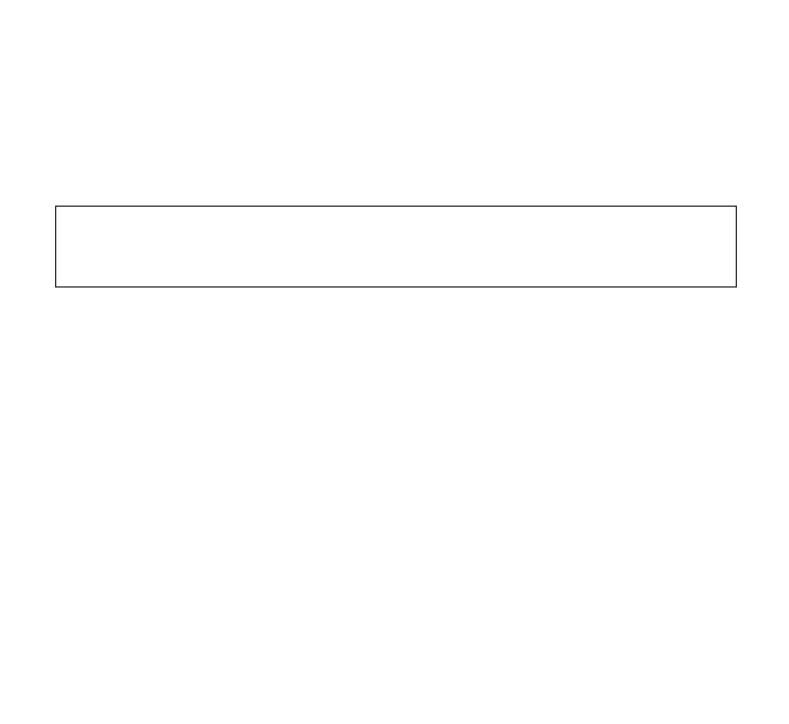


ARTS2755

; `cVU``8Yj Y`cda Ybh']b'DfUWf]\\\. '7 cb\\\\dhg'\UbX'\Df\U\\f\]\\\g Zcf' \pm \\\in g]j Y'8Yj Y`cda Ybh



5ggYgga Ybh

D`YUgY`Wcbgi `hA ccX`Y`Zcf`UbmUXX]h]cbU``]a dcfhUbh]bZcfa Uh]cb`fY[UfX]b['UggYgga Ybhg''``

5ggYgga Ybh'HUg_g'

5ggYgga Ybh'hUg_	% Y] <u>/</u> (\h	8i Y'8Uh 8i Y'8UhY	‰	Gh XYbh@yUfb]b[Ci hWca Ygʻ5ggYggYX
7 f]h]wU``Yj U`i Uh]cb`cZU Waa a cb`hcc`#JddfcUW. hc]bWi g]j Y`XYj Y`cda Ybh	(\$1	&\$#\$'#&\$&\$'%&.\$\$'5A		%₹
@cWU`8Yj Y`cda Ybh7 UgY Gh Xm	*\$1	\$%#\$) #&\$&\$`%&.\$\$`5A		&Ž

5ggYgga Ybh'8YHJ]`g

 $5\,ggYgga\ Ybh\%\ '7\,f]h]WU`Yj\ U`i\ Uh]cb'cZ'U'Wca\ a\ cb'hcc`*JddfcUWX\ 'hc']bWi\ g]j\ Y'XYj\ Y`cda\ Ybh$

