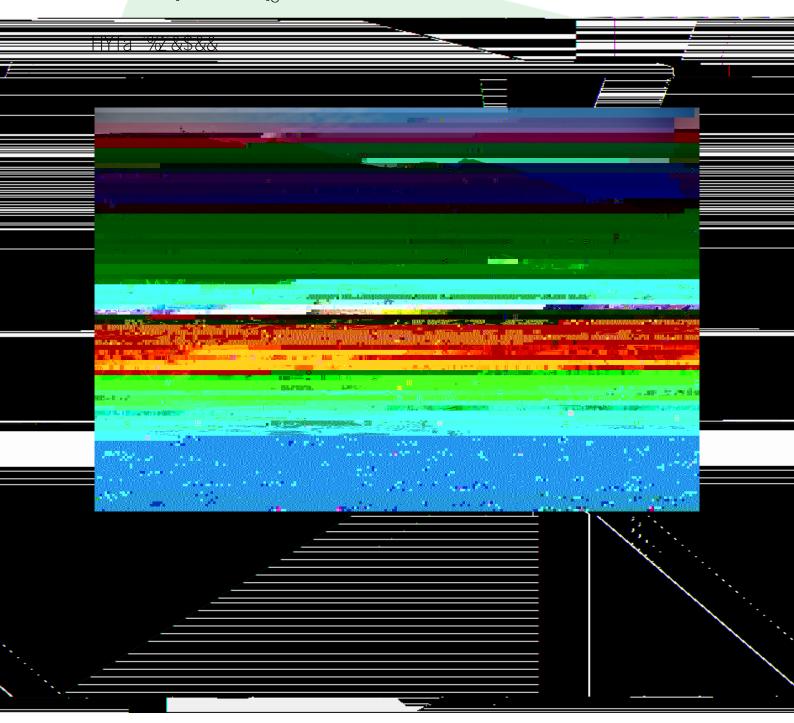


ARTS2571

⇒bhyfa YX]Uhy GdUb]g\ 6



7ci fgY⁻Cj Yfj]Yk

GHJZ7cbHJWh8YHJ]`g

7cbj Ybcfg

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8 f B UHU JU C ft]n 7 YVYf]c	<u>b"cfn]nWVYf]c4 i bgk "YXi "Ui</u>	6mUddc]bha Ybh	A cfj Yb 6fck b	

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@c\\U|rgcb. G\\cc``C\Z]\\\žA cfj\Yb'6fck\b'6i]\X]b[\zeroundering Y\`&z\&),

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HY`.'\$&'-'(, '\$(\$*

9a U]`. '<u>\U`4 i bgk "YXi "Ui</u>

5W_bck `YX[Ya YbhcZ7ci bhfm

I BGK '5frgž8Yg][b'UbX'5fW,]h'Wi fY'? Ybg]b[hcb'UbX'DUXX]b[hcb'Wa di gYg'UfY'Vi]'hcb'5Vcf][]bU`@UbXg"K Y'dUmci f'fYgdYWrg'hc'h\Y'6]X'][U''UbX'; UX][U''dYcd'Yg'k\c'UfY'h\Y'7i ghcX]Ubg'cZh\YgY'`UbXg" K Y'UW_bck 'YX[Y'h\Y'5Vcf][]bU`'UbX'HcffYg'GHfU]h=g`UbXYf'dYcd'Ygž'h\Y':]fgh5i ghfU`]Ubgžk\cgY'`UbXgž k]bXg'UbX'k UhYfg'k Y'U``'bck 'g\UfYž'UbX'dUmfYgdYWhc'h\Y]f'i b]ei Y'j U'i Ygž'UbX'h\Y]f'Wcbh]bi]b['UbX'YbXi f]b['W'h fYg'k\]W 'XYYYdYb'UbX'Ybf]W 'h\Y'`]ZY'cZci f'bUh]cb'UbX'Wca a i b]h]Yg"''

