
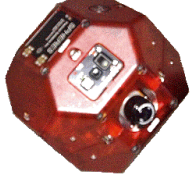


ZERO 

R  B  TICS

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HS TOURNAMENT 2016

# Game Manual

Ver. 2.1.0





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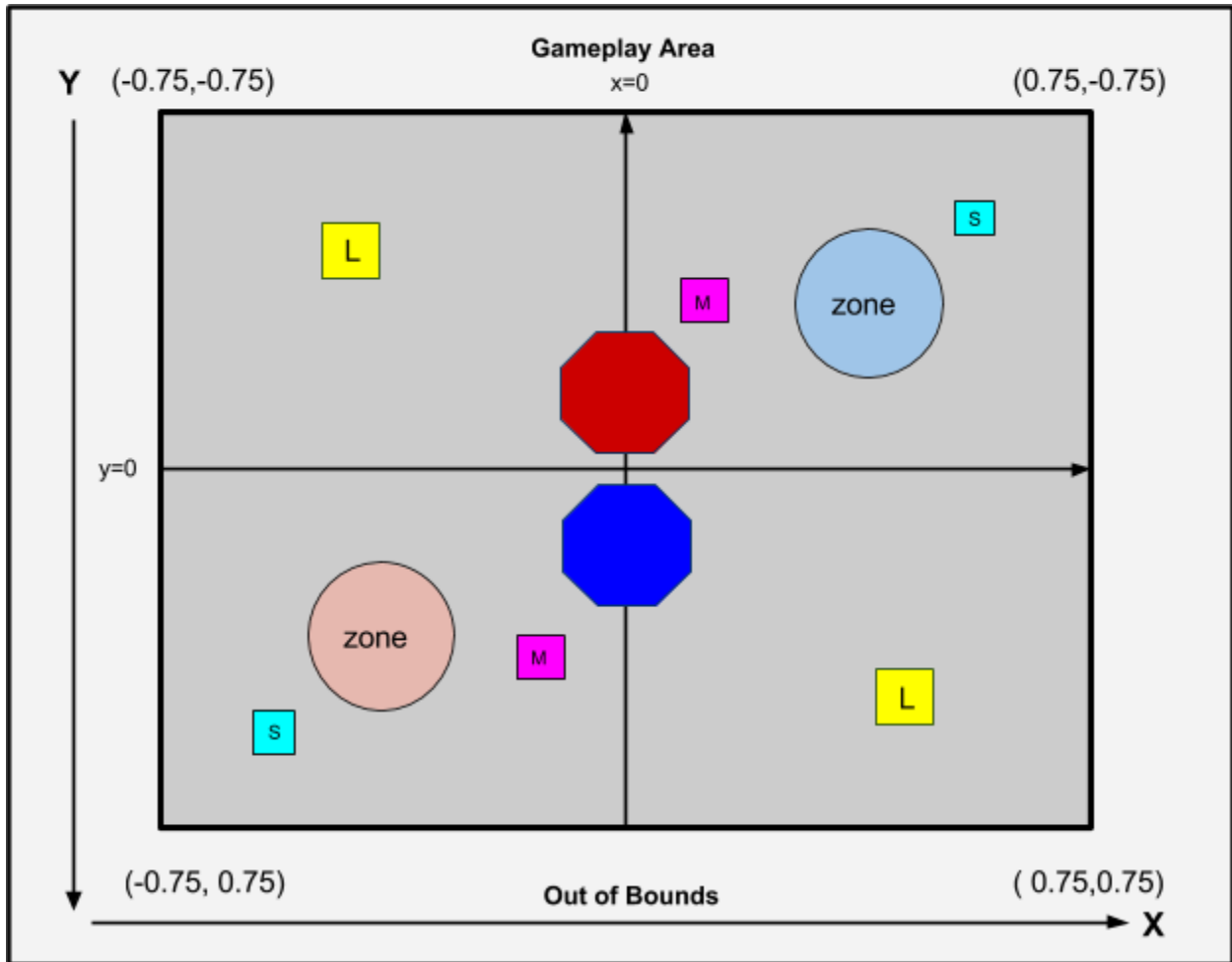
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# ZRHS 2016 Game Manual

## 30I co g'Qxgtxlgy ""

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"



S: Small, M: Medium, L: Large

Diagram not to scale

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O cvej gu'qh'URCEG/URJ GTGU'y kn'dg'r rc{ gf "dgw ggp'y q"URJ GTGU."eqptqmgf "d{ 'r tqi tco u'y tkwgp"d{ " y q'ugr ctvg'vgco uOGcej 'vgco 'y kn'eqo r gv'vq'j cxg'vj g'o quv'r qlpw'y j gp'vj g'tqwpf "ko g'ku'wr OGcej " tqwpf "rcuu": 2'ugeqpf uORqkpw'o c{ "dg'i gpgtcvgf "d{ "eqmgevp'i 'y g'kgo u"\*tgr tgugpvp'i 'y g'ucvgnkg" r kgegu-ur tgc'f "cetquu'vj g'r rc{ kpi 'hgrf "cpf 'f tqr r kpi 'y go "qhh'lpuk g"ppga'u'cuogo dn{ 'l qpg.'tgr tgugpvp'i 'y g' kf gcnr rceg"vq'eqput we'c'ucvgnkg0"

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### 30B"Ucvgnkg'Rquklqplpi "U{ uvgo "URU+kgo u"

Cv'vj g'uctv'qh'vj g'i co g.'vj gtg'ctg'vj tgg'Ucvgnkg'Rquklqplpi "U{ uvgo "URU+kgo u'i kxgp"q"gej 'URJ GTG0' Vgco u'pggf "q'r meg'vj gug'vj tgg'URU'kgo u'ht'cr ctv'q'hqto "c'v'kpi ng=vj g'ctgc"qh'vj g'URU/v'kpi wcvgf " tgi kpp'ku'wugf "q'ecrewr'vj g'gttqt'tcf kuu'vj cv'f gvto kpgu'vj g'v'gco a'u'guko cvgf "cuugo dnf | qpg0Vj g" i tgevt'vj g'ctgc'ku.'vj g'o qtg'r tgekugf 'vj g{ 'y km'dg'kphqto gf "qh'vj g'mecv'kq'qh'vj gk'URCEG/U0'cuugo dnf " | qpg0Tgcf "o qtg'cdqw'URU'kgo u'k'ugev'kq'30B'cpf "cuugo dnf | qpgu'k'ugev'kq'30B0"

### 30B"Cuugo dnf \ qpgu"

Vj g'cuugo dnf | qpg'ku'c'ur j gtlecl'mecv'kq'y j kej 'f qgu'pqv'kpv'gthgtg'y kj "gzkukpi 'ucvgnkg'qtdku."cu'ej qugp" tcpf qo n' 'htqo 'c'ur gekle'tcpi g'qh'eqqtf kpcv'g0'ku'cdqw'vj g'uk' g'qh'qpg'URCEG/U.'y kj 'c'f lco gvg'qh' 204'o gvtu0Qpeg'cm'vj tgg'URU'kgo u'ctg'r megf . 'vj g'r n{ gt'y km'dg'cdng'q'wug'vj g'hwpev'kq"ã~-->Á &ã↑æÈ&æ\X~^æÇã->~ã\Á~^æØ^ã~YHÿD "q'rgctp'vj g'guko cvgf | qpg.'vj cv'ku'c'ur j gtlecl' qpg'y kj k'p" c'egt v'k'p'tcf kuu'qh'gttqt'htqo 'vj g'v'wg'egpvt'qh'vj gk'cuugo dnf | qpg0Vj g'tcf kuu'qh'gttqt'qh'vj g'guko cvgf " | qpg'y km'dg'ecrewr'v'g'cu'kpxgtugf 'r tqr qt'v'kpcn'q'vj g'ctgc"qh'vj g'v'kpi ng'hqto gf 'd{ 'vj g'URU'

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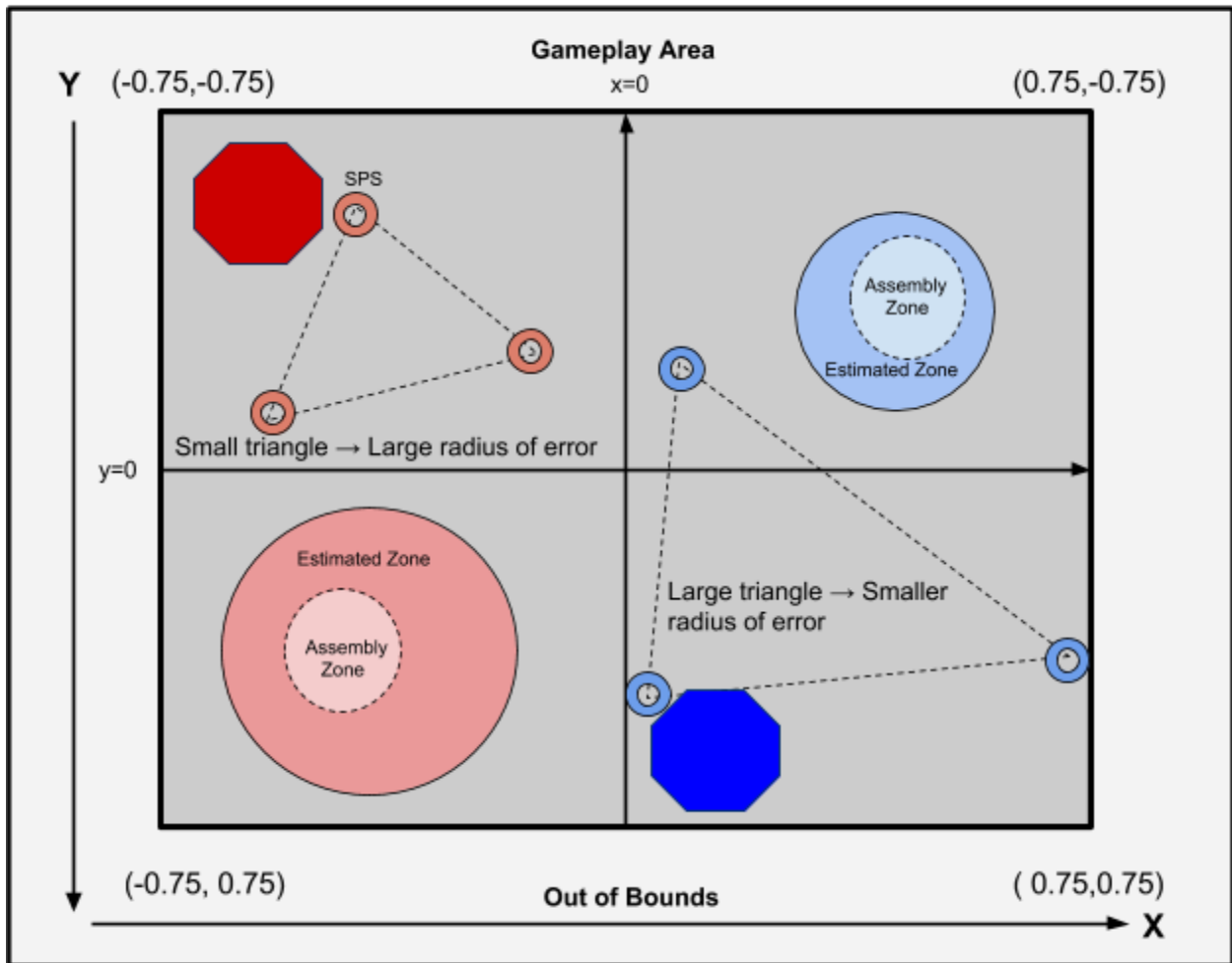


Diagram not to scale

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306 'Nqecvkvpu'qh'Kgo u'cpf 'URCEG/U"

