WINNING THE DERBY: HIGH-TECH FORMULAS THAT REALLY WORK PIUS THE MAHARISHI EFFECT: STUDENTS WIND TAP THE UNIVERSE PETER MAGELSTEIN: CREATING ONE OF THE WORLD'S OCEANS? AND A NOVELETE WY ORDER TAUKTORPORT



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FIRST

By Norman Myens

A campaign to relevest the earth will stabilize rising tomparatures, improve the quality of cut lives, and buy time until we find solutions to the greenbose offect. The second secon

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CONTRIBUTORS











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Dr Z is William Zimitelis nom de hask And in "Bay Money" (page 42) wiete end activ Monael Zimone registers haw Zierriss, a market erekyd and soonermit ageles his wisk is horse racing his system, in fact works for all options trading to discling witherer you drough size an untibelis to work

The Z-system, of course is not necessarily is suitable for reterement, saving The occasional better can be proteenanil gambles can not in the dough And Tyou read Take Money certy enough in the month, you might want to use Dr. 25 system and like way a chrones at Chardhill Downs

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For an exploration of a different hart, delive two Fairs Lankings processions in "Eggs to See" (suga 58). Forcinated by the workfor civeres even our. Lanking has captured the images of uggs from such excite binds as the European ourskoe and the estimated Micalegascan Bearchie (Hinds: Tab Der?) CO

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LETTERS

COMMUNIC/ATIONS

How Sweet 11 Is

Congratulations on your excellent article by Murray Cas. 'A Costerior of Teele (Features Y 1966). It was most features to a set of the second second second second possibility of the tester resultance and possibility of the tester and so the science to your renders and so the sciences who append that least meetinetized that your descend theme

Marc Kapler Drivater of Public Information Rockefeler University New York

Lie Detector

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Donna Worthington Meea, A2

Warded Alien Abstudiese

Boosee of the large response to your UPD survey formm Petruary (1660). I have been collecting much information onthe phenomenon I would live to make your residen to where their expenences and operating and the top Any information drawings potenes, or firms addressed, sharnoad arrelope If the material to be information.

> Bobert Kennedy Box 194 Southport MB Canada ROH 1ND

Middle East Conflict

I would have been amused by Howard Bicarris silly proce of prejudicacholarship (The Importance of Hugging T Explorations February 1969) If I had on been where with such itselforts sacial executions and gamma half surrently by dotting my warm Harf publication by dotting my warm Harf publication research. Is set the excert straight, i have warm holds the ware dotting and straight of the Balacum takes and straight of the Balacum. Lawy control the straight and the additional takes and additional takes and the additional ta

Lite Abu-Lughod Depertment of Anthropology University of Pennighistrial Philodophia

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The dataming of Arab culture is so common in American mindle that I thought I had become inued to it until I was faced with Bloom's matter-of-fact racism. He bladlet biggitly and inflammatary lineario are closer to Nan and concerning the set.

REEDUCATING AMERICA

FORUM

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Ornstanta model record book is New Work New Mind, with Paul Ethick Healthy Pressures, cost/transf with David Sobel wit be published by Adduss/Wealthy Times and the Adduss/Wealthy Times and the Adduss/Wealthy Times and the Adduss/Wealthy Times and the Instantian and the add describes Tumans as terving anveal minds, such an "export in different ansas, the headb-care works", the amotional guide the one who sorts out unrecessity intermation, the comparison maker. These "minif" operate unconsciously who need to build on the recognition of the mercial division, the says beginring in kindergarton.

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Orma: Define intelligence

Onseasin We can't continue to describe one person as unintelligent and another



Psychologist Ocostain: Teech kids to think

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We need to teach people what they're Nee biologically, why they operate as they do. We need to understand from the dawn of evolution how we developed, Biology is destiny.

say, "That's just the SOB reacting," subsets un by they and see that most of our deviations also consistently encomdemix with ascringe become deviates? Omaters, Never, Teschers would guide desuatericer, wound, guide an subjects are Burnachers need to be paid more and be green the status against to find greeter than that of lawyers and other phylosoches.

Orear Should achool be year-round? Orratem Today the world charges more ranicly in a decade then it did a century ago but our educational system has not changed. The amount of inlamation that people need to assimilate and the different skills they need to assemble that information have powneed dramatically arrow World War nine to three five days a week, nine months a view Clearly kick have to be in princel a lot more than they are Onvil Would the college system change? Ornatery: Probably the only place change will occur is in this interview. If somehow the amount and kind of information pacole would receive in

grade school or high school wina mattipe diferent over shorter Gente How do we decide what's shoot Ornstein That's a problem I don't know the prever that Los Angeles will choke course care turnes in teo wrens in clobal we'l never come to once with tenorism and conquer it. We need an overall education policy formulated at the incients), statu, and local levels, with individual teachers and achool boards Ornal Can people be taught to be more analytical, official, even creativa? Ornstein: In the past people were taucht these throat Today however there's thates a move new toward teaching techty the real delicencies in education, taut those's more to the every than aut removing distationnesss. We live in a new morality that a econoprise for our ora We're nearly includ by out inherited procively to toous on immediate events fails down a well is more compelling to thousands of people a month die in traffic

Over What score (W/) Ommon Wern of Many the questions that cauld be indext should here with what is the right and obtained the work what is the right and obtained the work the store of period of the source of the control operation. The source of the source theory fixed in work of wat to divide up the source work with the position of the source of the source of the source of the source of the position of the source is being an up control of the position of the source is being an up control of the mitlion" though the gas control of the mitlion" though the gas controls the divide to position a being could y of the divide to position a being could y of the

Ornal Even don't change now what will fings be like in the year 2025? Onsiels, We dan't want a world of them don't have enough food. We don't want a accesty where gangalana not so far away We don't want a world full of people who have no idea about their roles in its beneficiented about their dentity education sex hets mamages. relationships | think we want a species that has grown up and understands that we can be powerful bruzos with the ability however to care how we use our avasome power is people that gives and look forward to their future preparing them to make the bleand choices to conserve the carth, enabling them to comprehend the diversity of both If a DO studuo too

MOON RIVER



By Gerard K. O'Nell

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Werestingly though the moon was a maps target of US and Sowie speed treasures during the Solas and early Seventes, this is known about the tuner poles. The lancking isses of these mascres were all hear the lance routbor. All the Apola and Lunchhod samples were escaveding from state fait the equator—rome lices the pormaneity studeowed proteins mean the polies. If We were to construct a resource map of the moon today, we would have to label every region other than the belt around the equator uncarrupteo

Were yinken all nas auculated the mysee the answer not a laurent and the second and the government againcy chooses and (unding) Decaders ago NASA had plannet to hy instruments are were har kanne plannet to hy instruments are were the kannet in the second had been and ins years meal nearing in the lab Bewinten to got budgetony agarowel for a Luxer Plane Choter mission. That Dauly at carching and NASA structures Dauly at carching and NASA structures Dauly at carching and NASA structures to get the sace of which budget

NASA may someday lund a massion called the Lunar Observer, in which a large unmanned spacecraft would be sent to carde the moons polar regions it would be oupped to provide a ohermost map of the entire moon and to search for when and other fragen visatios in the studywed creaters if visatios in the studywed creaters if



Even on the moon Water, water prywhore?

The Differ of Exploration is considering a variety of somethin the him methods in space Arrang these are "Bent" measures to take the set of the set of the set of the benerstard by the set of the set of the permitter of the set of t

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Both JPL and SSI have studied a small species of the would carry an existing not unext, a gumma-ray spectromeer fell over as surpus from the Apple program. The spectrometer would be surnometer by a layer of controls on them is not controls on them is not STARRY BLIGHT

EARTH

By Kenneth Brower

ceen, who is source of all wing Homer He sang before than he know. The ucean is source now too, of posion and trashthese days and it is dark with the blood of whole is

Maat of our newly awakened concern for manne polution has been directed toward the planat a colder even because most of our manne stoemacmis—moot of our manne experiate—ine to the north Euclide Threats to the open do north Euclide Threats to the open do not stop at the Thops of Cancer

In the trupped, as in the temperate zones, the most atempt decine is in challow water menns systems. The most important of these systems in servitatuces are manyore forests sea, ones beds, and covil norts.

