



ARTS3065

GWYYb'9a ch]cbg. '5 ZYWh'UbX'7]bYa U

HYfa 'Hk c''##'&\$&%

7 ci fgY`Cj Yfj]Yk

GHJZZ`7 cbHJW`8 YHJ`g

7 cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj]m	@cWJhcb	D\cbY
8f`>cXj`6fcc_g	^Vfcc_g4 i bgk "YXi "Ui	Hi YgXUmg`%A%& UbX`cH`Yf`hja Yg`Vm Uddc]bha Ybh	&' %< `F cVYfh K YVghYf 6i]X]b[D\cbY. `f*%&Ł - \$*) `; \$&.

GWcc``7 cbHJW`bZcfa Uhjcb

GWcc``cZhY`5fmg`UbX`A YX]U

F cca ` ` %&ž`@j Y` ž F cVYfhK YVghYf`6i]X]b[`fj %Ł

D\cbY. `f\$&Ł`- ' ,) `(,) *

9a Uj`. [gUa 4 i bgk "YXi "Ui](#)

K YVg]hY. [k k k "Ufmg"i bgk "YXi "Ui #gUa](#)

H\Y`GWcc``cZhY`5fmg`UbX`A YX]U`k ci `X`_Y`hc`F YgdYWZ` ``m5W_bck`YX[`Y`hY`HfUX]hcbU`7i`gřcX]Ubgž`
hY`6YXY[U`fP`Ybg]b[hcb`WJa di gŁž; UX][U`f7]mUbX`5fhi`8Yg][b`7 Ua di gYgŁ`UbX`hY`B [i bbUk U`
dYcd`Y`f5i`ghfU]Ub`8YZ`bVW` : cfW`5WJXYa m]b`7 UbVYffUŁ`cZhY`UbXg`k`YfY`YUW`WJa di g`cZI`BGK`]g`
`cWJhYX"

7ci fgY'8YHJ`g

7fYX]hDc]bHg '*`

Gi a a UfmicZ\hY'7ci fgY

: cf'a i W'cZ]hg` \]gfcfnz`W]bYa U` \Ug`VYYb`Vch` `cj`YX`UbX`fYj`]YX`Zc`f`]hg`UV`]hmi`c`a`cj`Y`Ui`X]YbW`g`UbX`
a`U`_`Y`i`g`"ZY`""`#`h`]g`W`i`fgY`z`m`c`i`k`]`Y`I`d`c`f`Y`c`i`f`W`c`a`d`Y`I`]b`j`Y`g`h`a`Y`b`h`g`]b`W`]b`Ya`U`g`U`Z`Y`W`]`Y`W`d`U`W`]`Y`g`"
A`c`j`]b`[`U`W`c`g`g`j`U`f`]c`i`g`[`Y`b`f`Y`g`UbX`Z`c`f`a`g`-`Z`c`f`Y`I`U`a`d`Y`g`]Y`b`h`Z`]a`a`Y`c`X`f`U`a`U`g`z`c`b`[`Z`c`f`a`h`Y`Y`j`]g`c`b`
X`f`U`a`U`z`W`f`c`g`g`c`j`Y`f`Z`]a`g`z`X`c`W`a`Y`b`h`U`f`n`z`e`i`Y`Y`f`W`]b`Ya`U`UbX`]b`X`Y`d`Y`b`X`Y`b`h`W`]b`Ya`U`-`m`c`i`k`]`Y`I`U`a`]b`Y`g`c`a`Y`
c`Z`h`Y`k`U`m`g`]b`k` \]W`U`Z`Y`W`i`UbX`Ya`c`h`c`b`U`f`Y`g`i`a`a`c`b`Y`X`UbX`Y`b`U`W`Y`X`]b`g`W`Y`Y`b`a`Y`X`]U`"H`h`f`c`i`[` \`U`W`c`g`Y`
g`h`X`m`c`Z`_`Y`m`W`c`b`W`d`h`g`UbX`X`Y`V`U`H`Y`g`]b`h`Y`X`]g`W`d`]b`Y`UbX`g`W`Y`Y`b`h`Y`h`g`z`m`c`i`k`]`Y`I`U`a`]b`Y`g`c`a`Y`
\`c`k`UbX`k` \m`e`i`Y`g`h`c`b`g`U`V`c`i`h`g`W`Y`Y`b`f`]b`[`E`Y`a`c`h`c`b`g`W`c`b`h`i`b`i`Y`h`c`V`Y`g`c`]a`d`c`f`U`b`h`c`X`U`m`"

