'YUfbYX']b'A A 5B' &\$ \$' @]bYUf Gmg]hYa g'UbX'7 cb]fc''H\Y''Uf[Y'a U'c'f]m]cZ'h.]g'WUgg'\Ug'VYYb']bj c'j YX']b'Z][\hYi dYf]a Yb]g'hU]hd'fcj]XY U'Wñi W]U'']b_'VY'k YYb'hY'hY'c'fY]h]W''_bck 'YX[Y [U]bYX'Xi f]b['hY'WUgg'h]a Y'UbX'fYU'Z][\hg]h Uh]cbg" Gh XYb]g'UFY'U'gc'UV'Y'fc'cVgYf] Y'hY'ž bW]h]cb]b['cZ'gmg]hYa g'Zci bX']b'; YbYfU'5j]Uh]cb'U]fWUZh'5''hY'gY Wc'a dcbYb]g''Uf[Y'm'Wc'bf]Vi h'fc'XY'Y'cd]b['bY'W'ggUfmYb[]bYYf]b['g_]g'UbX' _bck 'YX[Y"

5ggYgga Ybh

<I F 8@9'F 9E I ƒ 9A 9BH

ƒ'cfXYf'hc'dUgg'hY'Wci fgYžmci 'U'gc'\Uj'Y'hc'cVhU]b'U'hcH'cZUh'YUgh) \$i 'f&&'a Uf_gk'Zcf'hY'A cXi 'Y'7. HYgh&'f%&i ŁŽ '@UV'fYdcfhi'f%(' ŁŽ 'A cXi 'Y'7 'dUfhicZ'hY'Z]bU'YI Ua 'f% i Ł'

5ggYgga YbhHUg_g

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH'	Gh XYbh@YUfb]b[Ci hWca Yg'5ggYggYX
:]bU'YI Ua 'i	(*i	Bch5dd']WUV'Y	%ž'ž' ž(
HYgh'i	(\$i	Bch5dd']WUV'Y	%ž'ž' ž(
@UV'F Ydcfhi	%('i	&\$#\$(#&\$&%%) '\$DA	%ž(

5ggYgga Ybh8YhU]`g

5ggYgga Ybh% :]bU'YI Ua

GHUfhXUH'. Bch5dd']WUV'Y

8YhU]`g.

:]bU'YI Ua 'fYgh]b['hY'Ybh]fY'A cXi 'Y'6 'Ug'k Y''Ug'XmbUa]WghUV']]m'

5ggYgga Ybh&'HYgh

GHUfhXUH'. Bch5dd']WUV'Y

8YhU]`g.

HYgh%cb'hY'Ybh]fY'A cXi 'Y'5 'f' \$i ŁŽ HYgh&'cb'ghU]WghUV']]m'f%&i Ł'

5ggYgga Ybh' . '@UV'F Ydcfh

GHUfhXUH'. Bch5dd']WUV'Y

8YhU]`g.

K]bX'h' bbY''a YUgi fYa Ybh'k]''VY'i gYX'Zcf'UggYgg]b['hY''cb[]h'X]bU'ghUV']]midUfUa YH'fg"

Hi fb]h]b'gYh]b[. 'H\]g'Ugg[[ba Ybh]g'gi Va]m'X'h'fci [\ 'Hi fb]h]b'UbX'gh'XYbh'Xc'bchgYY'Hi fb]h]b'g]a]Uf]m'fYdcf'g"

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

H\YfY`jg`bc`hI`Hcc_`Zcf`hY`Wci`fgY`"Dck`YfDc]bhg`]XYg`k`]"`VY`Uj`U]UV`Y`cb`A`ccX`Y`Zcf`A`cXi`Yg`5`UbX`6`
`YVh`fYg`Vi`hgh`XYbhg`UFY`YI`dYW`X`hc`i`gY`j`Uf]ci`g`gci`fWg"

F YWca a YbXYX`F Ygci fWg

5j`]Uh]cb`H\Ycfm7`YbhfY`fA`Y`Vci`fbYzJ`]Wl`&`\$`%`&Uz`"5]fWUZh[`YbYfU`'_bck`YX[`Y`UbX`UYfcXmbUa`]Wg`Zcf`hY`
7`5G5`DD@`UbX`7`D@`XUmJ`:`F`gm`UVi`g`z`<`i`bh]b[`XU`YzJ`]W.`"5j`]Uh]cb`H\Ycfm7`YbhfY`

7c``]bgcbzF`"-`"b]fcXi`W]cb`hc`5j`]cb]Wg`z`%ghYX`z`@cbXcb/BYk`Mcf_`7`\Uda`Ub`/`<`U`

5aa]t`?`zH`8`Yzf6k`S_`[Ue`Bd`U]b`Me`t`3d`a`V`BgT`TeZWet`G=t`#++)

Bai`W]Ba[`fe`fVWe`Xd?`aVg`Me`3`S`V`4`

G@EI`>[TcdSk`i`W]e[fW`[\hdg.#k.k.""\]VfUfmi`bgk`"YXi`"Ui`#`](#)