Mangroves are obtail forests most common in the fopose, where they cover 25 percent of the opedition. Like the sait massives of the north, they are important numerical for sait (6, provide terwised and temper for millions of cogatal people revine as matural severage plants and protect coordinate agritms, andexin They are disappearing fait Marginove neuro bean rock-coord by 75 percent in Plants Roo and by 30 percent in permittain Walgives, Berkwan 1997 and 1978 halt the marginoves in the Pringipenos were cut down. Defailed sprayed during the Vehican Warkelloo cool of the marginoves in the Makong Deals, Bibrishos horn disevitien in the pop co are employed and the Vehican and

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Rendy Oten, an American biologist doing research on Acentraster lanse on Laard laard of the Graat Barnar Reof showed the symposum electron monscope sides of his subjects. The tale covers of theories were harmless as yet They looked almost cuts in the homble way of all sponsor-forten invise.

It was a briefing of a sort familiar from the movies. After the elien investor, the womed screets dativers it in the war room to dim-witted generals who are invested or age to

FANTASIES OF THE OPERA

THE ARTS

By David Perry

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born for each often, seys author Deborsh Alterior who wate the tonitio for Looker the Double Moon Primering at St. Louist Opens Theater in Junn. Double Moon is the story of extratoriestrait twins with talepathic powers

Science Econ insolposed are might along the advance been point on in operar lises a Angle Seen point Dates and the comparison of the advance been any and the advance and writing come been any and the advance and writing come been insole to contract in serve takes when it was green gir. The one's differenange with sciences to advance in the or one with sciences to advance in one of the other to advance in the original of the other in the other in the other in one advance and advances to advance in the other in one advance advances to advance in the other in other advance advances to advance in the other in other advance advances to advance in the other in other advance advances to advance in the other in other advance advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other in other advances advances to advance in the other advances in the other advances adva

According to composer Tail Machover, directory of the Experimental Media Tainly a MT - Media Laterinary, We allocate be looking to assesse below that explores massa about the total of sessing and inchreidigy in sur lives of possiblem when we mail do to these up to our development as a main the next century.

Machaever's W4./6 based on the autobagraphical Philip K. Dick novel of the parte name deals with the role of sphrealogy in our society and the future The opper alino chronodes Dicks own



Space objectly. Hwater Class. Strin and obserview caking science fetters to rare heights as OMM

With an entertained spotent (201, IN-K) is a multimode production that includes the use of video monitors. The open electronic "open or enhanced by a two person electronic" "open or enhanced of the (user" — a Neuration II computer that can explaine and into version memmeria, coverage jummedic celetabilities Other measures an apply and childed the vecase of the cover members often to the poet of enhance tool synthesis

Boses composes seng computers, and dne recentrally to collect must often invite that that muse is controlition with accretectorism. All tests goods composes a tablitonal meatainth certainty opens for a factuation opens composes, tablet a status page of the status of the status page of the status of it is not all of the status of acting it is the status of which with a status of the status of acting and and acting it is the status of acting and acting it is acting acting acting acting acting acting it is acting ac

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AMTE and similar groups of course consider traditional opera only one compute on that te

INFRARED MINERS



By Steve Nadis

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IPAG light to this trigs or solid material sumunicing Wega and as many as 30 onise stims—objects that sould be developing planets. Its data also sevabled a new class of very kirminous galaxies pounes out more than 55 percent of



A star is borne. IPAS leaves Vandecberg

their energy in the International also shed www.elengthe. iPAS metal also shed light on the very small by showing that the intersteller medium is hild with dust parachis only 50 to 300 alonts in tozomatter one researcher termed. The shells are just an or old a odd didect ?

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Celeti golar la N/GA we develop adopata imit percentrel gol money o golt en moto al el fesi fuera di money to golt en moto al el fesi fuera tel basia ad como ni te Anette si tel Europene Specer Agenzo a l'Interdi Secon Desevatory itto el taborni mo Nela cope Fuerity golta ando mi he space fuera fuera di toto mi astronomen analiti del ten illi astronomen analiti del ten illi astronomen analiti della della della Vela moto della della della della della della Vela moto della della della della della della della della vela conservato della BRAIN MAN



By Mary S Glucksman

The above years from now Taytische does may not service the Chotone with Tay-Secha Salak and ensure a select hexademinister & Nark A hexademinister and the select service accumulation in the basis of the accumulation of the select service hexademinister and accumulation of the sector accumulation accumulation of the sector accumulation them. The dealers continues an advident hexademinister of the sector accumulation accumulation accumulation them the dealers continues and accumulation accumulation them the dealers continues accumulation of the sector accumulation accumulation of the sector them the sector the sector accumulation of the sector the sector the sector accumulation of the sector the sector accumulation of the sector the sector accumulation of the sector accumula

THE BRAIN S DEPLINSE

The barrier between the blood and the brain site burrier that live of oblance appress instead. Information, and charmood overhaad. Developed through evaluation, this cellular well protocils childcale brain tassues from the potentially harmful effects of autoances in the locabeterem Live is border patrol between has ownit too, it associatively grants accore to ownit too, it associatively grants accore to these substances the beam heads to function while barring others including most therapeutic drugs. The termer though, is not a banglos structure so much as the result of the unique config uration of cells in the brain.

Byzanakino carlo calebo circlottenial colla line all the capititines in the licely holes in the binn are also assumed by assocytes, estansion of bran colls Actorophis sectors a chemical that instanse endothelial cale to not over of happenes, the outer layers of actional continuous light protons, which make up the protocyte barrier

Recently several researchers have deveed different methods or manyeluting the barrier e properties to get disgo backgah if have of these systems depend on exploiting the mechanisms dueld by rows the barrier. Although these declares to test many more neurological declares to test many more neurological declares to test many more neurological demonstria, a ther method of cestion.



Game genet? An Oregon neurosurgeon is opening the braile to gene therapy on create

around the barrier has even more important implications—both for delivering drugs to brain tumors and for a new kind of gene therapy

BREACHING THE BARRIEF

To Expert A Neurel A Neurel a neurousgeneral (Progen Handlin Scancea University) (CHSU) Scincel of Modorne and in the Neurel Motions Akrimirevisor Neuronal International Americano Compositive Scincer (International Interpolitie) Scincer (International Compositie) Scincer (International Scincers) (International International Composities (International International Composities (International International Interna

Alterna to control to de la control de la co

Intervise Simulating the beam in this way cannes carre tasks, towever, Sw potentin have that atrakas while unsingaring the biococlust, and the According to Naswell, the wait mapping to be an acare patters have secures at comp point in the occurs of their weather. The says they be carry to weather, the says they are carry is encount of the occurs of their weather. The says they are carry is encount of the occurs in the carry of the says they are carry is encount of the occurs in the occurs of the occurs and the social main of the orange agrees of however, the beam inflections and tames.

GENETIC FUTURES

For this available call project Neurelli hold object of a method to the double object of a method to the call to Taylocitic. The Banchertin and the Taylocitic The Banchertin and the Taylocitic The Banchertin Herricz, Neurelli Taylocitic boot of the Taylocitic Taylocitic boot her Banchertin, Neurelli Taylocitic boot her Banchertin and the Manchertin James Denter, Taylocitic boot her potenti, Taylocitic boot her potenti, Taylocitic boot her potenti, Taylocitic boot her banchertin and transport. Neurelli boot her bancher boot

In order to dispetch the replacement gene across the behave havened waspet in a wrus sheath known as a vector For his Sanchoffs project, he has supermortified with revisited virusias in the ADS family His data by removing the wrus's replacation machinery to that it can intertoduce once it atrives in the beam Alber her wrus vector delivers. the gene to the appropriate cells if is metabolized in the brain without causing any orderation's.

TURNING ON THE GENE

Part of the problem is developed the best vector for incrulate a Justinizau to extend to incrutate a Justinizau to extend to incrutate a Justinizau the gare to actively express table in linguing annual, "Victoria and linguing the propertion molecular of Month of a solar of a gare in a vaciant in the allo scale in the garets in molecular." Month of a solar in the garets in molecular of Month of a solar of a garet in a vaciant in the enhanced promotion imposed on the line for the Sector of a simplication of the and construm million and construction and construm million and provide and construm million and solar line includings). Solar externs and and provide matching and the size of the million of th

Because
Tay-Sachs is caused by an
enzyme deficiency,
doctors won't need to remove
the faulty gene: The
new cloned gene, at least in
theory, takes over
the job of enzyme production

tosue outure but don't perform as will in the annual models. This he stresses is merely a technical strog he repects to work out in the next law years.