7ci fgY`@YUfb]b[`Ci hWca Yg

%`7`f`h`W`U`m`Y`b`[`U`[`Y`k`]h`X`Y`V`U`H`Y`g`UbX`]b`h`Y`Y`W`h`U`d`U`f`U`X`[`a`g`]b`Z`]a`g`h`i`X`]Y`g`"
&`@`c`W`U`h`z`c`f`[`U`b`]g`Y`z`UbX`U`g`g`Y`g`g`]b`Z`c`f`a`U`h`c`b`f`Y`Y`j`U`b`h`c`h`Y`g`h`i`X`m`c`Z`g`W`Y`Y`b`a`Y`X`]U`"
'`" `7`c`a`a`i`b`]W`U`h`h`Y`c`i`h`W`c`a`Y`g`c`Z`m`c`i`f`f`Y`g`Y`U`f`W`X`]b`V`c`h`g`W`c`U`f`m`U`b`X`b`c`b`!`g`d`Y`W`]U`]g`h`Ub`[`i`U`[`Y`"
(`" `8`Y`a`c`b`g`h`f`U`H`W`]h`W`U`g`_]`g`]b`d`f`c`V`Y`a`g`c`j`]b`[`UbX`g`Y`Z`X`]f`Y`W`Y`X`Y`U`f`b`]b`[`"

HYUW]b[`GhfUH []Yg`

G`W`U`Z`c`X`Y`X`Y`U`f`b`]b`[`]g`W`Y`b`h`f`U`h`c`h`Y`h`Y`U`W`X`]b`[`g`h`f`U`H`[`]Y`g`X`Y`d`c`m`Y`X`]b`h`h`]g`W`c`i`fgY`"5`g`U`W`U`d`g`h`c`b`Y`W`c`i`fgY`
5`F`H`G`\$`*)`d`f`c`f`]h`g`Y`g`Z`c`f`a`U`h`]`Y`e`i`Y`g`h`c`b`]b`[`z`c`b`[`c`]b`[`X`]U`c`[`i`Y`UbX`d`Y`Y`f`h`c`!`d`Y`Y`f`Y`U`f`b`]b`[`UbX`h`Y`U`W`X`]b`[`z`
Y`U`W`X`c`Z`k` \]W`X`d`U`m`U`_`Y`m`d`U`f`h`]b`h`Y`k`Y`Y`_`m`g`Y`a`]b`U`f`g`"7`c`i`fgY`a`U`h`f`]U`g`UbX`W`U`g`g`X`]g`W`g`g`c`b`g`U`f`Y`
X`Y`g`[`b`Y`X`h`c`W`X`U`Y`b`[`Y`g`h`i`X`Y`b`h`g`h`c`i`[` \`X`Y`Y`d`Y`f`Y`U`f`b`]b`[`UbX`X`]g`W`g`g`c`b`UbX`h`c`Y`b`U`V`Y`g`h`i`X`Y`b`h`g`h`c`a`c`j`Y`
V`Y`m`c`b`X`h`Y`]f`W`f`Y`b`h`g`_]`UbX`_`b`c`k`Y`X`[`Y`Y`j`Y`g`" #`h`]g`W`c`i`fgY`U`g`g`Y`g`g`a`Y`b`h`U`g`_`g`UbX`h`Y`U`W`X`]b`[`g`h`f`U`H`[`]Y`g`
U`f`Y`X`Y`Y`d`m`]b`h`f`h`k`]b`Y`X`z`k`]h`g`h`i`X`Y`b`h`g` \U`j`]b`[`h`Y`c`d`d`c`f`h`b`]h`m`i`c`X`Y`j`Y`c`d`UbX`k`c`f`_`g` \`c`d`h`Y`]f`]X`Y`U`g`UbX`
d`f`c`Y`W`g`h`c`i`[` \`g`W`U`Z`c`X`Y`X`Z`c`f`a`U`h`]`Y`UbX`g`i`a`a`U`h`]`Y`U`g`g`Y`g`g`a`Y`b`h`U`g`_`g`"

5ggYgga Ybh

8YHU]YX]bZcfa UH]cb'UVci hYUWX 'UggYgga YbhHUg_]g'Uj U]UV'Y'cb'hY'Wci fgY'A ccX'Y"

5ggYgga YbhHUg_g

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWca Yg'5ggYggYX
K f]h]b['YI YfW]gYg'	&)]b'WUgg'UW]j]mk YY_' h'fcf]U'g	' ž(
F YgYUfWX 'DcfhZ`]c'	')	&) # \$ + # & \$ & % % % \$ \$ ' DA	%ž&
F YgYUfWX 'Dfc'YW	(\$	%) # \$, # & \$ & % % % \$ \$ ' DA	%ž&ž(

5ggYgga Ybh8YHU]`g

5ggYgga Ybh% 'K f]h]b['YI YfW]gYg

@Yb[h. : & | ") \$ ' k cfXg

8YHU]`g.