Vj g'nqecvkvpu'qh'ucvgnkv'kgo u. 'cpf 'vj g'qr r qpgp'URCEG/U'ctg'tgxgcnf 'vq'vj g'vgo u'Vgco u'gpvt'vj g'



ur gekhgf 'kgo 'Kf ai'f guetkdgf 'kp'ugevkqp'3060+'cpf 'wug'vj g'hwpevkqp" { ~->äÁ&æ\Ø\æ↑Q~´ Çà->~á\ Á  
\*~bYŸÊÁ↔^ \Á↔\æ↑ØEDÁ "q'i gv'vj g'hwpevkqp'qh'vj g'kgo 0C"URCEG/U'ecp'o qxg'cp{y j gtg'qp'vj g'o cr"  
cpf "j cxg'hwzgf 'kpkknr qukvkpu" f guetkdgf 'kp'ugevkqp'3060+'0

3080'F qemkpi "

Vq'r lenlwr "c'ucvgnksg'r kgeg."c"URCEG/U'pbggf u'vq'cr r tqcej "vj g'kgo ."unqy "f qy p'vq'dgnqy "03o lu."dg"  
r qkpvkpi "cv'vj g'kgo "cpf "ecmkpi "vj g'f qemkpi "hwpevkqp0Vj g'URCEG/U'pbggf u'vq'uvqr 'kp'hwpevkqp'qh'vj g'kgo "cv'c"  
egtvc'p'f kwpcpeg'vq'r lenlwr "cpf "vj g'kgo 'y kn'dg'tgrcugf "cv'vj g'uco g'f kwpcpeg'cy c { "f guetkdgf 'kp'ugevkqp"  
3060+'0'v'vj g'5F "i co g'c'r gpcrm' "ku'cf f gf "hqt'f qemkpi "kpeqttgevt "c'cuq'f guetkdgf 'kp'ugevkqp'3060+'0

304'I co g'Nc{qww'

Vj g' \ gtq'Tqdq'leu'J ki j "Uej qqn'Vqwtqco gpv'4238'y kn'dg'eqpf wexgf 'kp'uko wvkvqp0Vj g'i co g'ku'r r { gf 'kp"  
cp'ctgc'ecmgf "vj g'kwgtcevkqp\ qpg'0K'r r { gtu'hwcxg'vj g'kwgtcevkqp\ qpg. "vj g' 'y kn'dg'eqpukf gtgf "qww'qh"  
dqwpf u0Vj g'hwpevkqp'qh'vj g'URJ GTGU'ku'o gcuwtgf "h'qo "vj g'egpvt'qh'vj g'ucvgnksg'0

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Vcdrg'3-<kwgtcevkqp\ qpg'F ko gpukqpu"

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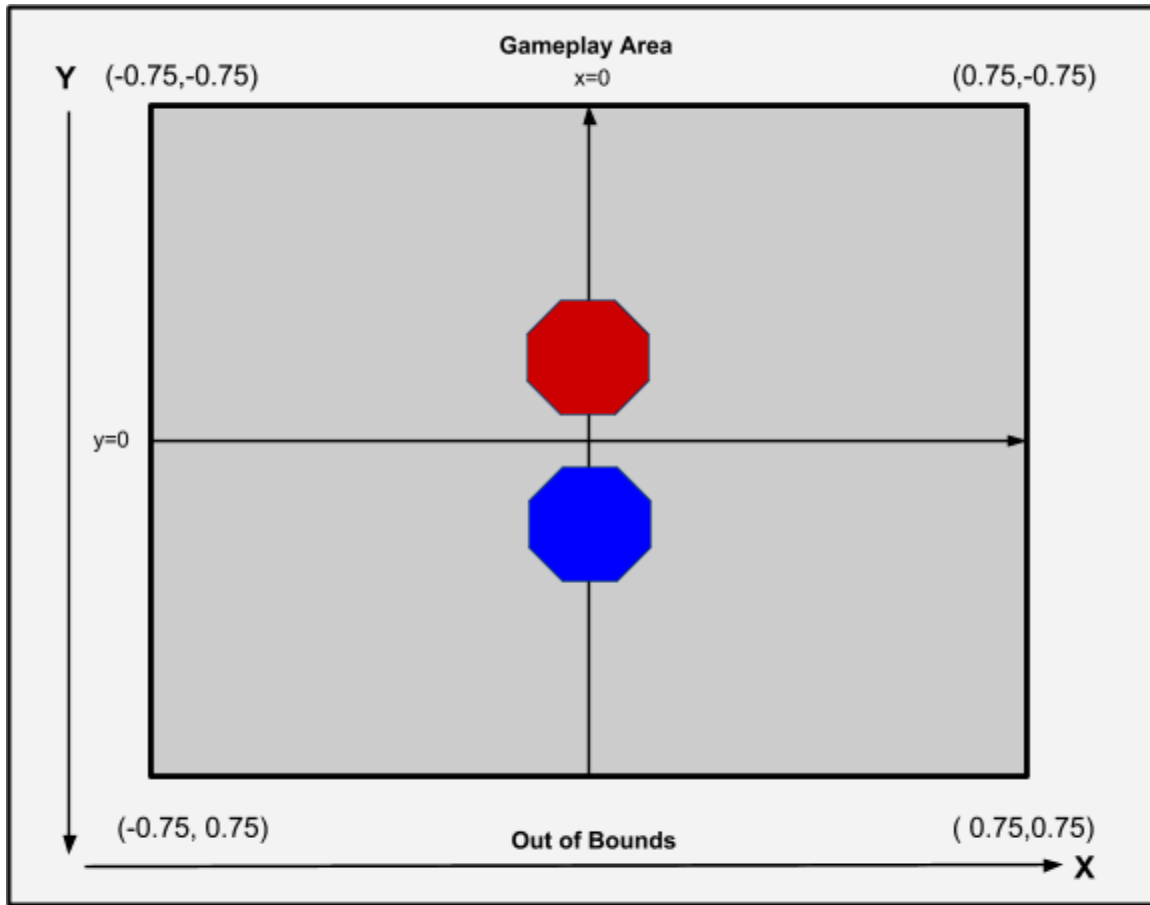


Diagram not to scale

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5F "Rj cug"

Htqo "y g"5F "r j cug"qpy ctf u."y g\ "f ko gpukqp"ku"qr gpgf "wr "hqt"o qxgo gpv"cpf "ugxgtcnlpgy "o gej cpleu"y kni dg"lptqf wegf 0Vj g"5F "r j cug"cf f u"r gpcnkgu"lqt"u"ecnlpi "y g"t qemlwpevkqp"y j gp"t qemlpi "etkgtk"ctg"pq" o gv"d"u"eqnlf lpi "y kj "lgo u."cpf "e+hqt"ue{ lpi "lp"y g"qrr qpgpva"cuugo dnf "l qpg"lqt"lpi gt"y cp"32" ewo wrvkxg"ugeqpf u0Ugg"ugevkqp"3067"lqt"o qtg"lphqto cvkqp"cdqwr"r gpcnkgu0"

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"  
"

### 305 "Ucvgmkvg"

Gcej 'vgo 'y kmly tkg'vj g'uqhy ctg'vq'eqo o cpf 'c'URJ GTGU'ucvgmkvg'vq'o qxg'lp'qtf gt'vq'eqo r rvg'vj g" i co g'vcumu0C'URJ GTGU'ucvgmkvg'ecp'o qxg'lp'cmf ktgevku'wukpi 'ku'vy grkg'vj twvgtu0Vj g'cewcn' URJ GTGU'ucvgmkvg. 'ikng'cp{ 'qyj gt 'ur cegetchw'j cu'c'hwgn'uwteg'k'p'vj ku'ecug'rhs wkf 'ectdqp'f kqz kf g+'cpf 'c" r qy gt 'uqwteg'k'p'vj ku'ecug'CC'dcwtg { 'r cemu0Vj gug't guqwtegu'ctg'iko kgf 'cpf 'o wuv'dg'wugf 'y kugn{ 0' Vj gtghqtg. 'yj g'r r{ gtu'qh\ gtq'Tqdq'vku'ctg'iko kgf 'lp'vj g'wug'qh'tgcn'hwgn'cpf 'dcwtg'ku'd{ 'xkt wcn'iko ku" y kj lp'vj g'i co g0Vj ku'ugevku'p'f guetkdu'vj g'iko ku'vq'y j lej 'r r{ gtu'o wuv'cf j gtg'vq'y kugn{ 'wug'tgcn' URJ GTGU't guqwtegu0

### 305B\ T"Wugt'CRK"

J gtg'ku'c'iku'qhi'hwpevku'p'c'xck'cdrg'lp'vj ku" { gct'au'i co g0F gvcku'ecp'dg'hw'wpf 'lp'vj g'URCEG/URJ GTGU' CRK'hw'wpf 'lp'Vcdrg'4-0'k'qtf gt'vq'wug'vj gug'hwpevku'p'wug'vj g'u{ pvcz'i co g0hwpevku'p' co g'k'pr wu+0"

Hqt 'gzco r rg=i co g0f qen'kgo \*+''

Hqt 'hwpevku'p'pqv'hw'wpf 'lp'Vcdrg'4. 'wug'vj g'u{ pvcz'cr k0hwpevku'p' co g'k'pr wu+. 'wprguu'vj g{ 'ctg'o cyj " hwpevku'p'. y j lej 'ecp'dg'ecmf 'y kj qw't ghgtgpeg'vq'vj g'lp'ucpeg0"

Hqt 'gzco r rg=cr k0g'Rquk'k'p'Vcti gv'hw'cv'r qu'Vcti gv'5\_+ " " " "

I gpgt'le\ T'wugt'CRK'N'k'p'm'j wr <hw'v'k'0 gt'qtdq'vku'0 k0gf wlf qeul'w'q'k'cu' Tawugt'CRK'f'h"

### Vcdrg'4-<URCEG/URJ GTGU'CRKT ghgtgpeg"

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dqqn'f qen'kgo *+''	Tgwtpu't'wg'hw' r { gt'r lemi'wr 'cp'kgo 'uweeguhwn' " Cwgo r w'vq'r lemi'wr 'vj g'kgo 'emuguv'vq'vj g'URJ GTGU'
dqqn'f qen'kgo 'k'p'v'kgo K' +''	Tgwtpu't'wg'hw' r { gt'r lemi'wr 'ur gekhe'kgo 'uweeguhwn' " Y kn'qpn' 'cwgo r v'vq'f qen'ly kj 'kgo K' 'ur gekhegf " B r ctco 'kgo K' 'Vj g'lp'v'gi gt'kf gp'v'hw'gt'qh'c'i kxp'kgo 0'
xqkf 'f tqr 'kgo *+''	F tqr u'vj g'kgo 'vj cv'vj g'ur j gtg'ku'ewt'g'p'v' { 'j qrf kpi "
lp'v'i gv'p wo 'kgo *+''	Tgwtpu'vj g'p'wo dgt'qh'v'q'v'k'kgo u'lp'r r { .y j gvj gt'vj g{ 'j cxg" dggp'r kengf 'wr " { gv'qt'p'q'v0"
xqkf 'i gv'kgo Nqe'hw'cv'r qu'... 'k'p'v'kgo K' +''	Eqr kgu'vj g'hw'ecv'k'p'qh'c'i kxp'kgo 'k'p'v'vj g'i kxp'cttc { 0' B r ctco 'r qu'C' r q'p'v'gt'vq'cp'cttc { 'qh'uk' g'5'y j lej 'y kn'idg" qxgty tkv'p'd { 'vj g'kgo 'hw'ecv'k'p'0' B r ctco 'kgo K' 'Vj g'lp'v'gi gt'kf gp'v'hw'gt'qh'c'i kxp'kgo 0'
xqkf 'i gv'kgo \ T'Ucvg'hw'cv'r qu'34... 'k'p'v'kgo K' +''	Eqr kgu'vj g' \ T'Ucvg'qh'c'i kxp'kgo 'k'p'v'c'i kxp'cttc { " B r ctco 'r qu'C' r q'p'v'gt'vq'cp'cttc { 'qh'uk' g'34'y j lej 'y kn'idg" qxgty tkv'p'd { 'vj g'kgo 'ucvg" B r ctco 'kgo K' 'ku'vj g'kgo 'y j qug'ucvg'ku'd'g'k'pi 't'gs'v'w'v'gf "
dqqn'kgo k'p' qpg'k'p'v'kgo K' +''	Tgwtpu'vj j gvj gt'vj g'ur gekhegf 'kgo 'ku'r r'ecgf 'lp' { 'q'w' } qpg0' Tgwtpu'hw'v'g'kgo 'ku'd'g'k'pi 'j grf 'qt'ku'p'q'v'lp'vj g' l' qpg0'
lp'v'j cu'kgo 'k'p'v'kgo K' +''	Vgm'y j q'j cu'c'i kxp'kgo 0' B r ctco 'kgo K' 'Vj g'lp'v'gi gt'kf gp'v'hw'gt'qh'c'i kxp'kgo 0' 't'gwtp'2''k'p'q'qpg'j cu'r kengf 'wr 'vj g'ur gekhegf 'kgo .3'k'i { 'qw"