A full root obtained Network Trutt model and the second s

Dr Roy Gravel, the geneticist at the Hospital for Sick Children in Toronto who activate the general Nacwelf al work (in the sector between the Natwelf manual additional the Natwelf manual additional the Natwelf manual additional the Natwelf and Natwelf Natwelf many sector is the State, if a Natwelf many sector is the State, if a Natwelf many sector is the State, and Natwelf the only repert out here which gards (in Additional Instate). The State is the only repert out here which gards (in Additional State) and the State is national tradeout and the states in the only repert out here which gards (in damage first update). The States of States of states for the states of states of the states of

POTENTIAL HAZARDS

Barrelic or algoridit or graphing and an analysis of the second second

Nexuel topped to light the next the parts working rule (the base in the regress working rule (the base in the second parts and rule (the base in the second parts and the rule (the base in the second parts and the rule (the base in the an and yeaper interful allogs which may polymers) and the second parts and an any separate the tags which may polymers entering to an advalut and the second parts in the second and and any separate the tags which may polymers the second parts and and any second parts in the second parts and any second parts in the second parts and any second parts in the second parts and the the

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COMING ATTRACTIONS

Of people's idea of excitation is this ample Noterial transitional bank banking the bacteria at woom, this crowle and of the particular time transitions gains that the base to wake west. Evolution more people this this base to happen and happened only a long time topo. It is a stratistic bolief that herepers our adde to prefet and instructurated the work of the long.

Last late gas back or perturbance comes to de case and the second secon

Whe school boards adale within 5 include in their background of the school of the school of the school of the s spaces had we all need to inderstand. Through the background school of the school of the school of the background school of the school of the school of the mach school of the school of

For example out increased dependence on chemicals to control our techniquest energies has resulted in evolutionary The second secon

Of course, many exclutionary changes have been beenfood to humanism Exclution has given us the plants, amabilia and noutrain mecorganisms that make modern if to possible. The genn and years that make the board you set and the been you drief, the flowers in your garden, and his dog you play with and if the end routicate of evolutionary chemica.

The second product of the course is a true of the course of the second product of the course is the second product of the second second product of the second second product of the second second product of the second second product of the seco

Norman C. Elistrand is an associate professor of genetics a the University of California. Revenuels

CONTINUUM

CHIMP RETIREMENT VILLAGE

It is step toward more particle treatment of lakesttory animals. The Southwest Foundation for Bernetgoal Research in San Astation has also up on a of the first and remark homes for chimps had toxin been used for passages. The Ecundation has all chimps that have been indicated with the ASS would be indicated with the ASS would be indicated with the ASS would be observed indicated and the second the toxing of the second the instruction of the homes and indication of the toxing theoremail found instruction of the indicated the second instruction of the indicated instruction of the indicated instruction of the indicated instruction of the indicated instruction of the instr taxe been rincled with papelse DL age before, proceed releases a second of the auxiliary of sectors, services and the second releases of the second bear less. Because and second releases of them by the second bear less. Because and second releases and and second releases of the second releases of the second releases of the second releases and second releases of the second release of the second releases of the seco

Some of the allothed money

will be case simply to eccy the grap character potention factory barrows maintain and the second second mathematical second second second patients in control second second patients in control second second bars to fee animals such The condoof will be spaced "construction segment" can be and the second second bars and patient construct will be an eccyptible con in which bars and patient construct will be an eccyptible con in which barsand con the cont the second control to second second



As appetition had to do to do to come up with a demont was iqueete coali in his hand White no coe has been ablo to top the Man of State's performance coeffets have long known that highpressure processors and people synthesis controlled have people and chert forces of cathon. But secretly researchers have credited demonds from two new markets, registerios in the markets.

At West Germany's Prizzholer Institute, Los Alamos Natoral Laboratory researcher Roy Genera delonaded a far-Jaza chan'n di contraren TNF type explosivese joordarang carbon oxygen metagan, and hyvingen') racio a sealed chamber Than the soci was sociated of and casted back to Los Alamos for anolysis. The mesuit's About 30 percent of the soci contamed diamonobi lass than one millionth of an nch wolk.

Using the high persuits or exclusions to be an exclusion particle into a binered a lists of exclusions of the second second second second second second second be research protect. "While is a bathroad with headed distribute actually coming exclusion actually coming exclusion actually coming exclusion actually coming and the second second second benefits as the catabin "And benefits as the catabin" hand been distant the catabin "bath been distant the catabin" hand been distant the catabin "bath beam distant the catabin" hand beam distant the catabin "bath beam distant the catabin" hand beam distant the catabin "bath beam distant the catabin" hand beam distant the catabin "bath beam distant to be actual the beam distant to be actual to be been distant to be actual to be actual to be been distant to be actual to be actual to be been distant to be actual to be actual to be been distant to be actual to be actual to be been distant to be actual to be actual to be been distant to be actual to be actual to be actual to be been distant to be actual to be actual to be actual to be been distant to be actual to be actual



Lab physips get a former. They give up alle and and for the betartness or turnamional How and turnamion is highling a senseway by these unsuits hences of medical sussands.



-Barley G Walter

FUTURE LA

The drought of 1988 and up and turned brown unable water restrictions

of callure, repearchers of the National Turfgrass Evaluation green carpet will be planted

Zovsia turt has always green but in the past it had stak-s pansisions and

ave them room to grow weed killers' says Morris lescue a type of writer grass.

The USDA's new lowns. nance Turl researchers are also eaper to make the take obsolate "Athletes hate maxes because it doesn't provides a cushion for the wear When the top of the grass gets worn down "





CONTINUUM



Wail all the Sweet base from The ment eccurate Object in the advector are something neighbor along

PULSAR CLOCKS

In autonomy as in other decipites timing is every timing. Knowing how long it makes light (or other electhomagnetic reduktor) to result here each as equilant to inswering the distance it has revised utilities autoint of stome cludes in the Hala, inswering statistics micro has eith anound the sam New spend autonomics disck mitiercent division

Pulsas are reutron stars toat gen ao teat, they even baares of ractor waves or X rays: like a rotating leptonuse. The leatuat of trace stars, millipport polears may rotate (300 temes in a rongle ascand: legits objects of the type have been discovered ao fair. Astronomen at the dearbin ractin abarevatory in Puerto Rico have been studying the switteet and PSR 193721, intere 1982

The pends if a year of most the public may be manizable han the best clocks in Earth' aggs Deser Alam a physical at the Nascral Boulder Colorado Live The Boulder Colorado Live The Deserver and the second in the second Alam second a physical boots a highlight and the phase address the physical boots and highlight the physical boots and highlight the physical boots and highlight the address the physical boots and highlight the address the physical boots and highlight the physica

There are astrophysical applications as well. The monitoring of millisecond pulsars with radio feleocoprin tas afeatoly ahown the asstance of electron clouds passing through taxes. Backer that, it was assumed that determore waves definiulter more workly in space 1 Misecond public clocks alone may yield the first dancet messauthmet of gravity weeks which were proposed by Einstein early in this sectory in hanse gravitational fields according to Alan, backet produce on a policer is anonal uniter historia

PLASTIC PURCE

entrines and to decrease tareat time (the time between food inteles and intel output), the researchers mostured these vanables for both the plastic and the bian

Benin and Head teccoaud hat the high-flow randhigh-spacin dets had he seen banefact without a float float of the state of the state float secondaries that both the pleate particles and the bana stimulates that both which in tain the pavel, which in tain the gar bowl states. If other studies subtractifies for him and Read strictings, the way may be open to platfor the supplements for people who cain takenam because for

"Life is a summer of collisions with the Auture, it is not a sum of whigt we have been but whigt we years to be " bud otherw y Control

"Boo bad that all the poople who know how to run the country are butly chang taxeabs and cutting her' --George Burrs



Can Extend bran? Researchers have boind that eating plattic may



Alternat were Doctors have begun using PET scans is derect sbgged areas in the host and blood vessels.

SCANNING THE

Al present, physicans who wint log at exiture of the condition of their patients' coronary orientes have to real which blood servin chokes tool is present) or on argrograms (or non argrograms (or non argrograms (or non argrograms) and the provide a content of the heart, blood vessels in the group op toxen the heart that is covering a kilowering Beakes of alternative in the provide the beakes of alternative in the second the provide the p Berkely California have her way hote less-than astotactory diagnostic fools will soon be replaced by a procedure that is both accurate and noninvasive---tie PET acan

There is busingly and he colleagues at Lawronce are using PET (position emission: tamography) technology, which is many hospitals here been used primarily to study the brain to peer in a sale and norm/advie way into the compary enteres.

