



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`>cX]`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@Yj 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`WŁa 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`bWV` : cfW`5WŁXYa m]b`7 UbVYffUŁ`cZhY`UbXg`k`YfY`YUW`WŁa di g`cZI`BGK`]g
`cWŁhYX"

7ci fgY'8YHJ`g

7fYX]hDc]bHg '*`

Gi a a UfmicZ\hY'7ci fgY

: cf'a i W'cZ]hg` \]gfcfnzW]bYa U` \Ug`VYYb`Vch` `cj YX`UbX`fYj`]YX`Zc`f`]hg`UV`]hmihc`a`cj`Y`Ui`X]YbW`g`UbX`
a`U`_Y`i`g`"ZY`""`#`h`]g`W`ei`fgYz`mci`k`]`YI`d`c`f`Y`ci`f`W`a`d`Y`i`]bj`Yg`ha`Yb`hg`]b`W]bYa`U`g`UZZY`W]j`Y`W]dU`W]h]Yg`"
A`cj`]b[`U`W`cgg`j`Uf]ci`g`[`Yb`f`Y`g`UbX`Zc`fa`g`-`Zc`f`YI`Ua`d`Y`g`]Yb`h`Z]a`a`a`Y`c`X`f`Ua`Ug`z`c`b[`Zc`fa`h`Y`Yj`]g]cb`
X`f`Ua`U`z`W`cgg`j`Y`f`Z]a`g`z`X`c`W`a`Y`b`h`U`f`n`z`e`i`Y`Y`f`W]bYa`U`UbX`]b`X`Y`d`Y`b`X`Y`b`h`W]bYa`U`-`mci`k`]`YI`Ua`]b`Y`g`ca`Y`
c`Z`h`Y`k`U`mg`]b`k` \]W`U`ZZY`W]h`UbX`Ya`c`h]c`b`U`f`Y`g`i`a`a`c`b`Y`X`UbX`Y`b`U`W`h`X`]b`g`W`Y`Y`b`a`Y`X]U`"H`h`f`ci`[`\`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`mci`k`]`[`U]b`Ub`i`b`X`Y`f`g`h`UbX`]b`c`Z`
\`c`k`UbX`k`\`m`ei`Y`g`h]c`b`g`U`V`ci`h`g`W`Y`Y`b`f`]b[`E`Ya`c`h]c`b`g`W`c`b`h]bi`Y`h`c`V`Y`g`c`]a`d`c`f`h`U`b`h`c`X`U`m`

7ci fgY`@YUfb]b[`Ci hW`a Yg

%`7`f]h]W]`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`gg`Y`gg`]b`Zc`fa`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`ca`a`i`b]W]h`Y`h`Y`ci`h`W`a`Y`g`c`Z`mci`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`Ya`c`b`g`h`f`U`h`W`h]W]`g_]`g`]b`d`f`c`V`Ya`g`c`]b[`UbX`g`Y`Z`X]f`Y`W`h`X`Y`U`f`b]b[`"

HYUW`X`]b[`G`h`f`U`h`Y`[`]Y`g`

G`W`U`Z`c`X`Y`X`Y`U`f`b]b[`]g`W`b`h`f`U`h`c`h`Y`h`Y`U`W`X`]b[`g`h`f`U`h`Y`[`]Y`g`X`Y`d`c`m`Y`X`]b`h`h`]g`W`e`i`fg`Y`"5`g`U`W`U`d`g`h`c`b`Y`W`e`i`fg`Y`
5`F`H`G`\$`*)`d`f]c`f]h]g`Y`g`Zc`fa`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`Ya`]b`U`f`g`"7`ci`fg`Y`a`U`h`f]U`g`UbX`W`U`gg`X]g`W`gg]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`f`i`[`\`X`Y`Y`d`Y`f`Y`U`f`b]b[`UbX`X]g`W`gg]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`e`i`fg`Y`U`gg`Y`g`g`a`Y`b`h`U`g`_`g`UbX`h`Y`U`W`X`]b[`g`h`f`U`h`Y`[`]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`f`i`[`\`g`W`U`Z`c`X`Y`X`Zc`fa`U`h]`Y`UbX`g`i`a`a`U`h]`Y`U`gg`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 'DcfrZc`]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 f h] b ! W U g g ' k f] h] b [' h U g _ g ' W c b g] g h] b [' c Z h k c ") \$ ' k c f X ' f Y Z Y W] c b g ' c b ' W c i f g Y ' a U H] f] U ' g ' U g ' g d Y W] Z Y X "