	j cxg'r lengf 'wr 'kgo . 'qt '4 'kh' { qwt 'qr r qpgpvj cu'r lengf 'wr 'vj g' kgo 0'
kpvi gwKgo V{r g*kp'kgo KF +'	Tgwtpu'y j cv'vj g'kgo 'V{r g'ku0' Rquikdng'Kgo 'V{r gu<'< ''''; ''K/GO aVl R Ga NCTI G' ''''; ''K/GO aVl R Ga O GF KWO " ''''; ''K/GO aVl R Ga UO CNN" 'B r ctco 'kgo KF 'Vj g'lp'vi gt 'kf gp'vktgt 'qh'c'i kxgp 'kgo 0' 'tgwtp'vj g'eqtgur qpf kpi 'kgo 'V{r g'v'vj g'i kxgp 'kf gp'vktgt 0'
xqkf 'f tqr URU*+'	F tqr u'URU'Kgo u"
hqcv'i gvUeqtg*+'	Tgwtpu'r n { gta'u'ueqtg"
hqcv'i gvQvj gtUeqtg*+'	Tgwtpu'qr r qpgpv'u'ueqtg"
hqcv'i gvHwgnl'go cl'kpi *+'	Tgwtpu'tgo cl'kpi 'hwgn'
kpvi gEwttgpvko g*+'	Tgwtpu'vj g'vko g'lp'vj g'i co g"
xqkf 'ugpf O guuci g*wpuki pgf 'ej ct'kpr wo ui +'	Ugpf u'inputMsg vq'qvj gt'ucvgnksg"
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dqqrn' cu'kgo DggpRlengf Wr *kp'kgo KF +'	Tgwtpu'twg'hwgn'k'kgo KF 'j cu'dggp'r lengf 'wr 'cv'v'qo g'r qkpv0Tgwtpu' hwgn'qvj gty kug0'

3050' Hwgnl'

Gcej 'r n' { gt 'ku'cuuki pgf 'c'xk'wcn'hwgn'cmqecv'kq'qh'82'ugeqpf u. 'y j lej 'ku'vj g'v'q'v'cn'v'wo 'qh'hwgn'wugf 'kp' ugeqpf u'qh'kpf kxk'wcn'vj twugt 'h'k'kpi 0Qpeg'vj g'cmqecv'kq'ku'equpuwo gf . 'vj g'ucvgnksg'y kn'p'qv'dg'cdng'vq' t'gur qpf 'vq'URJ GTGU'eqpvt'qn'leqo o cpf u0K'y kn'hwgn'vj twugt u'qpn' 'vq'cxqkf 'ngcx'kpi 'vj g'k'p'v'gt'cev'kq' \ qpg' qt'eqm'k'kpi 'y kj 'vj g'qvj gt'ucvgnksg0Cp { 'cev'kq'vj cv't'gs vkt'gu'hwgn' 'vj g'vj twugt u'wvej 'cu't'q'cv'kpi . " ceegr'gt'cv'kpi "qt"o qxkpi "equpuwo gu'hwgnl'

Vcdng'5<'Hwgnl'cmqecv'kq'

	2D	3D	Alliance
Hwgnl'cmqecv'kq']u_ "	82u"	82u"	VDC"

3055'K'p'v'gt/ucvgnksg'Eqo o wplecv'kqpu'''

Vj g'ucvgnksgu'j cxg'vj g'cdk'k'v' 'vq'eqo o wplecv'g'y kj 'gcej 'qvj gt'wukpi 'dl'p'ct { 'o guuci gu0Vj g'CRK'hwpe'v'kqpu' ugpf O guuci g'cpf 'tgegkxGO guuci g'o c { 'dg'wugf 'vq'ugpf 'f'cv' 'dgy ggp'vj g'ucvgnksgu0Vj g'dcpf y kf vj " cxk'cdng'vq'vj g'ucvgnksgu'ku'cu'hwgn'y u<'\*cf f kpi 'hwpe'v'kq'hwgn'eqqr gtcv'kq'p-'

Vcdng'6<'K'p'v'gt/ucvgnksg'eqo o wplecv'kqpu'dcpf y kf vj "

2D	3D	Alliance
----	----	----------

O guuci g'uk g"	Wpuki pgf "ej ct"	Wpuki pgf "ej ct"	VDC"
-----------------	-------------------	-------------------	------

306'Eqf g'Uk g"

C'URJ GTGU'ucvgnkg'ecp'hk'c'fko ksf "co qwpv'qh'eqf g'lp'ku'o go qt { 0Gcej 'r tqlgvej cu'c'ur gekhe'eqf g'uk g" cmqecvqp0'Y j gp" { qw'eqo r krg" { qwt "r tqlgvej y kj "c"eqf g"uk g"guvko cvg."y g"eqo r krgt "y km'r tqxkf g"y g" r gtegpvc i g'qh'y g'eqf g'uk g'cmqecvqp"y cv" { qwt 'r tqlgvej'ku'wukpi 0Hqto cnleqo r gvskqp'uxdo kuukqpu'tgs vkt g" y cv" { qwt "eqf g'uk g'dg"322' "qt 'rguu'qh'y g'vqvcn'cmqecvqp0"

307'Kpkkn'Rqukkqp"

Vj g'Dnwg'Urj gtg'uvctw'cv'y g'Z.' [ .\ "qh]200."207."200\_0Vj g'Tgf "Urj gtg'uvctw'cv'y g'Z.' [ .\ "qh]200." /207."200\_0"

Vj g'ucvgnkg'tcf ku'ku'2030 . 'dw'ucvgnkg'r qukkqp'tgmvxg'vq'i co g'hgcwtgu'ku'f gygto kpgf "d { 'y g'mqecvqp" qh'y g'egpvt'qh'y g'ucvgnkg0"

Vcdrg'7 < "Kpkkn'Rqukkqpu"

	2D	3D	Alliance
Tgf "	"	"	"
Z "jo _"	200"	200"	VDC"
[ "jo _"	/207"	207"	VDC"
\ jo _"	200"	200"	VDC"
Dnwg"	"	"	"
Z "jo _"	200"	200"	VDC"
[ "jo _"	207"	207"	VDC"
\ jo _"	200"	200"	VDC"

308'Rrc { gt "KF "

Wgtu'y knkf gpvkh { 'y go ugrku'cu'or rc { gt KF "? 3o'cpf "qr r qpgpvu'cu'or rc { gt KF "? 4o'hqt'cmf co gu.'y j gyj gt" qt 'pqv'y g { 'ctg'y g'tgf "URJ GTGU"qt 'y g'dnwg"qpg'tgur gevkgn { 0"

309'P qlkg"

K'ku'ko r qtvcpv'v'p'qvg'y cv'cmj qwi j 'y g'vy q'eqo r gvskqtu'lp"c"o cvej 'y kn'cny c { u'dg'r gthqto kpi "y g'uco g" ej cmgpi g'cpf 'j cxg'kf gpvkecn'ucvgnkgu."y g'vy q'ucvgnkgu'o c { 'dg'chhgev'f d { 'tcpf qo 'r gtwt dcvkqpu'lp" f kthgtgpv'y c { u.'tguwnkpi 'lp"uo cm'qt'g'xgp'rti g'xctkcvkqpu'lp'ueqtg0Vj ku'ku'hw'f 'lp'v'gf gf "cu'r ctv'qh'y g" ej cmgpi g'cpf 'tghgevu'wpegtv'cv'v'ku'lp'y g'ucvgnkg'f { pco le'cpf 'ugpukpi "o qf gnu0Vj g'dguv'r gthqto kpi " uqnvkqpu'y kn'dg'y qug'y cv'r tqxg'v'q'dg'tqdwu'v'q'y gug'xctkcvkqpu'cpf "c'y kf g'xctkcv' "qh'qdlgev'r ctco gygtu0"

" "

### 306'I co gr n{ "

kp"qtfgt"vq'dg'xlevqtqwu'qxgt'vj'g'qr r qukpi 'vgco . 'gcej 'ucvgnkg'lj qwf 'r rceg'vj gkt'vj tgg'URU'kgo u.'f qem' ucvgnkg'kgo u'vq'r rceg'kp'vj gkt' qpgu.'cmly j kg'o cpci kpi 'vj gkt'hwgn'vj gkt'vko g.'cpf 'vj gkt'ncvckqp'qp'vj g' i co gr n{ "ctgc0"

### 306B'Ucvgmkg'Rqukkqpkpi "U{ uvgo "

Vj gtg'ctg'5"URU'kgo u'j grf 'd{ 'gcej 'URCEG/U'cv'vj g'uvctv'qh'cm'vj g'i co gu0Vj g'URCEG/U'vgo u'o wuv' r rceg'vj go 'vq'v'kpi wcv'vj gkt' qpgu'egpvt0URU' qpg'ncvckpi 'y qtm'qpn' 'chgt'cm'5"URU'j' cxg'dggp' f gr nq'gf 'wukpi 'vj g'xqkf 'f tqr URU'+hwpevkp0URU'ecrwc'v'c'tcf kwu'qh'gttqt'kpxgtugn' 'r tqr qt'vkpcn'v'vj g' ctgc'qh'vj g'v'kpi wct'URU'kgo u'cpf 'f kur n{ u'vj g' qpg'y kj 'vj ku'tcf kwu'qh'gttqt0Wf qp'f tqr r kpi '{ qwt'kpcn' URU' { qw'y knitgegkg'r qkpw'gs wcn'v'0B f'gttqt'tcf kwu'0'

**kp'vj g'5F'i co g'URU'kgo u'ecppqv'dg'r rceg'f'qwu'kf g'i co g'dqwpf'ct'kgu'**

Vcdng'8<Cee'grt'v'kpi 'Tcv'gu'y kj 'URU'kgo u'

No SPS	1 SPS	2 SPS	3 SPS
cee"	: l; , cee"	, cee"	: B3, cee"