Budioner's human natients

are reacted with rubotum E2 which is allocated quickly into the beart mutch. Technic are then use exceep tomally permittee implicit to usely as the condition of the heart and antones in the could by attendentices in the could be antice antices are coupled by attendentices in the tosendors the heart sciencities are to the heart sciencities develope a sciencies that science is the heart sciencities develope a science that science is the heart sciencities develope a science that science is the heart science that science that scien

The lockingue is sheep? being und in a live live locking locgical accurd for county located accurd for county located accurd in the set patients will be leaf accord accurd acc

ALCOHOLIC GENES

Researchers at the Universpy of Wacchini have taken has first steps toward the development to a blood test that may be able to duted a particle prediction. The minute and blood test that the steps of the particle prediction of the steps particle of cancer only when hence is a stored to have a the steps of the store of the particle of the store of the store management. This charge production of a compound called charge taketwise the store the store that the the We were surprised when set ran role 2, solys Ganiel C. Mustler whose from prompt instead 25 stochain reim agod agothan to Blysteo who had stochain from age hearty to fold a chains from age hearty to fold and no blood militativia who were The stochains averaged 91 draps a weak, the offers. 4

surve encogn honrail amanta of phosphatolykethonai showed up in the blood of all 24 mandrineters Weik roughly half the alcoholos had levels two as high "The does not about Jeak pender market for abouttem" cautions Maerie: "Nei may have dentified only one of many tectors".

—George Nobbe

"Eis one of the commons? of mstakes to consider that the limit of our power of perception is also the limit of all these is to perceive of the sector of the limit of



Address to the bodie? It may be

CONTINUUM



OWN



the water for the second s

gill is also being developed for inclustrix? applications "Certian types of welding for contriple inclusion pure dragen and the gill could allow oxygen to be produced right on the work and."

Buil Camerato briere tree granta public vel bar denerat hole the treechaned granta public velocities and the main nease hold sports a support to dragger in three to two years, we believe be incorporate treatment of the transmission treatment be incorporate treatment particularly scrattere to unperfolding scrattere to unperfolding scrattere to unpart a severa and hereing of outing a solid vectors of the treatment due uses of a basis batter pression for basis and where a solid vector of the treatment of the basis and when the basis of upper the basis and when the solid vector of the treatment of the basis and when the basis of the basis and when the basis of the basis and when the solid vector of the basis and when the basis of the basis and when the solid vector of the basis of the basis of the basis of the basis and the basis

"The best way out is always through

And and Pornet

INOSAURS

The discourty in time Mongois of a clush of torsited beby dinorsus called anityloaxus has rean roton that acteors some species of discours were grogenous and may have tred and grown up logither in femily growings.

Here Daute of the lympic learner of leverships in sector of a part Chronic sector of the leverships and the leverships of the leverships and leverships of the leverships of t

Dume's theory about greganous behavior among anivjosauris is supported by darier research showing the prinations duribelit called maasaurs also tincled them yourso after helichood.

- Catorial Nobbel

The more human beings proceed by plan the more effectively they may hit by

-Freehot Durenmet

A POD FOR EVERY

brainchird of Albert A Lagnetti, chief soentisa at the Federal Avatton Actimistica tions Rectneal Center in Atlantic City "Ibu could have a module with a search module with a search module with a search module with a search module of the serve failer tood or are deposed of Ethy American be reav

The effect is the proceeding, of course First, each pool with the efficient own latest and inshem latents would add considerable weight to the implient (Latent and the parts and the advance of the the therefore a set of the the there advance of the parts and the there is a set the advance of the advance of the advance of the advance of the parts and the consideration and the consideration of the the consideration of the advance of the consideration of the advance of the consideration of the advance of the consideration of the consideration of the consideration of the consideration of the advance of the consideration of the considerat



To allevate congration of aligorial Albert A. Laparetti Ales chongrand millionational researcher costs for supra classe.

CONTINUUM

NUMB TONGUES

har years speech difficul tes have been linked to learning or haaring problems Now one researcher has don'tifed another cause below-normal tongue senativty, or "numb tongue "

Domes funct, a speech archiver glaconical is a subserver glaconical is a Arbera decovered the 25 exception of the 16 the 3 services of schooldcrittlene been for an output forgue servbeen framework for expansion terms forgue services why "here kerners," for expansion, the school of services to regular terms of packet being the school of services produce and school of services produces and school of services produces and school of services produces and school of school school of school of school of school produces and school of school of school of school of school produces and school of schoo

Accordent inclusion development, which is a backburght designed and all vicinities with articulation all vicinities with articulation control of the tool of a tool and tool of the tool of a tool and tool of the tool of the tool and tool of the tool of the tool and the model of the tool and the matched and the toppen sole of the toppen, wind an autochargened with the response autochargened with the response to people who can be tool tool tool tool tool tool tool tool and tool tool autochargened with the response tool tool the pool of the tool tool autochargened with the response of the tool tool tool tool tool tool and tool autochargened with the response autochargened and the tool tool

No one knows what causes rumb tongue much



Open your mouth and any is "control report abrowly immyned machine idonatifes interlieve abrows

less how to cure 1. "We nosity have to go at the study of anculation and assistavity in a far bager way than we have." Process explains to westudy total a possible westudy total a possible westudy to an the parts to westudy to a study of the near the parts of the near the

"fourwell and find posity anywhere unless you bring some of it with you."

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Machest is to think of Iso sany flarigs in succession to fast or of one thing the actuatively."

- 0.537



It is a coordy russel too to be majors' homes to book offer come back from borotever shores full of most meet downwape - cools rusches, level to book and the book of the shores of the list of the book of the shore and the book of the shores of the book of the book of the shore an excession of the book a meta-shore a concerned theorism of the book of the a meta-shore a concerned theorism of the book of the a meta-shore a while

Jerome Searcer of the State University of Now York at Seroouse leaded the notion on a contribution of hardsbarrid backe spepticitations, and magazines. When he put the publications at a microwowe at high power (700 wards), they emerged underragent in text fleer temperatures new gath heater fam 75 er The, Browner regiens, is backuase microwower hisk backuase microwower hisk backuase microwower hisk backuase microwower hisk out water and faits and as paper faits life of either backus anyone the microwower hisk

Next Brezner cut rendl weige in the guideballong which he sprinked with a street oblectate of two interacts Then he totaled the interacted books and mags rite and the stream of the interaction of the second of time within 46 seconds, Brezner reports, of second the techer the book?

Beares ways list inno transact strategies in tyron protectly wait with a startaget strategies wait with a startaget strategies with a startaget strategies with a startaget strategies with a strategies outs part entities position of an strategies with partaget or costs thousands of states and can be induced be a rest born to strates with partaget or costs thousands of states and can be be haven of the strate hash to part and theorem claims

ALL aware

"A malaphysicial is a man who goes into a clark coller at midnight without a light, looing for a black cat that is not them."

ab carea

ABTICLE



BY MICHAEL SKINNER

Men are coverned so much more by caprice than by research Everybody like simple things.

In combing, control is an heren and the strain botter than break even in

William Zimpha 1986

a world Damon Runyon once hendicapped at six game, he creates the edge for other players to two against, the gambler searches for the Dr. Zunderstands, and he offers a way to get well A gary of the worklind fourier is well as the can anticipate this pattern that this confusive, the knowing a race is fixed When and info is out in an effort to control events. Attempting to im-pose his will upon the dicting fulture events-train calling the winner of the Kenaucky Derby to wegering thethin July price of option on the Chicopp commodilies marked

coass of a hudder

will be five dollars more takes something else. It requires a series of hisrelationships in the jumble of new clubs peak and present that you can dehorseplayers commonly call racing luck Dr Z is William Zienkels nom do track, in the trackton of Pritsburgh Phil, Chicago O Brien, and The

the advects one of the Big internetional investment stategies. Zenabia nevaste his gambler's soul when he says. "There's an edge that excits because theres?

here much at Santa Anka then the question is. How His anale is finding discriptinoss between nose market. Yamachi, on externation incern and sec--the mathematical international investment money invested. These are modeling of ever-changing market molicitancies, or accorates, in fatorcial piegon. The best known is the January effect, in which investors undered the beginning of the year Dr. 2 has unoward samilar profit opportunitie ponts out that the times reason anomalies are

anormalies is that we can't The gaming arowd has used stochastic meth for centuries A seventeenth-century grap game probability theory /m sweing the plea of a part-bler friend, the French

mathematician and philosopher Bisse Pascel exernined the problem. Why do the octos differ in throwing a 6 in four rolls of one de as opposed to throwing ho for a 24 rolls of two diox? Pascel inverorie to altrink from the big quastions insponded with the laws of probability

The 2 system permay reason is a higher net of ream han livelihood of winning 2 sumbarearians. The selection winning 2 sumbarearians. The selection winning 2 sumbarearians with real having allow his faint as overgread. The selection of the selection of home paying how has been about its loop allowing a loop latel. But measure home paying how has not adopting the selection or water selection of home paying how to me selection creates a mechanical splatem in which operate bits in predability work in feilures to had an endotted selection or home of the methanism of the selection or home paying how to me selection or which are the selection or which are the selection or which are the selection or the methanism of the selection or home or home paying how to the selection or the methanism of the selection or the selection of t

A leader in the teld of decision theory, which tells us why people make the choices they do is Daniel Kahneman, a University of Dationes at Berkeley poychology peoplesion who oncos took a socal esconton to the tack with Dr. 2 Kahneman was struck by the tarmen lacfor. If an edge exists if a ditermined by the case. the between of other people-someting that and instakey dowces A precondition for rational beating is to think in learns of (overall wagering) policies inreliad of inclustrat betting inside-post positions on a tork with light tume, puts a constraint on personal bisises and overcomes the vagerise of insiden

Figuring out which horse to be is only one challenge, determining how much to be is the other There are nearly as many money-management schemes as there are handicapping systems ?

summer had a student legare do a lacon enays on the full of the Area The models had seen to work well are programmer. The models had seen to work well are programmers the models of the seen of the model and the set of the seen of the much time working and not accurate the binding produced and starts the much time working and not accurate with filley proteined and starts the laboration about the stores." Departs the boost an exceptioned and starts that is able exception accurate the safe control accurate and the safe control accurate able exception accurate the stores.