G \ c fh]b]WUgg'k f]h]b['HUg_g'Wcbg]gh]b['cZtk c") \$ ' k cfX'fYZYW]cbg'cb'Wci fgY'a UH'f]U'g'Ug'gdYW]ZYX"

K f]h]b'ZYXVUW_'cb'k f]h]b['HUg_'UbX'U'bi a Yf]W]' [fUXY'j]U'Wci fgY'@A G"

5XX]h]cbU'XYHU]`g.

H \ Y] fghUggYgga YbhHUg_]g'rk c'g \ c fh]k f]h]b'd]YW'gž'Wca d'YH'X']b'WUggž'VUgYX'cb'Wci fgY'a UH'f]U'g'fYUX]b[g'UbX'gWY'Yb]b[g'k YY_g'ž' " '8 YHU]YX']bZcfa UH]cb'UVci h'hY'HUg_ž]bW] X]b['gUa d'Y'ei Ygh]cbg UbX'a Uf_]b['W]h'f]Už'k]'VY'Uj U]UV'Y'cb'A ccX'Y"

Gi Va]gg]cb'bchYg. '7 ca d'YH'X']b]WUgg

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

5ggYgga Ybh&. 'F YgYUfWX 'DcfhZ`]c

@Yb[h. : , ! % \$ ' dU[Yg

8YHU]`g.

, ! % \$ ' dU[Y ' fYgYUfWX 'dcfhZ`]c'Wcbg]gh]b['cZW]h]W]' fYZYW]cbg'cb'fYUX]b[g'UbX'gWY'Yb]b[gž'UbbchUH'X V]V'c[fUd \ mž'dfc'YW]bchYgž'fYgYUfWX 'd'Ub'UbX'XfUž'ei Ygh]cb'Zc'f'hY'fYgYUfWX 'dfc'YW

5XX]h]cbU'XYHU]`g.

GYY'A ccX'Y'Zc'f'XYHJ'YX']bZc'fa UHcb'UVci hH'Y'F YgYUfW' DcfhZc']c"

Hi fb]h]b'gYH]b[. 'H\]g'Ugg][ba Ybh]g'gi Va]H'X'h'fci [\ 'Hi fb]h]b'UbX'ghi XYbhg'Xc' bchgYY'Hi fb]h]b
g]a]Uf]mifYdcfH]"

5ggYgga Ybh' . 'F YgYUfW' Dfc'YWh

@Yb[h. '&\$\$\$'k cfXgZ'd'i g'V]V']c[fUd\m

8YHJ]g.

&\$\$\$'k cfX'YggUmic'f'a] YX'a YX]U'k cf_'k]h' UW'ca dUbr]b['k f]H'b'W'ca a YbUfmcZ) '\$\$'k cfXg'h'Uh
YI d'cfYg'U'ei Ygh]cbZ'W'cbW'dhcf'XYVUH'YI Ua]bYX']b'h'Y'W'ci fgY"

K f]H'b'Z'YXVUW'UbX'bi a Yf]W'] fUXY'j]U'W'ci fgY '@A G

H\]g']g'h'Y'Z]bU'UggYgga Ybh]Ug_'Zc'f'h'Y'W'ci fgY"

5XX]h]cbU'XYHJ]g.

H\]g']g'm'ci f'Z]bU'UggYgga Ybh]Ug_'Zc'f'h']g'W'ci fgY" 'M'ci f'fYgYUfW' d'fc'YWh'k]'YI d'cfY'U'ei Ygh]cbZ'W'cbW'dh
cf'XYVUH'YI Ua]bYX']b'h'Y'W'ci fgY'h'fci [\ 'h'Y'W'cgY'UbU'm]g'cZcbY'cf'a cfY'Z'a 'cf'h'Y'j]g]cb'h'YI hg
fY'Yj Ubh'rc'h'Y'W'ci fgY'h'cd]W'Zc'fa UHcb'UVci hH'Y'fYgYUfW' d'fc'YWh]bWi X]b[[i]XUbW'cb'h'cd]W'g'UbX
UggYgga Ybh]W]H'f]U'k]'VY'Uj U]UV'Y'cb'A ccX'Y" 'H\Y'Ughk YY_'cZ'h'Y'W'ci fgY']bWi XYg'U
d'fc'YWh'k cf_g\cd']b'k \]W'k Y'k]'k cf_g\cd'k cf_]b'dfc[fYgg"