### 3060'F qen'kpi ""

F w'kpi 'vj g'4F'i co g.'vq'f qem'ly kj 'cp'kgo 'c'URCEG/U'o wuv'cr r tcej 'cp'kgo . 'pqv'dg'o qxkpi 'hcv'gt'vj cp' 03o lu.'dg'r qk'v'kpi 'cv'vj g'kgo 'y kj 'c'v'qr'gt'cpeg'qh'2047'tcf kcpu'\*Vj g'cpi ng'dgy ggp'vj g'ucvgnkg'u'hcelpi " xgev't'cpf 'vj g'xgev't'dgy ggp'vj g'egpvt'qh'vj g'ucvgnkg'cpf 'vj g'egpvt'qh'cp' { 'hceg'qh'vj g'kgo 'ku'y kj kp' 2047'tcf kcpu+'. 'dg'y kj kp'c'ur gek'kf 'f kucpeg'qh'cp'kgo 'cpf 'ecm'vj g'ã~~>Äã~´ ←∅\æ↑ÇD 'hwpevkp0kp' 5F.'c'r gpcn' { 'qh'0'r qkpw'ku'lo r qugf 'qp'c'URCEG/U'vj cv'v'wgo r u'vq'f qem'ecm'ä~´ ←∅\æ↑ÇD 'hwpevkp' y j kg'pqv'hw'k'kpi 'vj g'f qen'kpi 'tgs w'kg' go gpv'0Tgcf 'o qtg'cdqwr' gpcn'ku'kp'uge'vkp'3060'0"

"

Vcdng'9<'Kgo 'Rkew'r 'F kucpegu'no gvtu'ht'qo 'egpvt'qh'kgo +"

Item Type	2D	3D	Alliance
Small	[.124 : .146]	[.124 : .146]	TBA
Medium	[.138 : .160]	[.138 : .160]	TBA
Large	[.151 : .173]	[.151 : .173]	TBA

Hki wtg'6 < F qenlpi 'Ucvgmkg'Kgo u\*y kj 'czgu'eqttgewgf 'cpf 'z.{'eqqtf kpcvgu'eqttgewgf '+'

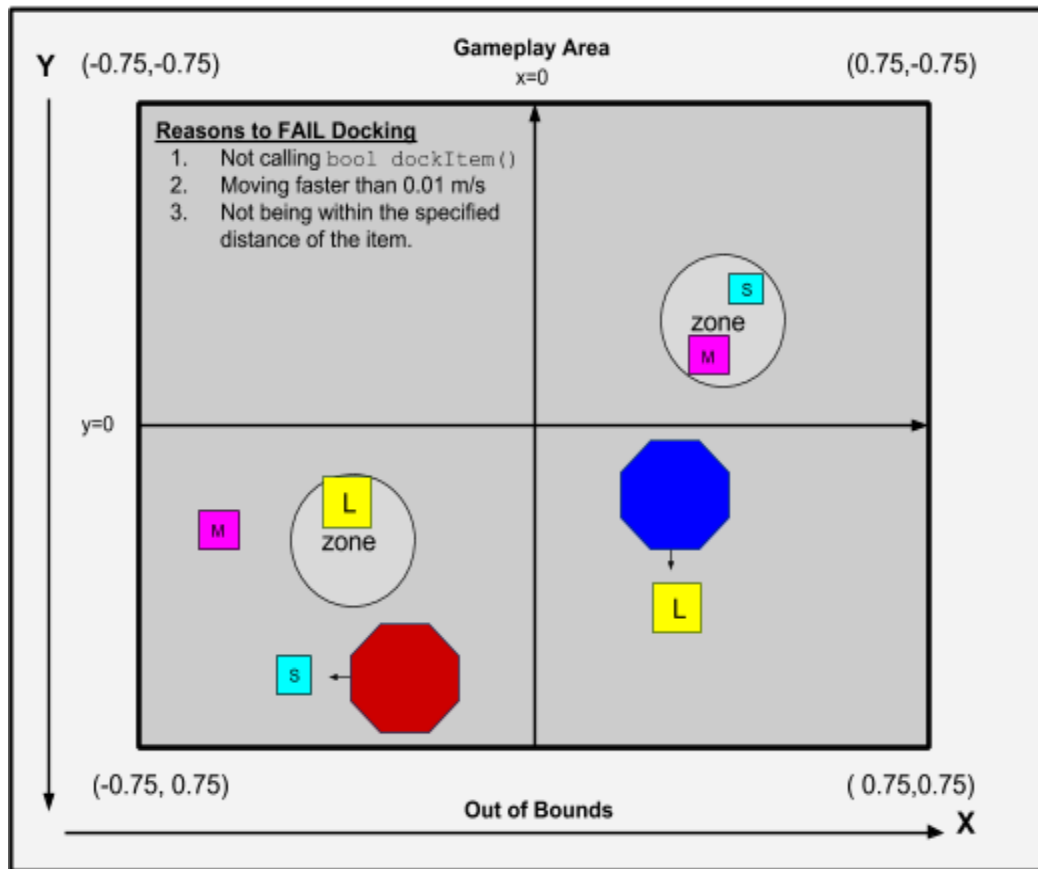


Diagram not to scale

3065 'Kgo u''

Vj gtg'ctg'ukz 'Ucvgmkg'kgo u\*'qh'y tgg'ukl gu+'uecwgtgf 'ctqwpf 'yj g'lpvgtcevkqp'l qpg0Ccej 'j cu'c'wpls wg''  
 pwo gtke'kf gpvklgt'htqo '2'v'P/3.'y j gtg'P 'ku'y g'pwo dgt'qh'kgo u0'k'vj g'4F 'xgtukqp'y gtg'ctg'ukz 'vqcn'  
 kgo u'\*2/7+0'

Vcdrg': <'Kgo 'KF u'cpf 'Nqecvkqp''

Item Number	Item Type	2D Location (X, Y)	3D Location(X,Y,Z)
0	Large	(.23, .23)	(.23, .23, .23)
1	Large	(-.23, -.23)	(-.23, -.23, -.23)
2	Medium	(.36, -.36)	(.36, -.36, .36)
3	Medium	(-.36, .36)	(-.36, .36, -.36)
4	Small	(-.50, .50)	(-.50, .50, .50)
5	Small	(.50, -.50)	(.50, -.50, -.50)

"

Vj g'ucvgnkg'kgo u'eqo g'y kj 'y tgg'uk' gu'qh'y j kej 'y gtg'ctg'wy q'gcej 0Vj g'Uo cmi'kgo 'j cu" 'uk' g'cpf "o cuu" qh'URJ GTGU0K'eqmgev'f 'lp'y g' | qpg.'k'i kxgu'20Br u'r gt'ugeqpf "cpf 'h'c'URCEG/U'ecttkgu'k.'k'ecp" ceegrctvg'cv': 1; 'tcvg0Vj g'O gf kwo 'kgo 'j cu" 'uk' g'cpf "o cuu'qh'URJ GTGU0Y j gp'lp'y g' | qpg.'k'i kxgu" 2087'r u'r gt'ugeqpf "cpf 'c'URCEG/U'y kj 'y g'o gf kwo 'kgo 'ecp'ceegrctvg'cv" 'tcvg0Hkpcmf 'y g'rti g'kgo " j cu" 'uk' g'cpf "o cuu'qh'URJ GTGU0K'i kxgu'20'r u'r gt'ugeqpf "cpf "o cngu'c'URCEG/U'ceegrctvg'cv': B3" tcvg0"

Vcdrg"; <Uk' g'cpf "O cuu'qh'kgo u'eqo r ctgf "q" c'URJ GTGU"

	2D	3D	Alliance
Ncti g'Ucvgmk'kgo "	51: "	51: "	VDC"
O gf kwo 'Ucvgmk'kgo ""	316"	316"	VDC"
Uo cmi'Ucvgmk'kgo "	31: "	31: "	VDC"

"

Vcdrg'32<Ceegrctvg'kqp'Tcvgu'ht'URCEG/U'y kj 'f h'htgp'kgo u"

	2D	3D	Alliance
Ncti g'Ucvgmk'kgo "	: B3"	: B3"	VDC"
O gf kwo 'Ucvgmk'kgo ""	617"	617"	VDC"
Uo cmi'Ucvgmk'kgo "	: 1: "	: 1: "	VDC"

"

Ecm'y g'i co g'hpv'kqp'lp'v' cu'kgo \*kp'kgo akf +'q'f g'vto kpg'y j gvj gt'y g'kgo 'ku'j g'f 'd' { 'pqdqf { \*2+" { qw\*3+.'qt' { qwt'qr r qpgpv\*4+0'

kp'5F.'C'URCEG/U'y kndg'r gpcnk' gf 'h'h'eqnk' gu'y kj 'cp'kgo 0Vj g'r gpcnk' 'y kndg'f g'vto kpg'f 'd' { 'y g' URCEG/U'u'o qo gpwo 'y j gp'k'eqnk' gu'y kj 'y g'kgo 0Vj ku'r gpcnk' 'cr r rku'gxgt { y j gtg'gzegr v'kpk' g'c" URCEG/U'vgo ai'qy p'Cuugo dnf \ qpg'y j gtg'eqnk'kqp'u'y kj 'kgo u'y kmpq'v'dg'r gpcnk' gf 0'Ugg'ugev'kqp" 3060'ht'o qtg'kph'qto c'kqp'cdqwr' gpcnk'gu'0'

Vj g'f'kci tco 'dgm'y 'uj qy u'j qy 'y g'kgo u'ctg'r r'egf 'u{o o g'v'kcm'f . 'cv'y g'vco g'f k'v'peg'ht'qo 'y g' f'kci qpcr0'

"

"



Hki wtg'7 < F kci qpcn'U{ o o gvt { '\*y kj "czgu'eqttgewgf "cpf "z. { 'eqqtf kpcvgu'eqttgewgf +'

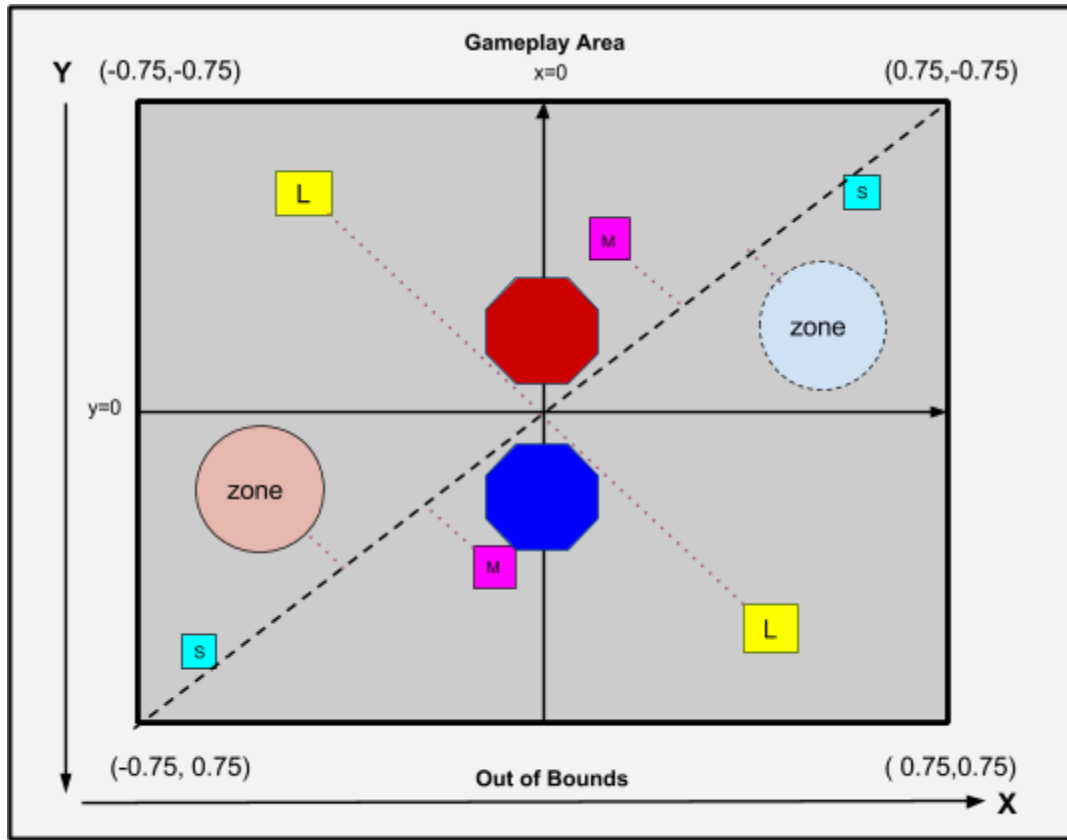


Diagram not to scale

3060"Ueqtkpi "Uwo o ct { ""