Paying against the crowd infler than focusing on the transition's acknowledges the nature of the pai-imused boring system. Pair makaal iterative mean my hob at anong outsolved, " was the wathout of an optimetric outsolved," was the sen porturner named Perre Oile, who then optimetric as a restman body togother the pair of the terms of the togother of the pair of the terms of the togother of the pair of the terms of the memory and the pair of the terms of the reserved. the race Olier would declud a commission satis file and church the niet of the pool among those with writing bottles. This reduction of the money pool by a house files a known in modern terms as the takeout, an amount that venes between 15 and 20 percent of American tracks. Regist bodies church 11 percent.

To gain the edge, thedcappens depend on supera information—hard to come by and more afficult to exituate Ohars—Autr. While in hom Nebraska terrorg a holdpy at the track—might depend on the occily into a system. The other formulas " traillor might win, but is afficial to occily into a system. The to background out in meeting in the beltim partners homewheat in the beltim partners homewheat.

The 2 experiments allowage parts by the second sec

Integrating the phase traditional tradition of the traditional treal traditional traditio

the faccileting-choic bases and the facciletion, takenood, and in a fee accounts projection in uncertainties into expected rate of neurofact and account of the second of the placed by the hard reality of the face. The Derby on 1.18 for a machine line the Derby on 1.18 for a machine in one out the two files.

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Figuring out which horse to bet is one challenge, determining how much to waper is the other. There are nearly as many money-management schemesging automs. The simplest-flat betamount on each race. Proportional bet-Increases the bet by the size of the backtonal scheme requires a \$100 bet with a \$1000 Include: \$50 with \$500. Neither turn, and flat botting ignores the size of losing wegers in the hope that an even losses-but this often leads to a bet of estoromical proportions. Zemba doesn't betting. An application of a mathematical achemet developed in 1956 by Bell Teleproach is used for fouring the best way to transmit information over telechone as the quantity of information trying to noisy channel has the correct transmisracel II no other data are trying to move down a own line, your morreston will make pretty good time But if the inecets crowded, your message stands less of a chance of making it through Likewase, if no one else is bettro a contender you could make a hefty profit. But if a lot of people play your bet. The payoff drops Kelly betting on horses takes into accountimenting of the easyst laise online expected payoot, important at losses the particular money pools, since the particular system returns increay-ofvised by the amount hild by winning tokets. Relys research, miggated into the chip for the IPL-REV constraints the chip for the IPL-REV constraints the chip for the IPL-REV constraints besince) [Long this method the Personal Colony bet was SSR2 and of a ball bartrold's IEEE 70 https://size.colon.col

Kelly betting beasse in depend on amount of well's smallful wind induces the wapper accordingly winally guarantees that ho beats will never go tradie hausen and zentra doward a computer smallake that compared Kelly betting with other money-smangement down and min 2000 table for 700 Zopdem and min 2000 table for 200 Zopdem and table for the state of the format with the state of the state of the format with the state of the state of the with does hint angle? If you we kelly to what does hint angl? If you we kelly to

Whrners laugh and their eyes gleam in their mament of truth, and they tell the world, I knew it all along. This very human tendency, the urge to claim prescience, is predictable ?

place 2-bats mostly your wealth will in crease by only 10 percent—beer and cartare morey. But X-6 percent of the time you will hit a strakk and run your \$1.000 bankrol to to \$100,000

The classes 2 bet occurred smuther neocody with accept web years marced Societaria (3-Height web years) the 1872 likenow Sakes Victores in the Data and Peakeres had lighteed of a bot tox often whether and lighteed of the 1886 web web years and a size win factor on the cheatrul colinamed size 20 kb a gentide being the same mony toplace weapiets (4-0) four 2 velocities there should be up to four 2 velocities and an out tasks forming 2 and the should be up to four 2 velocities and an out tasks

As appealing as the Z-system may accurd a live hand-core handcappers seear related bythe Indiamenta intomation compiled in the Dely Roong Tom They acknowledge D Z-3 power but tend to trust their own tend-andcometime-true systems. James Qann and Andrew Boyar autors of more traditioned handcapping books, here spent time at the track with Dr Z and recognize the truth in his figures, yet fley bypass opportunities to bell his system even when they spot a Z-play

As for the academic response to Dr. 21 formals in hus, to mixed Roccard Index has the works of some who have the source of the source of the source of the mixed academic but notice that 2.0 entrop in a source to entropy the tow pool mixed academic but notice that 2.0 entrop in the academic but notice that 2.0 entrop in the academic but notice that 2.0 entrop in the academic but and the source of the board agree in the mutual is any 2.0 entropy in the academic but and the source of the academic but and the source of the source of the academic but and the source of the source of the academic but and the source of the about obtained but and the source of the academic but and the source of the source of the academic but and the source of the source of the academic but and the source of the source of the academic but and the source of the source of the academic but and the source of the source of the academic but and the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of the source of the source of the academic but and the source of the source of the source of the academic but and the source of the source of

The 2 adhtade signation multi-bring agrees the territory of the cread to make awayton the norm 1 doines double or show pool are undersafuld bet hem over they good and undersafuld bet hem norms, it as 50 showbet on a one-1-territor laworts could prove the source of the than more, it as 50 showbet on a one-1-territor wayther benefit and given in a gamter's eye then Evental would be no more than the break-mine of ang pawnyon as sock. Paynes othen general values there of more observed wattern in there of more observed wattern in there of more observed values.

Con Conterna a Userierra of Protyperse profession wite studied gamp biles, ports switch those values mpt biles, ports switch those values mpt biles and the second studied of the studied biles of the studied of the studied biles of the studied biles of the design of the forther takes and work by design and the biles the studied of the content by a the studied biles of the content by a can make some move at 1, software it becomes and of the work has a weapone contain soft of the work while a weapone contain software biles of the studies a weapone contain software biles of the studies of the studies a weapone contain software biles of the studies of the studies a weapone contain software biles of the studies a weapone contain studies of the studie

The winning edge depends also on other psychological listoriawind Ziersa and decause houses as used Ziersa and decause houses of digitate and used with the data digitate and used with the data theory in a layed with a single period the system in a data, both a time data the base hat is such a large period the 2updam in the data, both Camerer and mentil accounting, the psychological memory and accounting the psychological memory and accounting the psychological memory and and the state of the system memory of the state differently.

Concepts like utility function and mental accounting lead the horse player to enmesus conclusions. The aixingle twodollar bottor tends to believe that a low return with a high probability is less atcommution wat me

AB CRINI

FICTION

Something site / houses, watching us, pdging us, and houng us to change our way of a world we baleved that we frame THE GATES OF BABEL BY J. R. DUNN

In this appeared a live muster after here left the lightwy to the cost indice. I had appendix bodiouse sering out the time cost indice. I had appendix outper on the determon here. Moons award at for its second before tarring to Parkaws. That is T hat's functorary? That's 1. "Parkaws and the second appendix to the root. Mocking be to acath there where use the worth the out.

PAINTING BY GREGORY MANCHESS

chugh considering his stay. He was well orested in an academic sort of way—beadglobat contarys batters, but had don't mean much They don't have to ware recalibrat or foreing obtain actives the sectors them at anothe had actives the sectors them at anothe had actives the sectors. Defaultions bad with beaded was in reverpert. Hell had has the add inter-incrementers along halve batters are shown in a sub lack. The sectors are the sectors are the sectors.

He had to attrait that Performen were defauent it warms that Performen were dependent of the subalities, and a dependent of the method beam numbering and beak method beam states that and beak method beam states that of Sama Barbara. It was not beam beam of Sama Barbara. It was not beam beam of the performed all privates that as a Are there are that other menton the booket marked beam number with were stated that the there.