GHJfhXUhY. Bch5dd`]WUV`Y

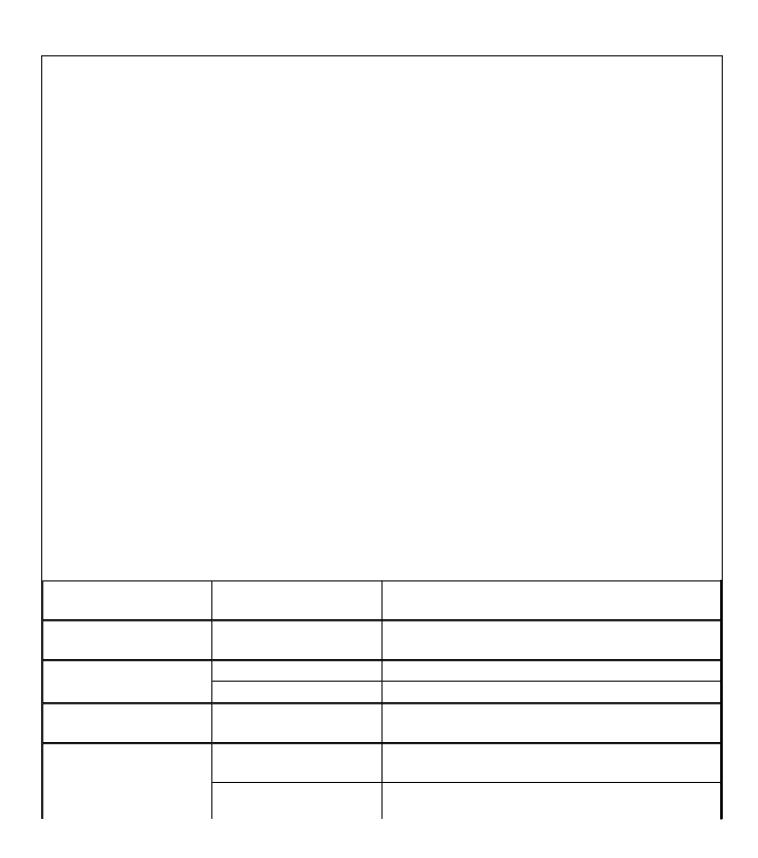
@Yb[h\. **@Yb[h**.'%)\$\$!'&\$\$\$'kcfXg

5XX]h]cbU`XYhJ]`g.

D`YUgY'Wcbgi `h'A ccX`Y'Zcf`Z fh\Yf']bZcfa Uh]cb"

Gi Va]gg]cb bchYg.cb`]bY

 $\label{thm:continuous} \begin{tabular}{ll} Hi fb]h]b gYhh]b [. H\]g Ugg][ba Ybh]g gi Va]hhYX hAfci [\Thi fb]h]b UbX ghi XYbhg WUb gYY Hi fb]h]b g]a] Uf]hm fYdcfhg"$



8 Yj Y`cda Ybh7 UgY!Gh Xm´žXi Y`a]Xb][\h: f]XUm'\gh cZA Um'``B \%eWUa` eq f? aaV \%ad XqdZ\\d
SeeWee_Wf[Xad_Sf[a`ž

FYgci fWyg

DfYgWf]VYX F Ygci fWYg

D`YUgY`W¢bgi`hA ccX`Y`Zcf`dfYgWf]VYX`UbX`fYW¢a a YbXYX`fYUX]b[g`Zcf`h\]g`W¢i fgYž`Ug`k Y```Ug`ch\Yfi gYZ\``fYgci fWYg`Zcf`UWUXYa]Wgh Xm''

FYWca a YbXYX FYgci fW/g

7 ci fgY 9j U`i Uhcb UbX 8Yj Y`cda Ybh

Ghi XYbhYj U`i Uhjj Y'ZYYXVUW_`]g'[Uh\YfYX'h\fci[\'I BGK fig'A m'9|dYf]YbWY"'±bZcfa U``ZYYXVUW_`UbX'WUgg! [YbYfUh'X`ZYYXVUW_`UfY'U`gc']a dcfhUbh'