 $\label{eq:continuous} \begin{array}{ll} \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY'``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY'``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY'``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY'``cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY'```cf' = bX][Ybci g'] \\ \text{$:$} = \text{$U[Y'Wc$ if} \text{$fhYgmcZh}, Y'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY'C$ $Z_jWY'cZh}, Y'Dfc'J]WY!7 \setminus UbWY'C$ $Z_jWY'cZh}, Y'Dfc'J]WY'C$ $Z_jWY'CAL}, Y$

7ci fgY 8YW] g

I b]hg cZ7fYX]h*

Giaa UfmcZh\Y 7ci fgY

K \Yth\Yf`mci 'k Ubhhc Yb\UbW'mci f'tfUj Y`Yl dYf]YbW'gžYl dUbX'mci f'k cf_'Wkc]W'gž'cf'UddfYW]UhY <]gdUb]WW 'hi fU`'Wcblf]Vi hjcbgž'GdUb]g\ ']g'cbY'cZh\Y'`Ub[i U[Yg'h\Uhk]``VYghgYfj Y'mci "'K]h\ 'a cfY'h\Ub (+\$'a]``]cb'bUhjj Y'GdUb]g\ 'gdYU_Yfg']b'&%'Wci blf]Ygž'UbX'a cfY'h\Ub'' 'a]``]cb'GdUb]g\ 'gdYU_Yfg']b'h\Y U G5'U'cbYž'<]gdUb]WW'`hi fY']g']bWYYUg]b[`mXca]bUbh''H\]g'Wci fgY'k]``Yb\UbW'mci f'UV]`]mm'c'UddfYW]UhY h\Y'Wca d'Yl]mmcZ<]gdUb]WW'`hi fY'UWfcgg'tk c'Wcbh]bYbhg"'H\Y'Wci fgY']g'UVci h'YUfb]b['hc'gdYU_ž'fYUX UbX'k f]hY'GdUb]g\ 'Vmi g]b['h\Y'a YX]i a 'cZW'`hi fY'''J cWUVi `UfmUbX'[fUa a Uh]WU`'ghfi Whi fYg'UfY'dfYgYbhYX]b'h\Y'WcbhYl h'cZW'`hi fU``mfY`Yj Ubhhcd]Wg''

5ggYgga Ybh

GYY'Accx`Y'Zcf'Zfh	Zia U Zo"		‰

CfU`ZYYXVUW_'UbX'a Uf_g'dfcj]XYX"

H\]g^]g^bchU^Hi fb]hb^Ugg][ba Ybh

5XX]h]cbU`XYhJ]`q

Hk c dUfhg"

%"I gY`cZhUf[Yh``Ub[i U[Y`Xi f]b['hi hcf]U`g`UbX``YWhi fYg`UbX`UWh] Y`dUfr]WdUh]cb"

&":]bU``hYgh`]b`k YY_`-"5`g\cfhWcbj YfgUh]cb`k]h\`mci f`hi hcf`cf`Ubch\Yf`ghi XYbhz̈Zcf`%\$`a]bi hYg"`

5 czwcz wc vgR]f ReZ _ ']bWi XY 'Vi hUfY 'bch`]a]hYX 'hc. 'Zi YbWhž UV]`]hmhc 'ghUmi]b 'GdUb]g\ 'UbX 'bchfYj Yfhhc 9b[`]g\ ž'dfcbi bW]Uh]cbž'UWW fUhY 'i gY 'cZhUf[Yhi[fUa a Uf'UbX 'UWW fUhY 'i gY 'cZhUf[Yhi] cWUVi `Ufm'

5ggYgga Ybh' . '9!DcfhZc`]c

GHUfh'XUhY. K YY_`m 5ggYgga Ybh`Yb[h\. 'j Uf]Yg 8i Y'XUhY. GYY'A ccXY

Dcfh7c`]c'cZk YY_`mcb`]bY'UWfjj]h]Yg'&\$!&) 'a]bg'dYf'k YY_"