What was the name of that handbook you cave the again?

Parkinson rubbed his toshead and sightad "STS Polar Launch Parameters" Ho put his hand out the window and began to hip the sate of the car. "Did you read (?"

McCure shock his head. "Intect but I couldn't follow any of it. I meant to biting it along so that I could ask you about a lew things, but like I said. These it."

"You didn't lose it."

He glased at Parkinson for a recreart, free furned he eyes black to be road. "Not know, you'd do a lot mone to your case if you focught twoe slout remarks like that Your story a white enough as it a whitu, implying that I three your owdense away, much loss trying to be it me what I were these wates own."

"You didn't bother to check your files?" "Why the hell should 17 You think I workful proceedur?

"How about a three-part series on cost overnums at Skok-6?"

McCure answered with a snort of disgust. Parkingon for his part smiled souny before turning his head back to the road He sat up suddenly and ponted "There you go he said "Gentree"

They had topped the last hill overlooking the coastal joins. Southered across it was a collection of large metal structures, openwork towers painted carage and white They were big over a hundred teet high, and McCure hed never seen anythere law them.

And what are they?"

"Westle launching platforms"

McCure shrugged "Right"

As they drave down the hill to inspected line rest of the base. There was this that he recognized no runney, no portrol towe no electrit of any kind justreads a few buildings the huge concrete blockhouse survounded by smaller structures of the same type and the exemption lowers norming any time coast against the blue of the Positic A long parked task, mendered from the lag bloekrouse south to the hills main the shoe and to a moment the brought their might be a remering the brought their might be a remover but no it wasn't we anogen and the most an worther of heapen tarms, avending the turmbods and guiles of the gian to It law largurd

The read went part a chain this forfor loggod with battled with before locking to a gate. If was watched, with only small startis of glass in the window. De spite this, McCane stopped this car. He said carding this saturity wheel for a moment before turning to Parkinson. Waybe we straud check is with sametbody.

"Noticity to check in web," Parkinson said. We passed administration two moutes ago pret Lompoor You saw it was enropy."

McCune thought back. It hadn't struck

Every licked on the flashlight as they entered and pointed it at an object resting on a wheeled pallet at the center of the concrete floor it was the same dameter as the tubes ?

hem at the lime but the last shelph of buildings they had passed had secred desireds with no one in sign and no cars on the streets the looked out again all the guardinous There had basin sign beneeth the tont window but all thit her manual now winn twelse boats and ditoblehot brick. "How could they leave a interv base open like this?"

'They clich's the link lew months. They kept up a guard for a while, but that petered out just like everything else."

But this damag

Kds, Parkinson said nearly spitting the word. They not ther minibles on the tow rouce incursit keep emout?

Notifing, McCare put the cer in gas and draw through the gate. The need took them past other buildings most of them birds build allow water of predits metall have wreen any better abape than the gaterforces, and a law water much wenne doors hocked down, a make stams show washaud of the equipment testatered wrons had a draw ear primer testatered across the needhand law.

After a few blocks Parkinson told him to take the next left, and they drove out

into the base itself soward the towers that some above the sand.

For about a mile they paralleled the curved path head noticed time the top of the mil. Inacting for the blockhouse at the control of the base. He was unable to blee he eyes off it as they often essent and it bogants committed the transfectore He don't hear Parkinson being time to tum unit they were well as the spart and the had to back up tifty yards to get to the roth need.

A time minutes time they pulled up in tend of building that was minute better drape than those hey had passed neer the gale. The windows were initial. He concurstanceged, and though the other to individe measuring a valent draft to to indirective imating that a boot on the attent was made and the asset of the table of the set of the asset of the table of the set of the asset of the table of the set of the set of the fiber was period institution.

Therearing a supported to be before orientify as Previous get out, the was decade casually mattered a gaugebers detain that flagged one has an set before a baseball day well an out according to bear, was with the bars of the as is moved on that they forked like amount hand. Like Mechanics was precised to any apporton to the rost of the tarset to due protect flags the flags and body protect flags here and any decaded to a size of the flags of the flags of body protect flags.

Sony about that said Parkason "He kept me sitting in the waring toom all morring". He took a step toward the building, the looked questioningly at he big main. When's everybody doa?"

"Sherry saw one of those spheres fosting around the assembly building about noon. The big man said working an arm to the south "I sent everybody home after she told me."

We have the part of the car we want the car want of the car wa

"Ben Everly avonce engineer," the big man boomed back. "Welcome to North Vandenberg: "He released McCure's hand and glanced at Parkerson with a opokes simile Parkerson with a opokes simile Parkerson societed and turned away.

We chare eyed them for a moment, them locked at the blockhouse, green ownwherming at this distance From where the second to could see an Armencian Rag parends on the side. Everly followed her gates "typeses we in a meestable sort of way. Makee you wonder what Balsonar lock with these index" He as we Mecune thow and load. "Balsonar the Russen well. Roget it is not importent".

Tearing his eves away. McCune turned

back to him. These spheres you just mentioned What are they like? Glowing? Making novite?

Crossing for arms. Every loand book agants the car, which will be diammingly under howeight. This are nothing like truk. Baskis Basket men anything you we neer heard of Ne lights, no sound, no emer sepres at it als be a we can let it. Thanks approach to be a attemmer checky undernath from close up but I we never seen it. They atow up once a month, sometimes merce offen We thruk they to unmarried. He amide through his beast. "Or a shatwate"

Who's we?"

Bunch of people trying to selvage what they can People who remember

McCure was about to ask him what it was they contembered when Parkmoon spoke "Look we hewen" got much daylight left and brefs a lot to look at We cuch to get stanted."

Every modded and pushed himself away formthe super "Denkinght Thomas too much to see here in one day and we haven't even gottrof" he horbed up has parts and welked over to Parlement "Well, what do you think? Where do we better?"

Parkinson pointed to the concrete structure 'Blok 6

The big man ran his fingers through his brend. "That's is half of a lot to take in at once Let's build up to it, show fam the Titler field."

Fine by me " said Parknson "Just as iono at the cets a lock at the orbiter."

"Or, he will Every and He walked with bulky grace toward the Blazer "18 take the truck and you follow me"

They down about her mere northandian end theorem and a second and a of total devolution that he could bandy stand the glanced at Parkinson, wondering if he felt the same. What's this Trian he was taking about?

Parkinson nodded at the tower ahead "Tran 3407. Standard milkary lifter."

McCure turned back to the road "Unhuh Standard military lifter I should have known." Pasienton atsred blankly out the wridsheld, resting he chin on he hand "soul see"

Nother of them spoke again bolina eaching the towar benty had pulled up near the metal object behind in and was auverying the bing, the bands on his hose He tarred as they approached. Well, here we are A Tran, or most of one, any weight and Paintrison wailad up to f, McCane Stoward extractive.

Alread in these perts direct metal black about the field individer and motely toot long, each attached on one side to any other the ends of the wort in the outside were searched of to built cores, who were searched of to built cores, who more than a stream of the metal the wey dearn and the other endi. Indion to M 6-Curle based sparset the pilet form and uted toward sparset the pilet form and uted toward sparset the pilet form and uted toward the direct of were today, canadid, with Alread of were today, canadid, with Alread of action the palation were in that rough who then the palation were in that rough who



the cories pointing upwind Looking at the tower he could see where if, too, had suffered, with struts and beams bent and with harows by the bill of the thirds.

Every hold stopped at the side of if and was patting five metal allochonoody when MCOurse reached him. There was writing on the metal numbers symbols and stratog words. What is 17

This another," card Berry meng a twoleaps back, "two-large, who saids boostown mostly three million pocurial thrust a lifet." He patient back holesostelic case. "Came down in the bag atoms pring of course the said of the said said saids and course three of mean and bag wild be a webbier passe of three areas a webbier a webbier passe of three and bag wild change." Wearth fueld, of course, encerpt of the isostesist. If hard basin, paceba when that one base will block if that was served that one base will block if the two served and the the batter about ."

McCure looked back at the pointed ends. "They look like fuel tanks to me."

Parkneon who had been watching him reantly sinckened and tamed away. Fuel tanks, my God

"Wet is second, Don, " sed Everty "He's notwong. They are tool tanks, except for the engines". He bogan to welk the length of the tuble, toward the tower. "We may as well take a look at those now."

Patienson giared at McOune and loilowed, mutaning. After a few seconds McOune set out after from second well overy from the sale of the tubes.

They have already contrast the methods the set is the pattern with the methods of the pattern between the methods of the pattern between the patt

"Nop: Every said as he rested his bulk against the railing. "It's true they are not." "They look like at angines."