=k Y`Wca Y`UbX`UddfYW]UhY`mci f`Wcbghfi Whj Y`ZYYXVUW_cb`hk]g`Wci fgY"'5Xf gha Ybhg`UbX`XYj Y`cda Ybhg`hc hk]g`Wci fgY`]b`Z hi fY`k]```VY`VUgYX`cb`ghi XYbhZYYXVUW_ž`]b`YZZcfhg`hc`Wcbh]bi ci g`m]a dfcj Y`h\Y`ghi XYbh`YUfb]b['YI dYf]YbWY"'H]a Y`]g`U``c\WhYX`]b`h\Y``Ughhi hcf]U``]b`k YY_'%'Zcf`ghi XYbhg`hc`dfcj]XY`a cfYXYhU]`YX`ZYYXVUW_Vch\`j YfVU``mUbX`]b`k f]h]b['fUbcbma ci g`mtž`k \]W\`k]```VY`i hj`]gYX`hc`a U_Y`Z fh\Yf W\UbX`UggYgga Ybhg`Ug`fYei]fYX"'

Gi Va]gg]cb cZ5ggYgga YbhHUg_g

Gi Va]gg]cb cZ5ggYgga YbhHUg_g

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

Image: Ybwci bhYf'U'dfcV'Ya k \Yb'UhYa dhJb['hc'gi Va]hmci f'Ugg][ba Ybht\fci [\ 'Hi fb]hJbž'd'YUgY

HY'Yd\cbY'9| hYfbU''Gi ddcfhcb'-',) '' ' ' %cf'Ya U] 'h\Ya 'cb'Y! hYfbU'hY'hgi ddcfh4 i bgk "YXi "Ui '"'Gi ddcfh
\ci fg'UfY', .\$\$Ua '-'\\$.\$\$da 'cb'k YY_XUmg'UbX'-.\$\$Ua '-') .\$\$da 'cb'k YY_YbXg'fl *) 'XUmg'U'mYUfŁ" Image:

UfY'i bUV'Y'hc'gi Va]hmci f'Ugg][ba YbhXi Y'hc'U'ZJi 'hk]h\ 'Hi fb]hJb'mci 'a UmUdd'mZcf'Ub'Y! hYbg]cbž'Vi hmci
a i ghfYhJ]b'mci f'hJW_Yhbi a VYf'Zfca '9! hYfbU''Gi ddcfhfU'cb['k]h\ 'Ubmch\Yf'fY'Yj UbhXcW a YbhgŁ'hc
]bWi XY'Ug'Yj]XYbW' 'hc'gi ddcfhmci f'Y! hYbg]cb'Udd']WUh]cb" Image: Ya U]''9! hYfbU''Gi ddcfhmci 'k]''

Ui hca UhJWJ''mfYW'] Y'U'hJW_Yhbi a VYfž'Vi h]Zmci 'hY'Yd\cbY'mci 'k]'''bYYX'hc'gdYWJZWJ''mUg_'Zcf'cbY"

Hi fb]hJb'U'gc'dfcj]XYg'i dXUhYg'cb'h\Y]f'gmghYa 'ghUh' g'cb'Hk]hYf"

; YbYfU`mž'UggYgga YbhitUg_g'a i gh'VY'gi Va]hhYX'Y`YVWfcb]\WJ``mj]U'Y]h\Yf'Hi fb]hjb'cf'U'A ccX`Y Ugg][ba Ybh''-\\\]bghUb\W'g'k \YfY'h\]g']g'bchdcgg]V`Yž']hk]``'VY'ghUhYX'cb'mci f'\\circ i fgY'g'A ccX`Y'g]hY'k]h\U`hYfbUhj Y'gi Va]gg]cb'XYhJ]`g''

cfi]bZcfa Uh]cbicbi\ckihcigi Va]hUgg][ba Ybhgicbi]bYij]UiA ccXiY.i\hdg.#gh XYbh'i bgk "YXi "Ui #\ck! qi Va]hUgq][ba Ybha ccXiY

5 WUXYa | W < cbYghmUbX D`U[| Uf]ga

D`U[]Uf]ga i]gii g]b[ih\Yik cfXgicfi]XYUgicZch\YfgiUbXidfYgYbh]b[ih\Ya iUgimci fick b"i±iWUbihU_Yia Ubm Zcfa qžZfca iXYi]VYfUhYiW\YUh|b[ihciUVW]XYbhU`mWcdm]b[iZfca iUigci fWYik]h\ci hUW_bck iYX[Ya Ybh'i

IBGK '[fci dg'd'U[]Uf]ga ']bhc'h\Y'Zc``ck]b['WUhY[cf]Yg.