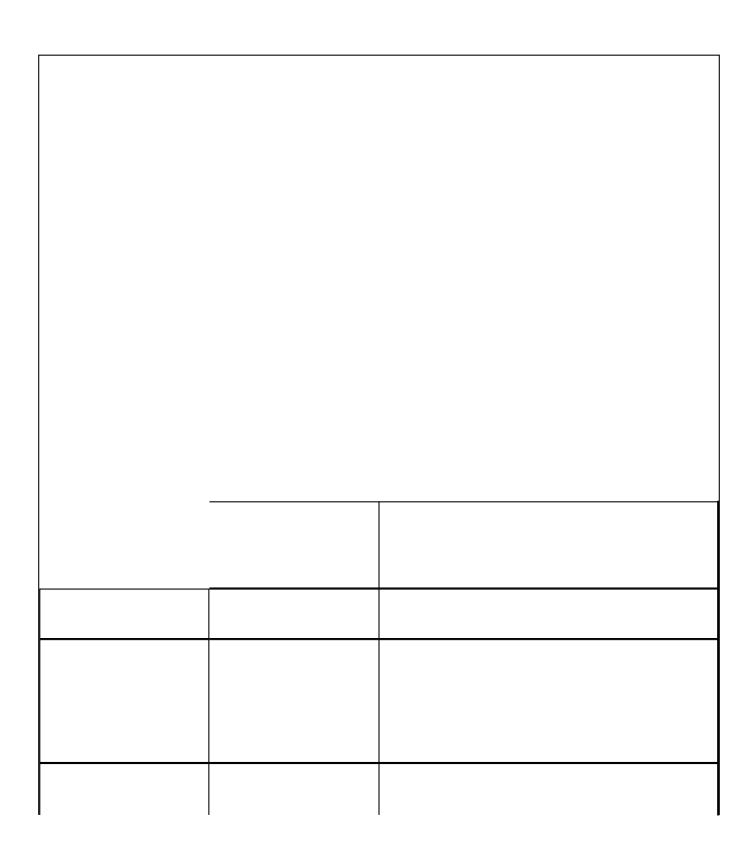
Cb`]bY ZYYXVUW_dfcj]XYX"

H\]g^]g^bchU^Hi fb]h]b^Ugg][ba Ybh

5XX]h]cbU`XYhJ]`g

 $\label{eq:condition} 5 \text{ if } Uf]YmcZcb^{}) YuWfJ]h]Yg''GY^ZUWWfgg'HUg_g'UfY'WcadYhYX'Vmh\Y'ghiXYbh''HUg_g'UfY'JcWUViYUfmz^{}) If YuYJb[Z'[fUaaUfz'UbX'kf]h]b[Z'fYUX]b[Z'[fUaaUfz'UbX'kf]h]b[Z'fYUWJW'''+h\Y'hcd]Wg'k]^\cdot\Y'fY'UhYX'hc'h\Y'&JgdUb]WkcfX'''+\bX]j]Xi U`'kYY_`mZYYXVUW_'''$

``Cb`]bY`UWnJj]hJYg`dUfhcZh\Y`9!DcfhZc`]c`UfY`bchUjU]`UV`Y`Zcf`YIhYbg]cb`fYeiYghg`UbX`aighVY Wcad`YhYX`VYZcfY`h\Y``YWhifY"



K F ≠HH9B 7CA DCB9BH Xi fl	JbhY ``U'hi	hcfW"
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FYgci fWyg

DfYgWf]VYX F Ygci fWYg

9LD97H98 H9LHG, J #15A #5 6%"

 $\label{eq:local_model} $$ \text{Mci f'9DCF H: C} @= \tilde{z}'k YY_`mk cf_\check{z}'UbX`fYgci fW'g`UfY`]b`mci f'hYI h'UbX`YI YfW]gY`Vcc_g\check{z}'h\YfYZcfY`mci bYYX`h\YgY`Vcc_g`cb`XUmcbY`k YY_`%"`6ch\ž'h\Y`X][]hU``hYI h'UbX`YI YfW]gY`Vcc_ž`Wcgh'U`hchU``cZ` &('UddfcI fI GŁ'' $$$