"Close ' said Every, 'real close. They operate roughly the same as jets. He gestured at the tublet, buckled and tom by the obje of the platform. Their and acclese flow from the taries into a chember just behind the nozzles and they gm. one nite and the exhaust pushes this succer ----hethrusthe paiminto the ar----'straight up'

McCurre bit his lip, looking again at the nozzles, then back at Every "Okay ganted Obecusty a lot of herd work wen to these things and that may be whill they're loc. But why would anybody want to do such a thing?"

"To lock a course in physics is college am ingit?" McCure nodicel, wondering how he knew "Well, ismember your hewither "loop path air object hard enough and fast enough it doesn't come down it goes into a circular path around the classit-an cital."

McCurre thought for a minute before speaking "But that d be filteen or beening thousand miles an boat"

"Sure' Everly said He pointed at the nozzles above them. "You think these couldn't da if?"

He looked up and tred to poture tiames shooting out of the tubes but left

 He hit the eject button and the tape popped out, nearly failing to the floor. He held it close to see what was written on it, but the trembling of his hand made it impossible ?

a phyer of unexperient dropped his ryes "But what good would that do? Some thing foeting around out here?"

It events flavorson here been avering her moment her hannad breved egenly "Solellies. Form obtat you can use commence and the sole of the sole operation of the sole of the docan't mean a carm firm to pose doce the back. Far amount treated. This docan't mean a carm firm to pose doce backing the head path of hand here to sole of the sole

The bagman laared back on the railing with the arms crosed and he jos pursed. A few executs passed before he answerted "Don." In said slowy, "Is going through sconding the rest of us have in the back field with no direct connection to back field with no direct connection to the program attrough he was working on a project for the space interacepterue that back to you anyware with only at that Device to you anyware with only been out here for two months and still has to get his teet on the ground."

"All well and good, I did him a tavor coming out here"

T know," Every said stepping away from the resing. "Lapprocise 4, Beleve ms, meat people wouldn't leve updan this fair." He turned and looked out over the base. This beginning to mean inviting to you?" he aetaid sweeping an arm across the vista.

"I can't really say I don't know if it means anything concerne but I'm gating a weild teeling from it al."

Every nocided "As if you've longotten a word, and if seems needy to pop out of your more but you can't oute crasp t

"Right But a lot stranger than that

'How so?"

McCure looked the big man in the eyes. "I'm scared," he and "Really solved"

He pointed at the tubes borning up agrined the sky "Timed to pattere that thing working, and il couldn't make mysel do it And the rest of the pisce" He grouped the top of a sixing "The taxens, that block overthere. He environd in a gust of wind "It trighters the and il don't know who

Every rootsel and welves to the logof the same if their Linderstand - After a moment McCure let go of the raining and follower Thankend than aiverty duscendad the metal single and welved over lotter care. Performance and the same rooting their approach Witer theywere a lew yetch avery, McCure tageted and Every turned to the height boost takent Every turned to the height boost takent Those satellings in the satelling about

"Sure Thavis one of them not two minutes from here "

Here? Now?

Every larghed "Neah Want to see it?" "Well McCure thought for a minule "Wharpo?"

'Okay it's in a hangar a couple miles down the road

Patiensen claint tole with him this time, instead getting into the truck with Evely. The wind hield grown coster, and Mic-Cane put his jacket on before starting the engine. Out is sea, the sun neiry lou-thed the horizon as he followed this huck down the long, base load to the white hangar rear the shore.

Every stopped in front of a but stayed naida tableng to Parkinson while McCure wated. The close to the welfer the smell of the seas was overwhething, the said cator overlaid with the addre of roting kep and the smell of dead throngs.

The pulse wheeled across the sky, caling to each other silicasitied by the seting sun Finally Every energed tom the Bases, flashight in trind, followed by Parlanson "Will need this, he said waing the flash, a big utility model, at McCune." They out the damp pawar off and ittle a dain in them? They welled to and ittle a dain in them? They welled to and ittle a dain in them?

the skilling door of the bancar, which had been left open a few feet

Eventy ficked on the flashlight as they entered porting if at an object section on a wheeled palet at the center of the concrete floor. It was the same diameter forty feet overall. The shape was different is well become the effects approximation an meaular polygon set with crigitar herches flush adanst the surface. From a number of metal plates antennas, and poses poking from 6. The other end was covered unbylighted by a folded panel find or extracrdinery slotst ri-it looked same series of discomfort of foreboding, that had louched hm back at the centry

Keyhole It's a long duration recon satelits, a modification of the KH-12 that want up on the shuffe. Never was a 13. We waked lowerd the machine, the circle of It was supposed to go up on that bed we sail sew on the twentern' thing 'Mice and men

Oppressed by the place's dateness McCure whispered. "What does it do?"

He walked to the machine and began digital filters. Evenly must have seen him stelano his head "Cameras" he said quelly Fancy cameras McCune made no response. His paze was drawn to the He kept seens that block of concrete and steel in the ortwice darkness a citide the sea had penetrated the handair, underkn ing the second bleek work in the cons. of the guils mocked it al. After a few minutes he said. "Two heard enough," and walked stifty cutside lietund him he heard Parkment's voice raised in anget but could make out no words

The sus had vanished leaven the western sky awash with ted and vellow that tacked its he weighed him sail down trying to understand what he left. The wind from the sea was much colder than it had walked out of the hances, the big men shuting of the baltion as he reserved

McCure nodded. He looked out at the into right A glow from the eastern hills backs: the partnes strangely, He shock his head 'I don't know ' he said 'The place must have cost sufficient

Billions then and nobody knows about a la abandaned' he looked beck you'd see it 11y miles off when it went up

McCure stand at the sand in front of

Parlamon held his hands out as if teerdh, two years acao he becan but Every put tim off. Hold on Don one off his rounds "We'll drive over to Lompoo. Get a divis maybe, something to est #'s

No or He sees the orbiter

'Om

"God damn it, Ben. thet's why I brought him out have in the first place. He sees the STS If thet doesn't shake hm up

Noretheless, he looked pussbormaly at McCune who rose from the hood of the car and said. "Okay 11 look at your orbit er, wholever the belither a But hot, I want

Everly strugged "No problem | can do it on the way over if you don't mind Not at all? McCune said. He turned to

Two driven a car." Parlemen said, and

McCure got n/p the Blazer and sat back locking at the okea in the second sky "By the way where is this thing?"

Everly started the truck, frien pointed to the blockhouse that brooded in derk-

"Well" McCurre sud after they had driven a few hundred yards from the hender Everly didn't enswer and set steering the truck with one hand, a to clear this up before we get over there. In writion (And one other thing, 11 look going in that building.

McCune relaxed and sank back rite the seat. 'Al noht, but tell me the rest of 1. I d appmer behave you then what's hessame there." He nest red treat the

"Year's you would at that," Everly said even though you were here to give me a

McCupe turned and stated "What?" Without a word Every leaned over and opened the giove compartment. He look







Souri Lormon Read of and several Maximum Print Heat Califies and the severation of the several several several several biological several several several biological several several several biological several several several biological several part reads for several several





COMMUNIC/ATIONS

CONTINUED FROM FINGE 14

Aryan Nation tracts than to reasoned pumplem. Whelever mix be notifi or wrong with Arab and/or listime cuture, Bicom is wrong in his mellion support to a shout child rearing. Anata low and hig that children as much as Westernest do.

> Bassam K. Abed, Ph.D. Assistant Professor of Anthropology Upsala College East Ovance, NJ

It may well be trial hugging on this is it is a imposed on a trooped and involves the Arction one of the base of a produktive senagement of the base of a produktive senagement of the second second second and second control base of a produktive senagement of the second second second second to the of them is where it makes to the desarem out the to well to second second second to the of them is where it makes to the second base. A produktive them is the to the of them is where it becomes the product and the second second second products and the second second second second and the second second second second and the second second second and the second second second and the second maches in Labaron, Imp, and Isan I was not the Machan who yeareled the atom borb. nor Biodown Imp machine yan it is childen in Philotom, nor Bod own who kill housens of Bodown society where ohid staws is norming atempter year withinadown in order the machine relaxioum the desped both in society where ohid staws is unring atempter to look like toys in Algranetian nor Bodown thiowhou atempters in where

Barnard L. Voorhoos idv/wrkt CA

- Feward Schort responses Them is no could them them to be them to be the second that them to be them to be the second that the second that

modern Islam's problems stem from one settple cause: "Repressive family socialzation and child rearing practices."