?`aaVW`

Gi Va]gg]cb'cZ'5ggYgga YbhiHUg_g

5ggYgga Ybhgi Va]gg]cb'UbX'a Uf_]b['Wf]hYf]U

G\ci 'X'hY'Wci fgY'\Uj Y'Ubmcbcb!Y'YWfcb]WUggYgga Ybhgi Va]gg]cbž'hYgY'g\ci 'X'\Uj Y'U'ghUbxUfX
GWcc`Wcj Yf'g\YYH'

5`gi Va]gg]cbg'UfY'YI dYWYX'hc'VY'bYUhiUbX'WYUfmgYhici H'Mci f'fYgi 'hg'UfY'hY'd]bbUWY'cZU`mci f'\UfX
k cf_'UbX'g\ci 'X'VY'hYUhx'k]h'Xi Y'fYgdYWf'DfYgYbh]b['fYgi 'hg'WYUfmi[]j Yg'hY'a Uf_Yf'hY'VYgh'WUbwY
cZi bXYfgtUbx]b['mci f'a YhcX/Yj Yb']ZhY'bi a Yf]WU'fYgi 'hg'UfY']bVc'ffYWf'

UggYgga YbhdYfZcfa UbWžmci 'UfY'Y'[]V'Y'rc'Udd'mZcf'GdYWU'7 cbg]XYfUhc'b'df]cf'rc'gi Va]h]b['Ub
UggYgga Ybhcf'g]h]b['Ub'YI Ua "

I BGK 'bck '\Ug'U': [\]hrc'G\]h#Gi Va \]hfi_Yžk \\]W'a](#) YUbg'hUh]Zmci 'UthYa dhUb'YI Ua 'cf'gi Va]hU'd]YW'cZ
UggYgga Ybhž'mci 'UfY'XYWUf]b['mci fgY'Z]hYbci [\ 'rc'Xc'gc'UbX'Wbbch'Uhf'Udd'mZcf'GdYWU'
7 cbg]XYfUhc'b"

: cf'XYHU]g'cZUdd'm]b['Zcf'GdYWU'7 cbg]XYfUhc'b'UbX'WcbX]h]cbg'Zcf'hY'Uk UfX'cZgi dd'Ya YbhUfm
UggYgga Ybhž'd'YUg'gYY'hY'jbZcfa Uhc'b'cb'I BGK 'g'[GdYWU'7 cbg\]XYfUhc'b'dU\]Y"](#)

D'YUgY'bc'hY'hUhighi XYbhg'k]'bchVY'fYei]fYX'rc'dfcj]XY'UbmXcW a YbhUfmYj]XYbW'rc
gi ddcfhUVgYbW'g'Zca 'UbmWUggYg'a]ggYX'VYWUi gY'cZ7CJ -8!%- 'di V']W\YU'h'a YUgi fYg'gi W'Ug

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

I BGK `Ug`Ub`cb[c]b[`Wca a]ha Ybhlc`ZcghYf]b[`U`W`hi`fY`cZ`YUfb]b[`]bZcfa YX`VmiUWUXYa]W]bhY[f]m`5`
I BGK `gh`XYbhg`Uj`Y`U`fYgdcbg]V`]hmlc`UX`YfY`hc`h`g`df]bW]d`Y`cZUWUXYa]W]bhY[f]m`D`U[]Uf]ga
i bXYfa]bYg`UWUXYa]W]bhY[f]m]UbX`]g`bchlc`YfUHX`Uhl`BGK`"B`SY[Sde_`SfG@E|`[e VWX` VW`Se ge[`Y`
fZWi`ad/e`ad[VWSe`aXafZW`S`V`bSee[`Y`fZW_`aXSe`kagdai``ž

D`U[]Uf]ga`]g`U`hmdY`cZ]bhY`YW`i`U`h`YZ`i`#iW]b`hU`_Y`a`UbmiZcfa`gž`Zca`XY`]VYfUHX`WX`YU]b[`hc`UWUXYbH`U`m`
W`dm]b[`Zca`U`gci`fW`k`]h`ci`hUW`bck`YX[`Ya`Ybh`I`BGK` `Ug`dfcXi`WX`U`k`YVg]h`k`]h`U`k`YU`h`cZ`
fYgci`fW`g`hc`gi`ddcfghi`XYbhg`hc`i`bXYfgHbX`UbX`Uj`c]X`d`U[]Uf]ga`ž`]g]h`[gh`XYbh`i`bgk`"YXi`"Ui`#d`U\[\]Uf\]ga`"](#)
H`Y`@YUfb]b[`7`YbhY`Ugg]ghg`gh`XYbhg`k`]h`i`bXYfgHbX]b[`UWUXYa]W]bhY[f]m]UbX`ck`bchlc`d`U[]Uf]gY`
H`Y`miU`gc`lc`X`k`cf_g`l`cdg`UbX`W]b`Y`d`gh`XYbhg`cbY!`cb!`cbY`"