[ qwt'ueqtg'ku'rcti gn' dcugf "qp'yj g'kgo u" { qw'j cxg'kp" { qwt'Cuugo dn' \ qpg0kgo u'ctg'y qtvj 'f khtgpvr qkp' xcmgu'f gr gpf kpi "qp'yj gk'uk' gu0"

Vj g'ueqt kpi "ecrewc'kq'ku'cu'hmny u<"

Vcdng'33 < Rqkp'Xcmgu"

	2D	3D	Alliance
Uo cm'kgo "jr vuhge_"	208"	208"	VDC"
O gf kwo "kgo "jr vuhge_"	2087"	2087"	VDC"
Ncti g'kgo "jr vuhge_"	204"	204"	VDC"
F tqrr kpi "hpcn'URU'kgo "	Ø f'gttqt'tcf kwu'htqo "URU+ "		

3060"Rgpcn'ku"

[ qwt'ueqtg'o c { "cnuq'ej cpi g'f wg'v'q'xctk'qu'r gpcn'ku'v' cv'y kmldg'gph'tegf "cu" { qwr'rc { "vj g'f co go"

"

Vj g'r gpcnkgu'y knldg'gphqtegf "cu'hqmy u<"

Vcdng'34<'Rgpcnkgu"

	2D	3D	Alliance
F qemkpeqtt gevn "	P IC "	/205"	VDC "
Eqnkukqpu'y kj 'kgo u. "	P IC "	*70'x' { qwt 'URI GTGU'o qo gpwo -"	VDC "
Eqnkukqpu'y kj "URI GTGU%v' xgmekkgu'dgmy "eqnkukqp" cxqkf cpeg'y tguj qrf -"	P IC "	*70'x' { qwt 'URI GTGU'o qo gpwo 0' Vj g'eqnkukqp'r gpcnm' 'ku'cr r rkgf "vq" dqj 'URI GTGU"	VDC "
Tgo clkpi 'kp'qr r qpgpva' qpg'"	P IC "	/206 luge "chgt "ewo wvwxg'32'uge-	VDC "

. Vj gtg'ku'pq'r gpcnm' "cr r rkgf 'hqt'eqnkukqpu'y kj 'kgo u'necvgf 'lpukf g'yj g'r r { gtai'qy p'Cuugo dn' \ qpg0'

3068'Gpf "qh'i co g"

Vj g'i co g'gpf u'chgt '3: 2'ugeqpf u0'Y j lej gxgt 'vgo 'j cu'o qtg'r qlpw'y kpu0'kp'yj g'wprkngn' 'ecug'qh'c'vkg." y j qxgt 'ku'emugt 'vq'yj g'egpvt ltki kp'qh'yj g'r r { kpi 'hgrf' cv'i co g'gpf 'y kpu0'

## 40'Vqwt pco gpv'"

C\ gtq'Tqdqv'ku'vqwt pco gpv'eqpuku'qh'ugxgtcn'r j cugu'ecmgf "eqo r gvkqpu0'Vj g'hqmy kpi 'vcdng'rkku'yj g' ng' f'gcf rkpgu'hqt 'yj g'4238'vqwt pco gpv'ugcuqp<"

Vcdng'35<'Vqwt pco gpv'Mg' { 'F cvgu'

Date (2016)	Event
Sept 10 (Sat)	Kick-off webcast
Sept 30 (Fri)	2D Simulation Competition Deadline (end of practice)
Oct 28 (Fri)	3D Simulation Competition Deadline
Nov 5 (Sat)	Alliance Formation Event
Dec 2 (Fri)	Semifinal Simulation Competition Deadline
Dec 18 (Sun)	ISS Code Due
Jan 2017- Date TBD	ISS Final Competition

"

Vj g'tcpnkpi u'kp'gej "eqo r gvkqpu'ctg'f gvgto kpgf "d' { 'c'Ngcf gtdqctf . 'f guetkdgf "dgrny 0'Vj g'4F "Uko wvwxp" Eqo r gvkqpu'ku'pqv'cp'grko kpcvqp'tqwpf =cm quv'gxgt { qpg'y j q'uwo ku'eqf g'y j lej "cej kxgu'c'pqp' gtq" ueqtg'ci clpuv'c'odirpno'r r { gt' r { gt' y kj 'pq'eqf g-'vq'yj g'4F "Uko wvwxp"Eqo r gvkqpu'cf xcpegu'vq'yj g'5F " Eqo r gvkqpu0'



tguwmu<"q"ecrewrcvg"gpvt { 'r qukkqp"qh"vgco u"uwdo kwkpi 'hqt"vj g'htuv"lko g"cpf "v"cuuguu'hkpcnr rcego gpv"qh" cmi"vgco u0'

4088"Ecrcwrcvki "Tcvki u"

C"vgco au"ucpf kpi 'lp"e"eqo r gvkqp"ku"fgvgo kpgf "d { "c"xcnwg"ecmgf "tcvki 0Vj g"Ngcf gtdqctf "tcemu"cm" o cvej gu"e"vgco 'j cu'r r { gf "ci ckpuv"qvj gt'r r { gtu"lp"vj g"eqwtug"qh"vj g"eqo r gvkqp"cpf "etgcvu"e"tcvki " dcugf "qp"vj g"qweqo gu0'

[ qwt"tcvki "ku"vj g"hcvt"2"lp"vj g"gs wcvkqp"ht"vj g"r tqdcdkx { "qh" { qwt"vgco "dgcvki "cpqvj gt'r c { gt"qh" tcvki "T3"lp"e"ukpi rg"o cvej 0'

$$\text{Probability}(W) = e^{R0} / (e^{R0} + e^{R1})"$$

Vj g"xctkcdrg"2"ku"eqo r wgf "wukpi "cp"cri qtkj o "dcugf "qp"De { gukcp"lphgtgpeg0Vj g"r tqdcdkx { "qh"e"tcpmi" i kxgp"e"ugtgu"qh"i co g"qweqo gu"l "ku"vj gp<

$$P(r|G) = P(G|r)P(r) / P(G)"$$

ku"vj g'r tkqt "f kurtkdwkqp"qh"tcvki u."y j kej "ku"cuwo gf "v"xc { "lp"e"tcpf qo 'y cmi'r tqeguu"y kj "c"ucpf ctf " f gxlcvkqp"qxgt"gecj "f c { "qh"vj g"eqo r gvkqp"qh"20. "ej qugp"chgt"vgvki "hqt"ucdkx { "qh"vj g"dqctf 0Vj ku" cmqy u"cmi'r tgxkqu"tcvki u"v"ej cpi g."cu"lo r rkgf "d { "vj g"pco g"Y j qng"J kuqt { "Tcvki 0K pqtkpi "R\*1 + " dgecwug"ku"e"pqto crk kpi "eqpuv"v"y kj "pq"ghge"v"qh"vj g"hkpcnr"tcvki ". "cpf "lpeqtr qtcvki "vj g"ucpf ctf " f gxlcvkqp"qh"tcvki u."j cxkpi "gecj "f c { "qh"vj g"eqo r gvkqp"tgr tguvki "h"

$$\prod P(r|G) = P(g_k|r_k)P(r_k|r_{k-1})"$$

Vj g"hkpcnr"vgo "R\*2+"ku"ugv"v"20"

Vj g"cri qtkj o "wugu"pgy vpru"o gvj qf "v"o czko k g"vj ku'r tqdcdkx { "cu"e"hwpev"v"qh" { qwt"tcvki 0Vj g"tcvki " cv"vj ku"o czko wo "ku" { qwt"pgy "tcvki 0'

4089"Uwo o ct { ""

P qv"cmly kpu"ctg"gs wcr0Y kpu"cpf "quugu"ctg"xcnwgf "d { "vj gkt"tgrcvkqp"v"vj g'r tqdcdkx { 0l qwt" tcvki "eqttgur qpf u"v"e"72" 'y lp"r tqdcdkx { ". o gcpkpi " { qw"ctg"o qtg"vj cp" 72"rkng { "v"y lp"ci ckpuv"vgco u" y kj "mqy gt"tcvki u"vj cp" { qwtu."dw"pqv"ci ckpuv"vgco u"y kj "j ki j gt"ueqt gu0Wpgzr gev"v"o cvej "tguwmu."gkxj gt" hcxqtdcrg"qt"vphcxqtdcrg."y kmhgexg"vj g"o quv"pqv"egcdrg"lo r cevu"qp" { qwt"tcvki 0'

Cmj qwi j "vj ku'r tqeguu"ku"dcugf "qp"r tqdcdkx { ". k"ku"y j qm { "tgrkcdrg0Vj g"tcpmieqo r wcvkqp"cri qtkj o " eqttgeu"gttqtu"lp"tcpmi" kuqt { "vj tqwi j qw"vj g"eqo r gvkqp."cpf "qr vko k cvkqp"cpf "ucdkk cvkqp"uchgi wctf u" j cxg"dggp"cf f gf "v"ecrcwrcv"tcpmly kj "gzv"tgo g'r tgekuqp0Cnuq."vj g"hgcf gtdqctf "ku"fguki pgf "v"cmqy "f c"e" v"q"r tqr ci cvg"vj tqwi j qw"vj g"u"vgo 0K"y q'r r { gtu"fg"p"v"wp"ci ckpuv"gecj "qvj gt"dgecwug"vj gkt"tcpmi" f hhtg"t"peg"ku"o qtg"vj cp"32"unqu."qxgtrr r kpi "o cvej gu"wr f cvg"dqj "vgco u"tcvki u0Gxgt { "vgco au"tcvki "ku" tgrvkg"v"q"cmi"qvj gt"tcvki u0'

Vq"uwo o ct k g"vj gtg"ctg"ugxgtcrlhcvqtu"vj cv"chge"v"e"vgco au"tcvki <00 cvej "Qweqo gu"e"vgco "vj cv" eqpukngpv { "y kpu"o cvej gu"y km"uwcm { "j cxg"e"j ki j gt"tcvki 0'

0Qr r qpgpv"Tcpmi"Y kppkpi "ci ckpuv"e"j ki j gt"tcpmgf "vgco "y km"uwcm { "lo r tqxg"e"vgco au"tcvki 0'

0Qj gt"0 cvej "Qweqo gu"Vj g"Ngcf gtdqctf "cngu"lp"q"beeqwp"v"cmbo cvej gu'r r { gf "d { "cmi"vgco u0Gxgp"kh"y q"

vgco u'f q'pqv'j cxg'c'f kgev'gpeqwpvgt. 'y gk'o cvej 'qweqo gu'y knj cxg'cp'ghgevcu'v'j g{ 'hngt'v'j tqwi j 'y kf " r ctvku0'

Vj g'vgco 'y kj 'y g'j ki j guv'cvkpi 'y kn'dg'tcpml3'qp'v'j g'ngcf gtdqctf 0Vj g'dguv'y c{ 'vq'uvcdkrl g'cpf 'gxgp" ko r tqxg' { qwt'tcpmlku'v'j g'o quv'qi kecn'y c{ <nggr 'y qtnkpi 'cv' { qwt'cni qtkj o u0Vj gtg'ctg'pq'uwghk'g" cngt'pcv'xgu0Cnq. 'f qpø'hv'hgct'qh'c'dcf 'o cvej 't'wkpki ' { qwt'vgco ø'r tqur geu'nggr " { qw'htqo 'u'wdo kvkpi " gctn' 0Gxgp'v'j qwi j 'gxgt { 'u'wdo kuukqp'ku'hcevqtgf 'kpv' { qwt'o cvej 'j kvqt { . 't'guwmu'qh'r cuv'e'qo r gvkkqpu" f go qpuctev'v'j cv'vgco u'v'j cv'o cng'o cp { 'u'wdo kuukqpu'v'gpf 'v'q'r gthqto 'd'gwgt0'