Hi fb]h]b'gYH]b[. 'H\]g'Ugg][ba Ybh]g'gi Va]H'X'h'fci [\ 'Hi fb]h]b'UbX'ghi XYbhg'Xc' bchgYY'Hi fb]h]b
g]a]Uf]mifYdcfH]"

K YY_*.) ' > i ` m ! ' - ' > i ` m	< ca Yk cf_	: ` Yl ` k YY_ ! ! ` bc ` WUggYg ` fk cf_ ` cb ` gca Y ` cZ h ` Y ` fYgYUfWk ` žj] Yk] b [` UbX ` k f] h b [` fUg_g ` žc ` f mci f fYgYUfWk ` dcfhž `] c Ł
K YY_+. % & ' > i ` m ! ' % * ' > i ` m	@YWi fY	8 fYUX ` UbX ` hfUi a U] b ` h ` Y ` Wc ` bhYa dcfUfm ` \ c f f c f Z] a
	GWYYb] b [FZW @ [YZ f] ` YS ` Wfb ` Ybb] ZYf ? Yb hž & \$ % Ł
	Hi hcf] U `	WUgY ` ghi XmiUbU ` mg] g
K YY_ ; . % ' > i ` m ! ' & ' > i ` m	@YWi fY	G ` ck ` W] bYa U # g ` ck f] b [Ł W] bYa U ` fH67 ` ! ! ` WUgg X] gW gg] cb ` h ` gYh hcd] Wžc ` f ` h `] g ` k YY_ Ł
	GWYYb] b [I ` W V k S ` V > gUk fP ` Y ` mF Y] WkUfXhž & \$ \$, Ł
K YY_ - . & * ' > i ` m ! ' \$ ' > i ` m	@YWi fY	GYf] U `] gYX ` fU [Y ` UbX ` ei U `] m h Y ` Yj] g] cb `
	GWYYb] b [5 SeWefgV k , FZW : S ` V _ S [Vie F S ` Wf h Y ` Yj] g] cb gYf] Ygž < i ` i Ł ž ` ch ` Yf ` h] hYg ` hWk] h ` WUgg
	Hi hcf] U `	WUgY ` ghi XmiUbU ` mg] g
K YY_ % \$. & ' 5i [i gh ! * 5i [i gh	@YWi fY	W] bYa U ` UbX ` X] g [i gh
	GWYYb] b [X ^ _ fTU
	Hi hcf] U `	5bU ` mg] g ` cZžcfa g ` cZW] bYa Uh] WX] g [i gh / ` YggUm k cf_g ` \ cd

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

9ggYbh]U`fYUX]b[g

H\YfY`]g`bc`hYI hVcc_`Zcf`h\]g`Wci fgY`!!`h\Y`YggYbh]U`fYUX]b[g`Zcf`YUW`k`YY`_`k`]`VY`Uj`U]`UV`Y`cb`A`ccX`Y`h\fcI`[\`@Y[`Ubtc`"H\YgY`fYUX]b[g`UfY`YggYbh]U`Zcf`h\Y`gi`Wf`ggZ``Wca`d`Yh]cb`cZ`h\Y`Wci fgY`UbX`mci`UfY`YI`dY`WfX`tc`_`YYd`i`d`tc`XU`h`k`]h`U`fYUX]b[g"

K` \YfY`dcgg]V`Yz`gYhZ]a` `UbX`h`Yj`]g]cb`hYI`hg`UfY`Uj`U]`UV`Y`Zcf`ghfYUa`]b[`h\fcI`[\`@Y[`Ubtc`"K` \Yb`Y`Y`Wfcb]W`Wcd]Yg`UfY`bch]Uj`U]`UV`Y`h\fcI`[\`h\Y`]VfUfmU`h`fbU`h]j`Y`h]h`Yg`UfY`dfcj`]X`Y`X"

D`YUgY`bc`h`h\]g`mYUf`k`Y`k`]`U`gc`fi`b`cd]cbU`g`WfY`Yb]b[`XUmg`Zcf`]b`h`bg]j`Y`Z]a` `j`]Yk`]b[`UbX`X]gW`gg]cb`!!