Mci`U`fY`U`gc`fYa`]bXYX`h`UhWUfYZ``h`a`Y`a`UbU[`Ya`Ybh]g`Ub`]a`dcfHbhdUfHcZghi`XmiUbX`cbY`cZ`h`Y`
]XYbh]Z`YX`W]i`gYg`cZ`d`U[]Uf]ga`]g`d`ccf`h`a`Y`a`UbU[`Ya`Ybh`G`h`XYbhg`g`l`ci`X`U`ck`gi`Z`W]Ybh]h`a`Y`Z`c`f`
fYgYUfW`ž`X`fU]h]b[`UbX`h`Y`dfcdYf`fY`Z`fY`bW]b[`cZ`gci`fW`g`]b`dfY`dUf]b[`U`UggYgga`Ybh]Ug_g`"

ž`d`U[]Uf]ga`]g`Z`ci`bX`]b`mci`f`k`cf`_`k`Y`b`mci`U`fY`]b`Z`fghmY`Ufž`mci`f`Y`W`i`fY`f`k`]`c`Z`Y`f`mci`Ugg]ghU`bW`hc`
]a`dfcj`Y`mci`f`UWUXYa]Wg_]`g`"H`Y`ma`UmUg`_`mci`hc`cc`_`Uhgca`Y`cb`]bY`fYgci`fW`gž`U`hY`bX`h`Y`@YUfb]b[`
7`YbhY`ž`cf`gca`Y`h`a`Yg`fYgi`Va`]h`mci`f`k`cf`_`k`]h`h`Y`dfcV`Ya`Z]`YX`"<ck`Yj`Yf`a`cfY`gYf]ci`g`]bgHbW`g`]b`Z`fgh`
mY`Ufž`gi`W`Ug`gh`U`]b[`UbchYf`gh`XYbhg`k`cf`_`cf`dU]b[`gca`YcbY`hc`Xc`mci`f`k`cf`_`ž`a`UmVY`]bj`Ygh[`UH`X`
i`bXYf`h`Y`G`h`XYbhA`]gW`bXi`W`h`DfcW`Xi`fYg`"

F`YdYUH`X`d`U[]Uf]ga`fYj`Yb`]b`Z`fghmY`Ufž`d`U[]Uf]ga`U`Z`Y`f`Z`fghmY`Ufž`cf`gYf]ci`g`]bgHbW`gž`a`UmU`gc`VY`
]bj`Ygh[`UH`X`i`bXYf`h`Y`G`h`XYbhA`]gW`bXi`W`h`DfcW`Xi`fYg`"H`Y`d`Yb`U`h`Y`gi`bXYf`h`Y`dfcW`Xi`fYg`W]b`]bW`i`XY`
U`fY`Xi`W`h`cb`]b`a`Uf`gž`Z]`]b[`U`W`i`fgY`cf`Z`c`f`h`Y`a`cghgYf]ci`g`a`UH`Y`fg`f]`_Y`d`U[]Uf]ga`]b`Ub`l`cbci`fg`
h`Y`g]g`L`Yj`Yb`gi`gdYbg]cb`Zca`h`Y`i`b]`Yfg]m`H`Y`G`h`XYbhA`]gW`bXi`W`h`DfcW`Xi`fYg`UfY`Uj`U]UV`Y`Y`fY`.

[k`k`k`"\[g`i`bgk`"YXi`"Ui`#d`U\[\]Uf\]ga`\]gW`bXi`W`h`DfcW`Xi`fYg`"dXZ`](#)

⇒ dcfhUbh@]b_g

- [A ccX`Y](#)
- [@UV`5WV`gg](#)
- [<YU`h`UbX`GUZYhm](#)
- [7ca`di`hb\[`: UW`hYg](#)
- [Gh`XYbhF`Ygci`fW`g](#)
- [7ci`fgY`Ci`h\]bYg](#)
- [9b\[\]bYYf\]b\[`Gh`XYbhGi`ddcfhGYfj`_W`g:7YbhfY](#)
- [A`U`YfgdUW`](#)
- [I`BGK`H\]a`YhUV`Y](#)
- [I`BGK`<`UbXVcc`](#)
- [I`BGK`A`YWX`Ub\]W\]`UbX`A`Ubi`ZUW`h`f\]b\[`9b\[\]bYYf\]b\[](#)
- [9ei`\]hUV`Y`@YUfb\]b\[`GYfj`_W`g](#)

⇒ U[Y`7`fYX]h

GmbYf[]Yg`]b`Gci`bX`&\$%*`

7F ⇒ CG

7F ⇒ CG`Dfcj`]XYf`7`cXY.`\$\$\$-`,`;

5W_bck`YX[Ya`YbhcZ`7`ci`b]fm

K`Y`UW_bck`YX[Y`h`Y`6YXY[U`d`Ycd`Y`k` \c`UFY`h`Y`f`UX]h]cbU`W`g`h`X]Ubg`c`Z`h`Y`UbXg`cb`k` \]W`I`BGK`
?`Ybg]b[h`cb`W]a`di`g`]g`c`W]h`YX"