Hkpcn' . 'k'ku'lo r qtvc'p'v'q'pqv'v'j cv'chgt 'gxgt { 'eqo r gvkkqp'r j cug. \*4F . '5F . 'Cmkpeg'r j cug+'cml'tcpnkpi " f cv'ku'tgh'g'uj gf 'cpf 'vgco u'uctv'htqo 'uetcvej 0'

### 404'4F "Rtceveg'Uko wrcvqp'Ego r gvkkqp"

Cm'vgco u'v'j cv'e'qo r ngv'c'xcnkf 'tgi kv'cvkqp'ctg'grki kdr'v'q'r ctv'ekr cvg'lp'v'j g'4F 'r tceveg'uko wrcvqp" eqo r gvkkqp0'

P qv<Uxgtcni'k'vgt'pcv'kqpcn'vgco u'htqo 'pqp/KU'pcv'kqpu'o c{ 'r ctv'ekr cvg'lp'v'j g'4F 'cpf '5F 'r j cugu'qh'v'j g" vqwt'pco gpv'v'j qy gxgt. 'y g' { 'y kn'pqv'e'q'v'k'p'w'g'lp'v'q'v'j g'cmkpeg'r j cug0Vj g'ug'vgco u'y kn'r ctv'ekr cvg'd { " kpxkcvkqp'qpn' 0'

### 405'5F "Uko wrcvqp'Ego r gvkkqp"

Cm'WUC. 'T'wauk'p. 'cpf 'C'wut'crk'p'vgco u'v'j cv'e'qo r ngv'c'xcnkf 'tgi kv'cvkqp'cpf 'u'wdo k'e'qf g'v'j cv'cej k'gxgu'c" pqp' gtq'uetq't'y j gp'eqo r gv'gf 'ci ckpu'c'ødrc'pnr r { gt'ø'c'r r { gt'y kj 'pq'eqf g+d { 'y g'4F 'r tceveg" eqo r gvkkqp'f gcf r'k'p'g'ctg'grki kdr'v'q'r ctv'ekr cvg'lp'v'j g'5F 'uko wrcvqp'eqo r gvkkqp0J qy gxgt. 'qpn' 'y g'47" j ki j guv'ueqtkpi 'vgco u'htqo 'gcej 'GUC' o go dgt'ucv'g'y kn'e'q'v'k'p'w'g'lp'v'q'v'j g'5F 'r j cug0'

Y j gp'v'j g'5F 'eqo r gvkkqp'uctv'v'j g'i co g'y kn'dg'w'r f cv'g'f 'y kj 'p'gy 'ej cngpi gu'cpf 'v'j g'e'qtt'gur qpf kpi " VDC'xcn'w'g'y kn'dg'c'ppq'w'pegf 0'

### 406'Cmkpeg'Hqto cvkqp'Gxgpv'

Vj g'v'qr 't'cpngf " : 6'vgco u'qp'v'j g'ngcf gtdqctf 'cv'v'j g'gp'f 'qh'5F 'uko wrcvqp'r r { 'y kn'htqo "4: 'cmkpegu'qh' v'j tgg' \*5+'vgco u'gcej 0Vj g'4: 'cmkpegu'y kn'y qtn'e'q'qr gtcv'x'gn' 'v'q'eqo r ngv'v'j g'ugo k'kpcn'cpf . 'k'hpqv' g'ko k'pcv'g' . 'y g'hkpcn0Vgco u't'cpngf 'd'gn'y 't'cpml: 6'y kn'dg'k'p'x'k'g'f 'v'q'r ctv'ekr cvg'lp'v'j g'Xk'w'cn'Hkpcn0Ugg" Uge'v'k'p'40 'h'qt'f'g'v'k'ku'c'dq'w'v'j g'Xk'w'cn'Hkpcn0'

Vj g't'cpnkpi 'qh'v'j g'vgco u'y kn'dg'f'gv'gto k'p'gf 'd { 'y g't'cpnkpi u'cv'v'j g'eq'ug'qh'v'j g'5F 'ngcf gtdqctf 0'

Chgt 'v'j g'5F 'ngcf gtdqctf 't'cpnkpi u'ctg'c'ppq'w'pegf . 'cf x'c'p'el'pi 'vgco u'y kn'j cxg'v'j tgg'f'c { u'v'q'eq'p'c'v'g'cej " q'v'j gt'v'q'f'k'ue'w'uu'v'j g'k'cmkpeg'r t'gh'gt'g'pegu0Cp { 'vgco u'v'j cv'f'q'p'qv'v'j kj 'v'q'eq'v'k'p'w'g'lp'v'j g'V'qwt'pco gpv'y kn' j cxg'v'j g'qr r qt'w'p'k'v' { 'v'q'eg'f'g'v'j g'k' 'r'qu'kkqp'v'q'v'j g'p'gz'v't'cpngf 'vgco 0'

Vj g'Cmkpeg'Hqto cvkqp'Gxgpv'y kn'v'cng'r r'æg'qp'P q'x'go dgt'7'y 0Vj g'cmkpeg'hqto cvkqp'gxgpv'qt'ø'f' t'ch'f'c { ø'ku'cp'q'p'rk'p'g'x'gp'v'f'w'k'pi 'y j lej 'vgco u'y kn'htq'ny 'v'j g'cmkpeg'ug'ge'v'k'p'r t'q'egu'f'g'uet'k'd'g'f' 'd'gn'y 'v'q' k'p'x'k'g'q'v'j gt'vgco u'k'p'v'q'cmkpeg'cpf k'q't'c'ee'gr'v'v'j g'k' 'r'æg'y'kj'k'p'cp'cmkpeg0C'v'g'cu'v'q'p'g't'gr'g'ug'p'c'v'x'g'

Itqo "gcej "vgco "o wuv'r ctvlek cvg'lp"vj g'qprkpg'of tch'f c{ö'gxgpv'ht'j g'vgco "vq"eqpvkpwg"vq"vj g'cmkpeg" r j cug0Cf f kkpqcnf gvcku'cdqw'vj g'qprkpg'of tch'f c{ö'cpf "j qy "vq"r ctvlek cvg'y kn'dg'r tqxkf gf "lp"cf xcpeg" qh'vj g'gxgp0'

F wg"vq"vj g'rti g'pwo dgt"qh'vgco u'kpxqmgf . "vj g'f tch'y kn'dg'ur rkv'lpvq"vy q'r ctvu'cu'uj qy p'lp"vj g'dgmy " hki wtg0Cm'vgco u'tcpngf 'y kj "qf f 'pwo dgtu'y kn'r ctvlek cvg'lp" F tch'r ctv'3"cpf 'cm'vgco u'tcpngf 'y kj "gxgp" pwo dgtu'y kn'r ctvlek cvg'lp" F tch'r ctv'40Gcej 'f tch'y kn'kpenw'g'64"vgco u0'

Hki wtg'8<F kkkkqp"qh"Vgco u'ht'j g'F tch'u"

Draft part 1 teams with odd numbered rankings			Draft part 2 teams with even numbered rankings		
1	29	57	2	30	58
3	31	59	4	32	60
5	33	61	6	34	62
7	35	63	8	36	64
9	37	65	10	38	66
11	39	67	12	40	68
13	41	69	14	42	70
15	43	71	16	44	72
17	45	73	18	46	74
19	47	75	20	48	76
21	49	77	22	50	78
23	51	79	24	52	80
25	53	81	26	54	82
27	55	83	28	56	84

Note: The times of the draft parts are To Be Announced

Vj g'cmkpeg'ugrgev'q'p'r tqeguu'y kn'hqmy "c'ugtr gpv'kpg'r cvgt p"knwutcvf "lp"vj g'Hki wtg'dgmy +< dVj g'j ki j guv'tcpngf "vgco "ugrgev"vj gkt'r ctvpgt'htqo "cp{ "gzegr v'vj g'vqr "8'tcpngf "vgco u'lp"vj gkt'f tch'0' dVj g'pgz'vj ki j guv'tcpngf "vgco "ugrgev"vj gkt'r ctvpgt'htqo "cp{ "qh'vj g'tgo clkpi "vgco u'gzegr v'vj g'vqr "8" tcpngf "vgco u'lp"vj gkt'f tchv"

d36'r cktu'ctg'etgcvgf "lp"vj ku'o cppgt"

dC'dtgcni'cngu'r meg'ht'j g'pgy 'r cktu'vq'f kuewu'vj gkt'ugrgev'q'p'ht'j g'5tf "cmkpeg"vgco "

dVj g'öny guv'tcpngf 'r ckt'vj gp'ugrgev"vj gkt'5tf "vgco 'htqo 'vj g'tgo clkpi "36"vgco u"

dVj g'ö4pf "hgy guv'tcpnr ckt"o cng'vj g'pgz'v'ugrgev'q'p"

dEqpvkpwg'v'p'vni'cm'36'cmkpegu'ctg'htqo gf 0'

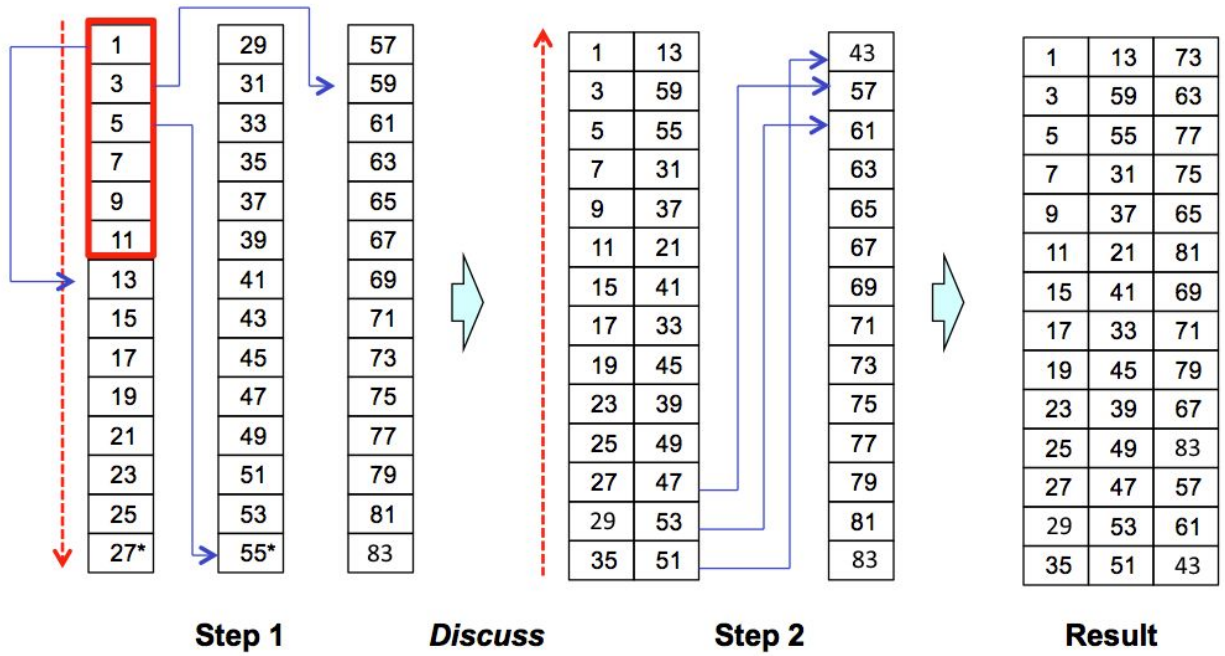
dVj ku'r tqeguu'ku'f wr rkecvf "lp"dqy 'f tch'v'gxgpw'vq'gpf 'y kj "c'vqcn'qh'4: "cmkpegu"

Rule: No more than 2 of the teams in an alliance can be from the same continent.