%"Di fWkUgY 'h\Y'X][]hU``Vcc_g'cb`\hdg.#g\cd"V`]b_`YUfb]b["Wca #@cc_'Zcf'J \pm 15A \pm 85'6%5@Ž9>'fl 5@ A B C 'M9>9F 7 = \pm G \pm \pm 66B.'-+, , (%*+, &- ' &\ell &

&"'CbWY'mci '\Uj Y'h\Y'Vcc_g'^c]b'ci f'WVgg'+BH9FA98+5H9'6'k]h\'h\Y'WcXYg'Ubbci bWYX']b'ACC8@9"

'9| d`cfY`h\Y`Vcc_g`hc`[YhZJa]`]Uf`k]h\`U```h\Y`UWhj]h]Yg"`H\]g`g]hY`[]j Yg`mci `UWWgg`hc`h\Y`f]W\`hcc`g`UbX fYgci fWg`Uj U]`UV`Y`Zcf`h\]g`hYI h'`< UfX`Wcd]Yg`UfY`Uj U]`UV`Y`Uhih\Y`I BGK `Vcc_ghcfY"`H\Y`\UfX`Wcdm j Yfg]cb`]bWi XYg`U`WcXY`hc`'c]b`h\Y`X][]hU``d`UhZcfa `UbX`U```h\Y`fYgci fWg"`Mci `A I GH`\Uj Y`h\YgY`Vcc_g cb`XUm%k YY `%"

i=hi]g YggYbh]U`mci 'WXYW_'A ccX`Y`cb`U`k YY_`mVUg]g`VYZcfY``YWh fYg`UbX`hi hcf]U`g"`H\Y`Wci fgYfYqci fWYq`UfY`6%I`&``Yj Y```7 ca a cb`9i fcdYUb`: fUa Yk cf_`Zcf`@Ub[i U[Yq

FYWca a YbXYX FYgci fWYg

DfUWIW A U Yg DYfZYWi6mfUi h\cfl :]XUB]qqYbVYf[:

~ E i Å 'hY 'dUfYWY3/A W fUk!<]``/' fX 'YX]hcb" '&\$\$)

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"'=Imci
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']WUhJcb"'=Imci 'Ya U]''9! hYfbU'`Gi ddcfhmci 'k]'`
Ui hca UhJWJ'`mfYWY]j Y'U'hJW_Yhbi a VYfž'Vi h]Zmci 'hY'Yd\cbY'mci 'k]'``bYYX'hc'gdYWJZJWJ'`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 YbhiHug_g'a i gh'VY'gi Va]hhYX'Y`YWfcb]WJ``mj]U'Y]h\Yf'Hi fb]h]b'cf'U'A ccX`Y Ugg][ba Ybh'' = D']bgHJbWYg'k \YfY'h\]g']g'bchdcgg]V'Yž']hk]``VY'gHJhYX'cb'mci f'Wci fgY'g'A ccX`Y'g]hY'k]h\

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 gžZfca iXYi]VYfUhYiWXYUh]b[ihciUWW]XYbhU`mWcdm]b[iZfca iUigci fWYik]h\ci hiUW_bck iYX[Ya Ybh'i

5 WUXYa]W + DZcfa Uhjcb

8 i Y 'hc 'Yj c'j]b['UXj]WY 'VmB GK '< YU'th žighi XYbhg'a i gh'WkYW_'Zcf'i dXUhYX']bZcfa Uh]cb 'fY[UfX]b['cb`]bY 'YUfb]b['Zcf'U``'5fhgž'8 Yg][b 'UbX'5fWk]hYWhi fY 'Wci fgYg'th]g'thYfa 'fJ]U'A ccX`Y'cf'Wci fgY']bZcfa Uh]cb dfcj]XYX"Ł

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

• fYei Yghg'Zcf'Yl hYbg]cb/

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