



ARTS1120

9I dYf]YbW]b['H\YUhfY

HYfa 'Cby''##'&\$&%

7 ci fgY`Cj Yfj JYk

GHJZZ7cbHJW`8YHJ`g

7cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj`]m	@cWjhcb	D\cbY
>cbUH\Ub`6c`Yb	^Vc`Yb4 i bgk "YXi "Ui	Hi YgXUmgž %\$Ua !%&da /cH\Yf hja Yg`Ya Uj`Zcf Uddc]bha Ybh	K YVghYf`&(*8	Ž*%&`-' ,) \$+%-

GW\cc`7cbHJW`bZcfa Uhjcb

GW\cc`cZH\Y`5fng`UbX`A YX]U

Fcca " %&ž@Y] Y`" žF cVYfhK YVghYf`6i]X]b[`fl %Ł

D\cbY.`f\$&Ł`-' ,) `(,) *

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

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

H\Y`GW\cc`cZH\Y`5fng`UbX`A YX]U`k ci `X`]_Y`h`F YgdYVW`m5W\bck`YX[Y`h\Y`HfUX]hcbU`7i gHcX]Ubgž
h\Y`6YXY[U`fP Ybg]b[hcb`WJa di gŁž; UX][U`f7]mUbX`5fh/ `8Yg][b`7 Ua di gYgŁ`UbX`h\Y`B [i bbUk U`
dYcd`Y`f5i ghfU]Ub`8YZybW : cfW`5WUXYa m]b`7 UbVYffUŁ`cZH\Y`UbXg`k \YfY`YUW`WJa di g`cZI`BGK`]g
`cW]hYX"

7ci fgY'8YHJ`g

7fYX]hDc]bhg '*`

Gi a a UfmicZ\hY'7ci fgY

8c'mci`k Ubhlc'gYY'dYfZcfa UbW`j] Y'cb'ghU[Y3'8c'mci`k Ubhlc`ZbX'ci h\ck`j]hg'a UXY3'A UmVY'mci`j Y VYYb'a cj YX'VmUb'UW'c'g'dYfZcfa UbW'z'Ua UnYX'Vm\hY'VYUi hmicZUb'ja U[Y'cf'WUj [\hU['ja dgY'cZ gca Yh\]b['VYmcbX'k cfXg" b'h\]g'Wci fgY'mci`k]`Yi d'cfY'\ck`Ufhghg'WYUHy'a YUb]b[Z`Yi dYf]YbW'g]b dYfZcfa UbW`"GHU[]b['gW]d]hg'z'XYg][b]b['gW'bYg'z'XYj]g]b['UW]cbg`-`mci`""YUfb'UVci h\hY'dfcW'gg'cZ a U_]b['h\YUhfY'UbX'\ck`lc`di hnci f'ck b]XYUg]bhc'dfUW]W'"H\]g']g'U'Zci bXU]cbU'Wci fgY]b'dYfZcfa UbW UbX'dfcXi W]cb""hcdYbg'i d'cddcfh b]hYg'Zcf'UW]b[z'X]fYW]b['UbX'XYg][b'z'VUW_g]hU[Y'dfcXi W]cb'z'gW]dh k f]h]b['UbX'fYj]Yk]b['h\Y'Ufhg"

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

%`8YgW]VY'UbX]bhYfdYhU'h\YUhfY'Yj Ybh]b'hYfa g'cZ]hg'a i`h'd'Y'g][b]Z]b['Y'Ya Ybhg'UbX'h\Y]f

5ggYgga Ybh

GYY`Wci fgY`a ccXY`ZcfHJg_]bghfi Wjcbg`UbX`UggYgga YbhW]hYf]U"

5ggYgga YbhHJg_g

5ggYgga YbhHJg_g	K Y][\h	8i Y`8UH	Gh XYbh@YUfb]b[Ci hWca Yg`5ggYggYX
DYfZcfa UbW`5bU`mg]g`	&\$i	% #\$(#&\$&%`%) - `DA	%ž`&ž)
9ggUm	(\$i	\$\$#\$(#&\$&%`%) - `DA	&ž` ž)
DfUW]W]`Dfc`YW	' \$i	&\$#\$(#&\$&%`\$&.\$\$`DA	(ž)
hXj]Xi U`7cbf]Vi hcb`hc DfUW]W]`Dfc`YW	%\$i	&#\$(#&\$&%`%) - `DA	(ž)

5ggYgga Ybh8YHJ]`g

5ggYgga Ybh%`DYfZcfa UbW`5bU`mg]g

GHUfhXUH. `Bch5dd`]WUV`Y

@Yb[h. `&\$\$\$`k cfXg

8YHJ]`g.

K f]h`U`\$\$\$!k cfX`UbU`mg]g`cZcbY`fYW`bhH`YUhfY`Yj`YbhfZca`h`Y`]ghcZ`h`YUhfY`Yj`Ybth`dfcj`]YX`]b`WUggL`"

F i Vf]W]bX]W]h]b[``Yj`Y`cZdYfZcfa UbW`U[U]bghYUW`UggYgga YbhW]hYf]Užk f]hYb`Zcfa Uhj`Y`ZYXVUW`ž`UbX`dYfW`bHJ[Y`[fUXY`"

Hi fb]h]b`gYH]b[.`H\]g`Ugg][ba Ybh]g`gi Va]hY`h`fci [\`Hi fb]h]b`UbX`gh XYbth`Xc`bchgYY`Hi fb]h]b`g]a]`Uf]mifYdcfth`"

5ggYgga Ybh&`9ggUm

GHUfhXUH. `Bch5dd`]WUV`Y

@Yb[h. `&\$\$\$`k cfXg

8YHJ]`g.