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Hki wtg'9<Cnikpeg'Etgcvkp'Rtqegu'f go qpwtcvgf 'hqt'vgco u'y kj "qf f "pwo dgt'tcpnki u'



\*; Vj g'gzco r rg'uj qy p'cdqxcg'ku'crr tqzko cvg0"

### 40'Y kf 'Ectf u'Gzr nckpgf /'T gugtxgf "

\*Vj ku'ugevkqp'ku'P IC'hqt'yj g\ gtq'Tqdqkcu'J ki j 'Uej qqrVqwt pco gpv'4238+

### 408'Ugo khpnc'Uko wrvkqp'Ego r gvkkqp"

Vj g'4: "cnkpegu'etgcvgf 'f wtkpi 'yj g'Cnikpeg'Hqto cvkqp'Gxgpv'y knlr ctvkr cvg'lp'yj g'ugo khpnc'uko wrvkqp' eqo r gvkkqp0'

Y j gp'yj g'ugo khpnc'eqo r gvkkqp'uactvu 'yj g'i co g'y knldg'wr f cvgf 'y kj "pgy 'ej cmgpi gu'cpf 'yj g' eqttgur qpf kpi "VDC'xcnngu'y knldg'cppqwpegf 0Vj gug'pgy 'ej cmgpi gu'ctg'lp'vpgf gf "q'dg'uwducp'kcn' gpqwi j "q'tgs wktg'r ctvkr cvkqp'qh'cm'cnkpeg'vgco u'lp'r tgr ctkpi 'eqo r gvkkqp'uwdo kuukqpu0'

### 40'KU'Hkpcn'Ego r gvkkqp"

Vj g'qr '36'cnkpegu'qp'yj g'ngcf gtdqctf 'cv'yj g'gpf 'qh'ugo khpnc'r n{ 'y kn'cf xcpeg'q'yj g'KU'Hkpcn' Eqo r gvkkqp0Cnikpegu'tcpngf 'dgmjy 'tcpm'36'y knldg'lp'xkzf "q'r ctvkr cvg'lp'yj g'Xk'wcn'Hkpcn0Ugg"



Ugevkqp"40 'hqt'f gvcku'cdqaw'vj g'XktwcnHkpcn0'

Vj g'KUUhkpcn'y kn'vcng'r rceg'cdqctf 'vj g'kpvgtpcvkpcn'Ur ceg'Ucvcqp'y kj 'rkxg'v'cpuo kukqp'vq'O KVO  
Vgco u'y kn'dg'kpxkqf 'vq'rkxg'dtqcf ecuv'gxgpw'cv'O K'WU+.'cp'GUC'rqecvkqp'GW+.'cpf 'cv'Wpkxgtukf 'qh'  
U{f pgf '\*Cwutcrk-0'

400'Qxgtxkgy "cpf "Qdlgevkgu"

Twpkpi 'c'rkxg'eqo r gvkkqp'y kj 'tqdqu'lp'ur ceg'r tgugpw'c'pwo dgt'qh'tgcn'y qtrf 'ej cngpi gu'vj cv'hcvcqt"  
kpv'vj g'twgu'qh'vj g'eqo r gvkkqp0C o qpi "o cp{ 'kgo u.'vj g'ucvngku'wug'dcwtg { 'r cemu'cpf 'EQ'4'vcpm'vj cv'  
ecp'dg'gzj cwvngf 'lp'vj g'o kf f rg'qh'c'o cvej . 'cpf 'vj g'eqo r gvkkqp"o wu'hk'lp'vj g'cmqecvngf 'vko g0Vj ku'ugevkqp"  
guvdrkuj gu'ugxgtcnf wkf grkpgu'vj g' gtq'Tqdqv'ku'vgo 'kpvpgf u'vq'hqmjy 'f wt'kpi 'vj g'eqo r gvkkqp0Mggr 'kp"  
o kpf 'vj cv'cu'lp'cp{ 'tghgtggf 'eqo r gvkkqp.'cf f kkpncn'tgcn'vko g'lwfi o gpw'o c{ 'dg'tgs wktgf 0Rrgcug'tgur gev'  
vj gug'f gekukpu'cpf 'eqpukf gt'vj go 'hkpcn0'

Cdqxg'cm'vj g'hkpcn'eqo r gvkkqp'ku'c'f go qputcvkqp'qh'cm'vj g'j ctf 'y qtm'vgo u'j cxg'r w'hqty ctf 'vq'o cng'k'  
vq'vj g'KUUVj g' T'uchhu'j ki j guv'r tkqtkf 'y kn'dg'o cnpki 'uwtg'gxgt { 'cnkpep'j cu'c'ej cpeg'vq'twp'qp'vj g'  
ucvngku'0K'ku'cnuq'g'zr gevngf 'vj cv'vj g'eqo r gvkkqp'y kn'j cxg'ugxgtcn'Nquu'qh'Uki pcnf '\*NQU'ur g'kqf u'y j gtg'  
vj g'rkxg'hggf 'y kn'dg'wpcxckrdrg0Y g'y kn'c'wgo r v'vq'o cng'uwtg'cm'vgo u'i gv'vq'ugg'c'rkxg'o cvej 'qh'vj gkt"  
r n { gt. 'dw'hkpkj kpi 'vj g'eqo r gvkkqp'y kn'vcng'r tkqtkf 0'

Vq'uwo o ctk g.'vko g'r tkqtkf 'y kn'dg'cmqecvngf 'vq<

3+Twpkpi 'cm'uwo kukpu'cdqctf 'vj g'KU'cv'rgcuv'qpeg"

4+Ego r rgvkpi 'vj g'vqwtpeo gpv'dtcengv"

5+Twpkpi 'cm'uwo kukpu'f wt'kpi 'rkxg'xkf gq"

Y g'j qr g'vq'eqo r rgv'vj g'vqwtpeo gpv'wukpi 'qpn' t'guwmu'htqo "o cvej gu'twp'cdqctf 'vj g'KU.'dw'ukwcvkpu"  
o c{ 'ctkug'vj cv'y kn'hqteg'wu'vq'tgn' 'qp'vj gt'o gcuwtgu'uwej 'cu'uko wcvngf "o cvej gu0'

400'Ego r gvkkqp'Hqto cv'

Vj g'cnkpegu'y kn'dg'f kxkf gf 'kpv'4'eqphgtgpegu'hqt 'vj g'KU'eqo r gvkkqp0Cm'vgo u'tcpngf 'y kj 'qf f "  
pwo dgtu'y kn'r ct'vkr cvg'lp'E'qphgtgpeg'C=cm'vgo u'tcpngf 'y kj 'gxgp'pwo dgtu'y kn'r ct'vkr cvg'lp"  
Eqphgtgpeg'D.'cu'uj qy p'lp'vj ku'hki wtg0'

Hki wtg': <F kxkukqp'qh'Vgco u'dgy ggp'Eqphgtgpegu''

"

Gcej 'eqphgtgpeg'y kn'kpcn'v'g'qpg'od { go'vgo '\*cnkpegu'tcpngf '%0'cpf '%4'cwqo cv'ecm' 'cf xcpeg'vq'vj g"  
eqphgtgpeg'ugo kn'kpcn+'cpf '4'dtcengv'qh'5'cnkpegu'gcej 0Gcej 'dtcengv'y kn'r n { '5'o cvej gu'lp'tqwpf /tqdkp"  
u'v'rg-<cnkpep'C'xu0D.'D'xu0E.'cpf 'E'xu0C0'

Chgt'vj g'tqwpf /tqdkp'ctg'eqo r rgv.'vj gtg'y kn'dg'c'y kppgt'qh'gcej 'dtcengv'uj qy p'cu'DT3.'DT4'lp'vj g"  
KU'Ego r gvkkqp'Dtcengv'hki wtg0'Vj g'hqmjy kpi 'twgu'f gvtgto kpg'vj g'y kppgt-<

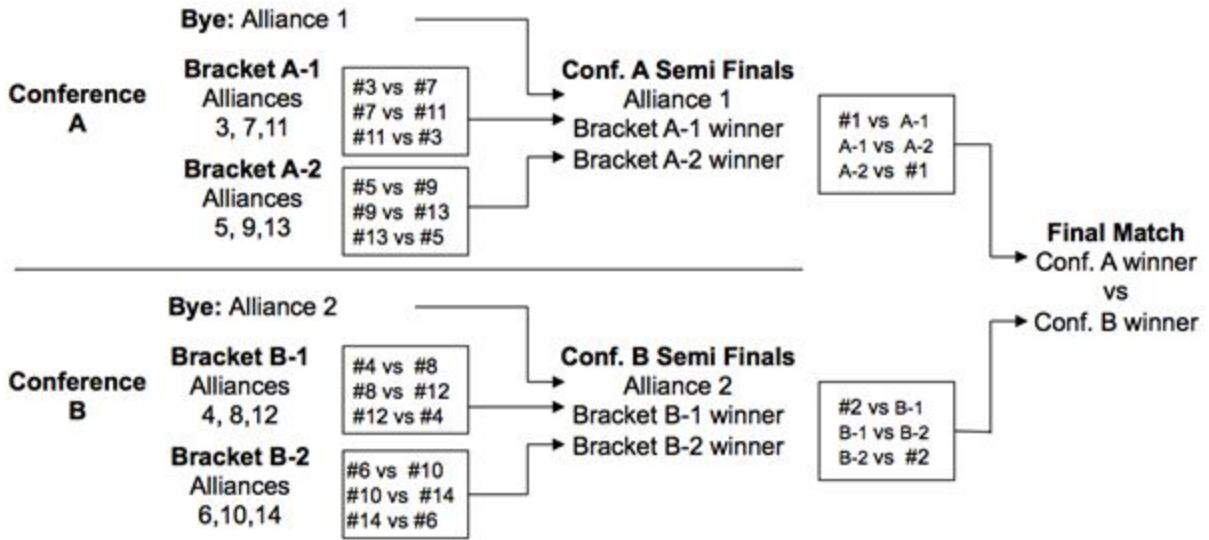
30Vj g'cnkpep'y kj 'vj g'o qu'v'y kpu'cf xcpegu'40K'cnkpegu'ctg'vkgf 'hqt'y kpu.'vj g'cnkpep'y kj 'vj g'j ki j guv'



qvcn'ueqtg'cf xcpegu'50Kl'ueqtgu'ctg'vkgf. 'uko wrvqrp'tguwnu'y km'dg'wugf 'vq'dtgcml'v g'vkg'Vj g'ugo khp'cn' o cvej 'dgy ggp'yj g'vqr "4'dtcengv'y kppgtu'cpf 'vj g'od{ g'o'vgo 'y km'cnuq'dg'r r { gf 'kp'tqwpf/tqdkp'uv'ng'0Vj g' y kppgt'qh'y ku'o cvej 'ku'f gvgto kpgf 'kp'yj g'uco g'y c{ 'cu'yj g'dtcengv'y kppgtu-<

30Vj g'vqr "4'cnkpegu'y kj 'vj g'o quv'y kpu'kp'yj gk'dtcengv'cf xcpeg'40Kl'yj gtg'ku'c'vkg'hqt'y kpu. 'vj g' cnkpeg'u+y kj 'vj g'j ki j guv'qvcn'ueqtg'lp'yj gk'dtcengv'cf xcpeg'50Kl'ueqtgu'ctg'vkgf. 'uko wrvqrp'tguwnu'y km' dg'wugf 'vq'dtgcml'v g'vkg'Vj g'y kppkpi 'cnkpeg'htqo "gcej 'eqphetgpeg'y km'r r { 'c'ukpi ng'o cvej 'vq'f gvgto kpg' vj g' gtq'Tqdqvku'KU'Ej co r kq0Vj g'vku'kpi 'cnkpeg'y km'dg'cy ctf gf "4pf 'r rneg'0

Hki vtg", <"KU'Ejo r gvkkqp'Dtcengv'



Definition: *Successful Match*

- Both satellites move correctly to initial positions
- Both satellites have normal motion throughout the test
- Both satellites return a valid score
- Neither satellite expends its CO<sub>2</sub> tank during a test run

Definition: *Simulated Match*

In advance of the competition, the ZR Team will run a simulated round robin competition between all participating teams. The results from matches in this competition will be used in place of ISS tests if necessary (see below.) The results of a simulated match will only be announced if they are used in the live competition.