7 cdm]b[.'i g]b['h\Y'gUa Y'cf'j Yfmg]a]`Uf'k cfXg'hc'h\Y'cf][]bU`hYl h'cf']XYU'k]h\ci h'UW_bck `YX[]b['h\Y gci fW'cf'i g]b['ei chUh]cb'a Uf_g"'H\]g'U`gc'Udd`]Yg'hc']a U[Ygž'Ufh'UbX'XYg][b'dfcYWhgž'Ug'k Y``'Ug dfYgYbhUh]cbg'k\YfY'gca YcbY'dfYgYbhg'Ubch\Yf'g']XYUg'cf'k cfXg'k]h\ci h'WfYX]h'

⇒ Uddfcdf]UhY 'dUfUd\fUg]b[...7\Ub[]b['U'ZYk 'k cfXg'UbX'd\fUgYg'k \]'Y 'a cghmfYhJ]b]b['h\Y'cf][]bU` ghfi Wh fY 'UbX#cf'dfc[fYgg]cb'cZ]XYUg'cZh\Y'cf][]bU'žUbX']bZcfa Uh]cb'k]h\ci hUW_bck `YX[Ya Ybh'H\]g'U`gc Udd`]Yg']b'dfYgYbhUh]cbg'k \YfY'gca YcbY'dUfUd\fUgYg'Ubch\Yf'g']XYUg'cf'k cfXg'k]h\ci hWfYX]hUbX'hc d]YW]b['hc[Yh\Yf'ei chYg'UbX'dUfUd\fUgYg']bhc'U'bYk 'k \c`Yžk]h\ci hUddfcdf]UhY'fYZYfYbW]b["

7 c``i g]cb. 'k cf_]b['k]th 'cth Yfg'Vi hidUgg]b['cZZth Y 'k cf_'Ug'U'dYfgcb'g']bX]j]Xi U``k cf_"'7 c``i g]cb'U`gc]bWi XYg'dfcj]X]b['mci f'k cf_'thc'Ubcth Yf'ghi XYbh'VYZcfY'th Y'Xi Y'XUHYZcf'Zcf'th Y'di fdcgY'cZth Ya

- i bXYfglUbX`mci f`f][\hg`UbX`fYgdcbg]V]`]h]Yg`Ug`U`gh XYbh'Uhi BGK
- VY'Uk UfY'cZd`U[]Uf]ga ž'Wcdmf][\hzil BGK 'Gh XYbh7cXY'cZ7cbXi WhUbX'5WWdhUV`Y'I gY'cZ I BGK '= H'F Ygci fWfg'Dc`]Wh
- VY 'Uk UfY 'cZh\Y 'ghUbXUfXg 'cZVY\Uj]ci f'Yl dYWhYX 'cZYj YfmcbY ']b 'h\Y 'l BGK 'Wcaaib]hm
- `cWUHY 'gYfj]WYg'UbX `]bZcfa UH]cb'UVci hI BGK 'UbX'I BGK '@]VfUfm

5 WUXYa]W = DZcfa Uhjcb

: cf`YggYbhJU``gh XYbh]bZcfa UhJcb`fY`UhJb['hc.

fYei YghgʻZcfʻYl hYbg]cb/ `UhYʻgi Va]gg]cbgʻ[i]XY`]bYg/ fYj]Yk ʻcZa Uf_g/ I BGK ʻ< YUʻh\ 'UbXʻGUZYhmdc`]WJYg/