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 ' Z] f g h U g g Y g g a Y b h H U g _] g ' k c ' g \ c f h k f] h] b ' d] Y W ' g z ' W c a d ' Y H X '] b ' W U g g z ' V U g Y X ' c b ' W c i f g Y ' a U H] f] U ' g ' f f Y U X] b [' g ' U b X ' g W Y Y b] b [' g z ' k Y Y _ g ' d ' " ' 8 Y H U] Y X] b Z c f a U H] c b ' U V c i h h Y ' H U g _ z] b W i X] b [' g U a d ' Y ' e i Y g h] c b g U b X ' a U f _] b [' W] h] f] U z ' k] ' V Y ' U j U] U V ' Y ' c b ' A c c X ' Y "

Gi Va]gg]cb'bchYg. '7 ca d'YHX']b!WUgg

Hi fb]h]b'gYh]b[. H \] g ' U g g] [b a Y b h] g ' g i V a] h] X ' h f c i [\ ' H i f b] h] b ' U b X ' g h i X Y b h g ' X c ' b c h g Y Y ' H i f b] h] b g] a] U f] h] f Y d c f r g "

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

@Yb[h. : , ! % \$ ' d U [Y g

8YHU]`g.

, ! % \$ ' d U [Y ' f Y g Y U f W X ' d c f r Z c `] c ' W c b g] g h] b [' c Z W] h] W ' ' f Y Z Y W] c b g ' c b ' f Y U X] b [' g ' U b X ' g W Y Y b] b [' g z ' U b b c h U H X V] '] c [' f U d \ m z ' d f c ' Y W h b c h Y g z ' f Y g Y U f W X ' d ' U b ' U b X ' X f U Z h e i Y g h] c b ' Z c f ' h Y ' f Y g Y U f W X ' d f c ' Y W "

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'Y'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'Y'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 ` \ cffc f Z] a
	GWYYb] b [FZW @ [YZf] ` 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
	Hi hcf] U `	WUgY ` ghi XmiUbU ` mg] g
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 YbhiH'fci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'-',) " ' ' %cf'Ya U] 'H'Ya 'cb'YI HYfbU'HY'fgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY', .\$\$Ua '—%\$.\$\$da 'cb'k YY_XUmg'UbX'-. \$\$Ua '—) .\$\$da 'cb'k YY_YbXg'fI *) 'XUmg'U'mYUfI" Ʒmci
UfY'i bUV'Y'hc'gi Va]hmc i f'Ugg][ba YbhiXi Y'hc'U'Zi 'hk]H'Hi fb]h]b'mci 'a UmUdd'm'Zcf'Ub'YI HYbg]cbž'Vi hmc i
a i ghfYHU]b'mci f'h]W_Yhbi a VYf'Z'ca '9I HYfbU'Gi ddcfhfU'cb['k]H'UbmcH'Yf'fY'Yj UbhXcW a YbHgE'hc
]bWi XY'Ug'Yj]XYbVW'hc'gi ddcfhmc i f'YI HYbg]cb'Udd'jW]h]cb" Ʒmci 'Ya U] '9I HYfbU'Gi ddcfhmc i 'k]
Ui 'ca UH]W]m'fYW]j Y'U'h]W_Yhbi a VYfž'Vi h]Zmci 'HY'Yd\cbY'mci 'k]'bYYX'hc'gdYW]Z]W]mUg_ 'Zcf'cbY"
Hi fb]h]b'U'gc'dfcj]XYg'i dXUH'g'cb'H'Y]f'gmgh'Ya 'ghU'g'cb'Hk]HYf"

; YbYfU'mž'UggYgga YbhiHUg_g'a i ghVY'gi Va]HYX'Y'YW'fcb]W]m'j]U'Y]H'Yf'Hi fb]h]b'cf'U'A ccX'Y
Ugg][ba YbH' 'b]bg]UbVW'g'k \YfY'H'g]g'bc]hdccg]V'Yž]hk]'VY'ghUH'X'cb'mci f'Wci fgY'g'A ccX'Y'g]H'k]H
U'HYfbUH] Y'gi Va]gg]cb'XYHU]g"

: cf]bZ'fa UH]cb'cb'\ck 'hc'gi Va]hUgg][ba YbHg'cb]bY'j]U'A ccX'Y. \Hdg.#gh XYbH'i bgk "YXi "Ui #ck!
gi Va]hUgg][ba YbH'a ccX'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.