40G'Ueqtkpi "O cvej gu"

Ueqtgu'lp'yj g'ueqtkpi "o cvej gu'y km'dg'f gvgto kpgf "ceeqtf kpi "vq'yj gug'twgu-<

Case 1: "UweeguuhwiO cvej. 'Dqvj "Ucvnkgu'Tgwtp"Wpks wg'Ueqtg'gG 0352."373+"

E'Vj g'ueqtgu'y km'dg'tgeqtf gf 'cu'yj g'qh'k'cn'ueqtg'hqt'yj g'o cvej 0'

Case 2: "Gkj gt "Ucvgmksg" Tgwtpu"cp" kpxcrkf "Ueqtg" \*g0 0352."477+"

Éki'vj g'htuv'twp'qh'c'o cvej 'ku'pqv'uweeguuhwn'vj g'o cvej 'y kn'dg'tgtwp.'vko g'r gto kvkpi 0

Éki'vj g'ugeqpf 'twp'qh'c'o cvej 'ku'pqv'uweeguuhwn'vj g'tguwmu'htqo 'c'uko wrcv'f'o cvej 'y kn'dg'wugf 0

### 40 "Xkt wcn'Hkpcni"Uko wrcv'q'Eqo r gv'kq'p"

Cm'vgco u'r ctv'ekr cvkpi 'kp'vj g'5F'eqo r gv'kq'p'vj cv'f q'pqv'cf xcpeg'v'q'vj g'Ugo k'Hkpcni'eqo r gv'kq'p'"Cnkpeg" Rj cug+'cpf'cm'vgco u'r ctv'ekr cvkpi 'kp'vj g'Ugo k'Hkpcni'Eqo r gv'kq'p'vj cv'f q'pqv'cf xcpeg'v'q'KU'Hkpcni'y kn'dg' kpxk'gf 'v' r ctv'ekr cvg'kp'vj g'Xkt wcn'Hkpcni 0

Vj g'Xkt wcn'Hkpcni'i co g'y kn'dg'kf gpv'krcni'v'vj g'Ugo k'Hkpcni'eqo r gv'kq'p'"Cnkpeg"Rj cug+'i co g0'Vgco u' r ctv'ekr cvkpi 'kp'vj g'Xkt wcn'Hkpcni'y kn'u'wdo kv'q'c'Xkt wcn'Hkpcni'Ngcf gtdqctf 0

Vgco u'o c' 'ej qqug'v'q' r ctv'ekr cvg'kp'vj g'Xkt wcn'Hkpcni'cu'lpf k'kf wcn'vgco u'qt'cu'cnkpegu0'Vgco u'vj cv'f kf' pqv'r ctv'ekr cvg'kp'vj g'qtki kpcni'cnkpeg'htqo cv'kq'g'xgpv'ctg'y g'raqo g'v'q'etgcv'g'cnkpegu.'k'f'gult'gf 0 J qy g'xgt.'qpeg'c'vgco knkpeg'wdo ku'eqf g'v'q'vj g'Xkt wcn'Hkpcni'Ngcf gtdqctf 'vj g'vgco knkpeg' eqo r qu'kq'p'ecppqv'dg'ej cpi gf 0

Qpeg'vj g'Xkt wcn'Hkpcni'Ngcf gtdqctf 'em'ugu.'vj g'v'qr 't'cpngf "4'vgco ulknkpegu'y kn'cf xcpeg'v'q'vj g' Ej co r k'p'uj k' "O cvej 'qh'vj g'Xkt wcn'Hkpcni 0"Vko g'r gto kvkpi . 'vj g'kpcni'Ej co r k'p'uj k' "O cvej 'qh'vj g' Xkt wcn'Hkpcni'eqo r gv'kq'p'y kn'dg'eqo r gv'f 'cdqctf 'KU'f wtkpi 'vj g'KU'Hkpcni 0'

### 50 Ugc'cu'q'p' T w'gu"

### 50B "Vq'wtp'co gpv' T w'gu"

Cm'r ctv'ekr cpw'lp'vj g'\ g'q' T qd'q'v'eu'J ki j 'Uej qqn'Vq'wtp'co gpv'4238'o wu'cdkf g'd{ 'vj g'ug'v'q'wtp'co gpv' t w'gu'<

"Vj g'\ g'q' T qd'q'v'eu'vgco "O K'"T'cwt'qtc'l'KNE'+ecp'wug'tgr tqf weg'lr wdr'kuj 'cp{ 'u'wdo kw'gf 'eqf g0'

"k'p'vj g'g'xgpv'qh'c'eqp'tcf k'v'kq'p'dgy ggp'vj g'k'p'v'p'v'qh'vj g'i co g'cpf 'vj g'd'gj c'xk'qt'qh'vj g'i co g.'O K'" y kn'le'rt'kh{ 'vj g't'w'g'cpf 'ej cpi g'vj g'o cpw'cn'qt'eqf g'cee'q'f k'pi n' 'v'q'h'ggr 'vj g'k'p'v'p'v'0'

"Vgco u'ct'g'g'zr gev'f 'v'q't'gr qt'v'cm'dwi u'cu'u'q'p'cu'vj g' 'ct'g'ht'wp'f 0'

"C'ödwi ö'ku'f g'k'p'gf 'cu'c'eqp'tcf k'v'kq'p'dgy ggp'vj g'k'p'v'p'v'qh'vj g'i co g'cpf 'd'gj c'xk'qt'qh'vj g'i co g0'

"Vj g'k'p'v'p'v'qh'vj g'i co g'uj cm'q'xg'ttk'f g'vj g'd'gj c'xk'qt'qh'cp{ 'dwi u'w'r 'v'q'eq'f g'ht'gg' g0'

"Vgco u'uj q'w'f 't'gr qt'v'dwi u'vj tqwi j 'vj g'q'p'rk'p'g'uw'r qt'v'v'q'nu'0' T't'gug't'x'gu'vj g't'ki j v'q'r qu'v'cp{ 'dwi " t'gr qt'v'v'q'vj g'r w'nr'e'ht'q'wo u'"k'p'p'ge'gu'uct{ .\ T'y kn'ly q'tn'ly k'j 'vj g'u'wdo kvkpi 'vgco 'v'q'g'p'uw't'vj cv'p'q'vgco " ut'c'v'gi k'gu'ct'g't'g'x'g'c'rf +0'

"Eq'f g'cpf 'o cpw'cn'ht'gg' g'y kn'dg'k'p'g'ht'ge'v'5'f'c{ u'd'gh'q't'g'vj g'u'wdo ku'k'q'p'f g'cf r'k'p'g'qh'c'eqo r gv'kq'p'0'

"Y k'j k'p'vj g'eq'f g'ht'gg' g'r g't'k'f 'vj g'eq'f g'uj cm'q'xg'ttk'f g'cm'q'v'j g't'o cv'gt'k'cu.'k'p'ew'f k'pi 'vj g'o cpw'cn'cpf " k'p'v'p'v'0'

"Vj gt g'y kn'dg'pq'dwi 'hkz gu'f wtkpi 'yj g'eqf g'htggj g'r gtlqf 0Cm'dwi 'hkz gu'o wuv'cng'r nceg'dghqt g'yj g' eqf g'htggj g'qt'chngt'yj g'eqo r gvkqap0

"I co g'ej cmgpi g'cf f kkkpu'cpf "cppqwpago gpv'qh'VDC'xcnngu'kp'yj g'i co g'o cpwcn'o c{ "dg'dcugf "qp" nguupu'rgctpgf "htqo "gctrlgt'r ctwa'qh'yj g'vqwpco gpv0

### 504"Gyj keu'Eqf g"

ãVj g\ T'vgo 'y kn'y qtnif kni gpv\ 'wr qp'tgr qt v'qh'cp{ 'wpgyj kecn'ukwcvkqp."qp'c"ecug'd{ 'ecug'dcuku0

ãVgo u'ctg'utqpi n{ "gpeqwtci gf "vq'tgr qt v'dwi u'cu'uqpp'cu'yj g{ 'ctg'hqwpf =kpvgpvkqpcn'cdwug'qh'cp" wptgr qt vgf "dwi "o c{ "dg'eqpukf gtgf "cu'wpgyj kecn'dgj cxkqt0

ãVgo u'uj cm'pqv'kpvgpvkqpcn{ "o cpk'wcvg'yj g'ueqt'kpi "o gjj qf u'vq'ej cpi g'tcpi'kpi u0

ãVgo u'uj cm'pqv'cwgo r v'vq'i ckp'ceeguu'vq'tgut'levgf \ T'kphqto cvkqap0

ãY g'gpeqwtci g'yj g'wug'qh'r wdrke'hqtwo u'cpf "cmqy 'yj g'wug'qh'r tkxcvg'o gjj qf u'hqt'eqo o wplecvkqap0

ãXwi ct'qt'qh'hpuk'g'rcpi wci g.'j ctcuuo gpv'qh'qyj gt'wugtu.'cpf "kpvgpvkqpcn'cppq{ cpegu'ctg'pqv'r gto kwgf " qp'yj g\ gtq'Tqdqv'keu'y gdukg0

ãEqf g'uwdo kwgf "vq'c'eqo r gvkqap"o wuv'dg'y tkwgp"qpn{ 'd{ 'uwf gpv0

ãRnc{ gtu'o c{ "pqv'ceeguu'yj g'lo r ngo gpvcvkqap'kpucpeg'qh'yj g'i co g'qt'o qf kh{ "cp{ "xctkcdngu'qh'yj g'qdlge0 k'p'r ct'kwrcr.'yj g'cr k'cpf 'i co g'qdlgeu'uj qwrf "pqv'dg'f wr rkecvgf "qt'o qf kh'gf "kp'cp{ 'ecr cekv0

ãUko wrcvkqap'tgs wguu'o c{ "qpn{ "dg'f qpg'o cpwcm{ 'xlc'yj g'y gdukg'kpvgt'heg.'CRKecmu'hqt'uko wrcvkqap'ctg" pqv'cmqy gf "xgp'kh'f qcdrg+0

# 60Tgxkukqp"J kuvqt { "

"

Tgxkukqp"P wo dgt"	F cvg"	Ej cpi gu"O cf g"
300"	32"Ugr v04238"	Tgrgcug"Xgtukqp"
300"	33"Ugr v04238"	Eqttgevkqpu'vq'hkz<hki wtg'czgu.'kgo 'pwo dgtu.'cpf 'hwpevkqp"J cu" Kgo *+0'
300"	36"Ugr v04238"	Eqttgevkqpu'vq'hkz<kgo 'y gli j w'cpf 'ceegngtcvkqpu.'cpf 'hki wtgu" z.{"eqqtf lpcvgu0'
400"	23"Qex04238"	Wf fcvgu'b cpwcnly kj "5F 'i co g'ej cpi gu"
400"	26"Qex04238"	Eqttgevkqpu'vq'hkz<eqphrkvpi 'r cuuci g'cdqw'cuugo dnf 'l qpgu" cff 'f gvckn'cdqw'i co gftqr Kgo *+hwpevkqp0'

" "