K f]h`cbY`\$\$\$!k cfX`9ggUm]cb`U`hcd]WgdYW]ZYX`Vmih`Y`7`cbj`YbYf`"

F i Vf]W]bX]W]h]b[``Yj`Y`cZdYfZcfa UbW`U[U]bghYUW`UggYgga YbhW]hYf]Užk f]hYb`Zcfa Uhj`Y`ZYXVUW`ž`UbX`dYfW`bHJ[Y`[fUXY`"

Hi fb]hb'gYhb[Yh\$

	5ggYgga Ybh	9ggUmXi YžH\i fgXUmž%5df]`&\$&%
K YY_ ; .) '5df]'! '- '5df]	@YWhi fy	DfUWjWj`Dfc YWñ-F Y\YUfgU" F Yj]Yk 'fYgYUfW" 6Y[]b'fY\YUfg]b[]b'mci f'U`cWUHYX'j Ybi Y"
	Hi hc f]U`	DfUWjWj`Dfc YWñ-Wc b]bi Y'fY\YUfg]b["DfYgYbhUb UWñcb`ghUbX'XYg][b'Wc bW dhc'mci f'Hi hc f/ 'A Uf_ A]hWY`"
K YY_ - . %&'5df]'! '%* 5df]	@YWhi fy	DfUWjWj`Dfc YWñ-F Y\YUfgU"7 cb]bi Y'fY\YUfg]b[]b'mci f'U`cWUHYX'j Ybi Y"GhU[Y'U'dfcj]g]cbU`k U`! h'fci [\ `cZH Y'dYfZcfa UbVW`f]hg'gYei YbWgž UffUb[Ya Yb]g'UbX'YZZYWgŁ"
	Hi hc f]U`	DfUWjWj`Dfc YWñ-Wc b]bi Y'fY\YUfg]b[" : i ``fY\YUfgU`cZWc a d'YH`dYfZcfa UbVW`-dfYgYbh mci f'gci bX#[\ h]b[#YVX`d'Ub'hc'mci f'hi hc f'UbX'A Uf_ A]hWY`"
K YY_ %\$. %- '5df]'! '& 5df]	@YWhi fy	DfUWjWj`Dfc YWñ-Hi YgXUm&\$'5df] &\$&%`HYVX`#fYgg'fY\YUfgU'ž' \$'a]bi h'g'dYf' [fci dž VYtk YYb' - . \$\$Ua `UbX`%\$\$da ž]ja Yg'hc'VY

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

9I dYWYX`fYgci fWg`Zcf`hY`Wci fgY`UFY`Uj U]`UV`Y`Zca` I` BGK` `@]VfUfmj]U`A` ccX`Y`"

Gh XYbHg`UFY`YI dYWYX`hc`Uhh`bX`tk`c`dYfZcf`a` UbWg`g`cbY`cb`WJa` di` g`z`cbY`c`Z]WJa` di` g`z`Ug`d`Ufhc`Z`h`Y`
Wci fgY`"8YhU]`g`UVci`hdYfZcf`a` UbWg`UFY`dfcj`jYX`cb`A` ccX`Y`"

F YWca a YbXYX`F Ygci fWg

F YWca a YbXYX`fYgci fWg`Zcf`hY`Wci fgY`UFY`Uj U]`UV`Y`Zca` I` BGK` `@]VfUfmj]U`A` ccX`Y`"

7ci fgY`9j U`i` Uh]cb`UbX`8Yj`Y`cda` Ybh

K`Y`k`Y`Wca`Y`Wcbgfi`Wj`Y`ZYXVUW`-`YgdYWU`mk`f]hYb`ZYXVUW`f]Ya`U]g`z`bchYg`YHW`E`cb`hY`Wci`fgY`
Wcb`hYb`h`gfi`Wi`fY`UbX`UggYgga`Ybha`Y`h`c`Xg`-`bchcb`m`Uh`h`Y`WcbW`g]cb`c`Z`h`Y`Wci`fgY`z`Vi`h`U`gc`Ug`k`Y`[`c`
U`cb[`"5`h`h`Y`YbX`c`Z`h`Y`Wci`fgY`k`Y`k`]"`]bj`]h`mci`hc`dfcj`jY`ZYXVUW`i`g]b[`I`BGK`fg`Wci`fgY`YI`dYf]YbW`
gi`fj`Yn`f`

A`Ubm`UgdYWg`c`Z`h`j`g`Wci`fgY`UFY`h`Y`fYgi`hcZ]bbcj`Uhj`Y`ghi`XYbhZYXVUW`Zca`dfYj]ci`g`m`Y`Ufg`-

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

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

≠mci 'YbWci bhYf'U'dfcV'Ya 'k \Yb'UffYa dh]b['hc'gi Va]hirci f'Ugg][ba Ybhih'fci [\ 'Hi fb]h]bž'd'YUgY

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