Gi Va]gg]cb`cZ5ggYgga YbhiHUg_g

Hi fb]h]b`Gi Va]gg]cb

Ʒmci`YbWci bHYf`U`dfcV`Ya`k` \Yb`UH`Ya` dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`h`fci`[`\`Hi`fb]h]b`z`d`Y`Ug`Y`
HY`Yd`l`cb`Y`9I`HY`fb`U`Gi`ddc`fh`cb`-`,`)`"``"``%`cf`Ya`Uj`h`Ya`i`cb`YI`HY`fb`U`HY`hgi`ddc`fh`4`i`bgk`"YXi`"Ui`"Gi`ddc`fh`
l`ci`fg`UfY`,`.\$\$Ua`-`-%\$.\$\$da`i`cb`k`YY`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`i`cb`k`YY`YbXg`f`l`*)`XUmg`U`m`Y`Uf`l`"Ʒmci`
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybhi`Xi`Y`hc`U`Z`Ji`h`k`]h`Hi`fb]h]b`mci`i`a`Um`Udd`m`Z`f`Ub`YI`HY`bg]cb`z`Vi`hmc`i`
a`i`gh`f`Y`h]b`mci`f`h]W`Y`hbi`a`VY`f`Z`ca`9I`HY`fb`U`Gi`ddc`fh`f`U`cb[`k`]h`Ub`m`c`h`Y`f`f`Y`Yj`Ub`h`X`c`W`a`Y`b`h`g`k`h`c`
]b`Wi`XY`Ug`Y`j`]X`Y`b`W`h`c`gi`ddc`fh`mci`f`YI`HY`bg]cb`Udd`]W`h]cb`"Ʒmci`Ya`Uj`9I`HY`fb`U`Gi`ddc`fh`mci`k`]`
Ui`h`ca`U`h]W`U`m`f`Y`W`]j`Y`U`h]W`Y`hbi`a`VY`f`z`Vi`h]Z`mci`HY`Yd`l`cb`Y`mci`k`]`b`Y`Y`X`h`c`gd`Y`W`Z]W`U`m`Ug`_`Z`f`c`b`Y`"
Hi`fb]h]b`U`gc`d`fc`j`]X`Y`gi`d`X`U`h`Y`g`c`b`h`Y`]f`g`m`g`h`Y`a`i`g`h`U`h`g`c`b`H`k`]h`Y`f`"

;`Yb`Y`f`U`m`z`Ugg`Y`gga`Yb`hi`U`g`_`g`a`i`gh`V`Y`gi`Va`]h`Y`X`Y`Y`W`f`c`b]W`U`m`j`]U`Y`]h`Y`f`Hi`fb]h]b`c`f`U`A`cc`X`Y`
Ugg][`ba`Yb`h`i`h`]b`g`h`U`b`W`g`k` \Y`f`Y`h`l`g`]g`b`c`h`d`c`g`g]V`Y`z`]h`k`]`V`Y`g`h`U`h`X`c`b`mci`f`W`ci`fg`Y`g`A`cc`X`Y`g`]h`k`]h`
U`h`Y`fb`U`h]`Y`gi`Va`]gg]cb`X`Y`h]g`"

:`c`f`]b`Z`c`fa`U`h]c`b`c`b`l`c`k`hc`gi`Va`]h`Ugg][`ba`Yb`h`g`c`b`]b`Y`j`]U`A`cc`X`Y`.\`h`d`g`#`g`h`X`Y`b`h`i`bgk`"YXi`"Ui`#`c`k`!
gi`Va`]h`Ugg][`ba`Yb`h`a`cc`X`Y`"

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

D`U[]Uf]ga `]g`i`g]b[`h`Y`k`c`f`X`g`c`f`]X`Y`U`g`c`Z`c`h`Y`f`g`i`U`b`X`d`f`Y`g`Y`b`h]b[`h`Y`a` `U`g`m`c`i`f`c`k`b`" `#`W`U`b`h`U`_`Y`a` `U`b`m`
Z`c`f`a`g`Z`Z`c`a` `X`Y`]V`Y`f`U`h`Y` `W`X`Y`U`h]b[`h`c` `U`W`W`Y`X`Y`b`h`U` `m`i`W`c`d`m]b[`Z`c`a` `U`g`c`i`f`W` `k`]h`c`i`h`U`W`_`b`c`k` `Y`X[`Y`a` `Y`b`h`

I`B`G`K` `[`f`c`i`d`g`d`U[]Uf]ga `]b`h`c` `h`Y` `Z`c` `c`k`]b[`W`U`h`Y`[`c`f`]Y`g.

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V']hYg'Ug'U'gh XYbhUhl BGK
-

5 WUXYa]W**⊖**Zcfa Uh]cb

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`tc.