Heppy Trails

"Table Boyles Save the Word?" (Comum, February 1988) is commanished in as support of "boyles isodrawas". In with weight but, in instant yakes the boyles area, authoritors have only a public to any standard and the support have ledged compares and some ing them. Cycles combine table yakes address the public boyles and some ing them. Cycles combine that poget in address on the paths booking the weight officing public to the under the matterial down the middle.

Christopher Bernett Alexandria VA

A Wheik is a Wheik is a Wheik

Your article on the European dog wheel (MCDC Wholks: Animatile, Returning (MCDC Wholks: Animatile, Returning and amateur malacinguits nike But the accompanying photograph shows a companying photograph wheel long appears about a closely retixed to the one ench reck-dwelling dag wheel to the one ench reck-dwelling dag wheel as an amateling to b a rherocomp

Paul R. Monfile Provelance



Two orders domes, such inton enough to hold several high achool symmistance, are lined with handrods of arched windows. Rosembling two flying saucars. the buildings look as if they had suck foundations rule the ground. Hundreds of people stream into

the domes-mon into one stracture women into the other A bell tota "Firve minutes" calls a woman. The congregants whik quickly now. Some begin to jog

"Fifteen seconds"

The doors shut with a hollow boom, and the hillsidos of Mahan in Farteld, lows, become as select

methodors let their mends rev into



BY DOUGLAS STARF

bodies rest. They are also participating in what they say is history's mediators gather in the domes, MIU scientists record attondance trivids, crime rales, and even the incidence of disease. They state tos, hey claim, show that group mediation can influence such bunds in a positive way, intrally broadcasting vibrations beyond fre golden walls, across the lowa

"It's a bold thing to say," says Path Schneider, who handlos pub-Ic afters for MUL "But our studets show that the influence is there," To meny, of colates, such claims

seem too sensatonal to believe. "Faise and profoundly meleoding" is the way the late physical Heinz R. Pagets of Rockateller University put t before his death last year No quelhod scientist I know would make such claims without knowingly committing fraud/ Frederick Bed, astocials professor of veigion at Concorder. University in Montineal, speed d srother way "The distinction









Their vubrations, these meditators claim, extend beyond the golden walls, across the lowe farmland, to every city and town in the USA ?



based released detrine and secrets a not deenty made. The says. They says is alread the word religion built will sinserially what they are As you get more rollward, so take on more thinks castown. The movement requires a commiment to a philosofty and a group. These who are committed says the Maharah as a percent of urb."

Not, say MU officials, even ontics agree hat meditation can lower blood pressure and promote deep releasion. With memercus legitimate medical scholas backing up these claims, a million Americans have thus for agreed up for the basic previous data Mediation course.

Is also head to genoe the orderifisation of the MAL accentish. Many Nasia acand Benking John S Hageth, charmer of MUL a physical digath, charmer and head periodic digath. Then a head head periodic and the Excellent Laboratory to Phom Harvert and head periodic numbers and public to the start of the start of the start physical Revised numbers and public Revised Physical Revised numbers and public Revised Revise

Previous pages. At his light, charapoor investtors Pool Faile from Canada and Sa Karn Tim Nom maedand Chros at tight, studente catisols the Golden Domms of Puer Koswiedge The cases. Montres mediators http://depair.evalue.relians.may avem associated with its connocium and nome. MU is accreated through the doctoral level in other works is degree from MU is patial avail as that from any other four-year university and graduale school—whit the addea benefits of the Mahanshi & biossage and a prek at the bases device of the grant and an the leval degree of the processor.

Many Annuaries loan head stad. Mit hears to turn when the polytele cert and the single-hanned, leng-baseled load of as sourced. Manualith Menuel and Manuality Manuality Menuel certrar dags in the Sources (Withouts in the larger high private manuality of the source's high shares manuality of the analysis and Manuality and the Analysis distribution of the source of the Analysis of the Analysis of the source of the Analysis of the Analysis of the source of the Analysis of the Analysis of the source of the Analysis of the Analysis of the source of the Analysis of the Analy

As modified from the ancest inclutudious, Mehanshis practice inclustedington marins on pottow sound that incluse a molative state. This safe het/chink lobers could open new found to come consocursed's append to leaders of the social revolution the Soan The Seaders who met Mahanim Irrough the situation Rev. Sharkar, be came and out modulators. The Beach Boys, Nax Farrow, and Merry Griffin adopted TM as well: Benchulary the massage hait two 20 minute meditators see they cauld timp? Tigethial alwalening: toolhad! Within a Swysers the Mithareh and his instructors entry TM concrete all huncheda of universities in Northing Jans of thusandis of universities.

During the lab Severies are much of the Sprate, Ruppositive TM and/or period on the interval scene in a new birth of the several scene in a new birth of the several scene in a new birth of the several scene is a construction of the self-table, much agement devines the birth several scene is a more scene scene of persistence of the self-table, much agement devines of prices Maximum and several furthers Maximum and the several scene scene of persistence of the self-table, much agement devines the birth self-table scene of persons where the self-table scene of the self-table scene of persistence of the self-table scene of persistence of the self-table scene of table scenes of the self-table scenes of table scenes of tables are scenes of tables of tabl

This has been also you hope yong " says that Bahmada own he latestone. "It's a very private lang we percently seeks permission from the interretional. This organization." Instead, the MULT faces' have had some bod experiences with the press On one program. It's instance GBB-TV strowed that nonmediating gymnasts do what TMers did, shorty with meets The Stroy, or "nonpeng, as the TMess new call r, has become a series to poor."

If highl without mechanical and a of concern to those at MUL however you'd never know it from a casual walk around the computer from the old brock buildings to the gracey hits to the olden out to dents chefting in the sun, a conservative ambaince seams to hold sway.

Bettere yerre rago her did bulling herune Plansens Colega a unal local arts school lounded in 1975. The ochool during her Sinkis began admitting with herune of the transformation and the herune of the transformation and Armal House pathers. As of reputitions pread. Hells Angels occusionally graund the transformation and Armal House pathers. As one reputition admittight and Plansin, data of the admittight and Plansin, data of the admittight and Plansin bas about the The energing Results for a pool-

For more than a year, the compusistood empty until it was spotled by the Amencan academics who followed Meharahi Mahesh Yogi. They raised \$25 million from private donations and from the ratonal TM organization and bought the old college in 1974.

The new MLL campus attracted hundress of students, mostly from the rolls of TM occurres throughout the renter. It should affracted nontablents who wanted to live in a community of modators. The Millias of up ochools for their last. And in 1960 and 1961 they built the twen dolden Domas of Pure Knowledge.

Not overvice application the intranational Phrasima Same local and this the idea of 'a bunch of cultifut' in lowflot where a which the Medidation U liade addrt aroun so bast. They don't donate here beioagnost to their local and they oddrt own local kie cultimation in fact, and contrals to any adversarialy rules, much had to wear lockers; and they, and women.

Courses at the school are a bit more obtain than the dees ooth and granuth. Tier hav year physics, a mature of hercentral physics and Hercu philosophy. Alher boart of the scient school and disperin his time, bias three peece suit. On the deak are three hores you don't gerwinky see in cologo, physics is final contenpeece and here thimmed pativies of beektod hely man. The Mananth Mahert May and his tablet Calu Davi Deers, will physics depress tiom the import Callage of Section and Dear Ministry of Section 2010 and Callade, these shifting Western Physics will Eastern physical search and the setenced by social section the sufficient label and the section of the setenced by social section the sufficient biddly. It was a parking as a physical table as an approach section the sufficient biddly. The section section the sufficient section section the set of the section section of the set of the physical section section of the set of the section section of the set of the section section sec

The home—the mutual Subtractory of Waters scalars of Salaws philosophia-mutual the second at MUV where discussionshifts where the second scalars where the second scalars with the years MUV researchors have inteed TM when for of charteristic interview the read black preserve to discussed real patient real distanticity to more as cases of themis of latiticity of mutual are all interview to any more the scalar and scalars when the mutual are all interview and allows the interview to the second MUV of realized and the scalars when the mutual are all interview and the interview to the second mutual interview to the se



Similar MU barratal are reveal pabilitation MU barratal are reveal patition of the second second second second second barrat Places received a Second second second barrat Places incoming har classes live or regress to decay to we substrance of testing common second more second second second second patients in a substrance of the second second patients in the second more complete the portune time reveal in the second second second in three decisions sized and the second second in the second devision in the second second second in the second devision in the second second second in the second devision in the second second second in the second devision in the second second second in the second second second second second second second second in the second second second second second second second second in the second second second second second second second second second in the second in the second second

The most important research at MN, however les outside the bounds of converternal source. Millians call their arcare discipline the Science of Creative Intelligence (SCI), or the Mahanish's Technology of the Unified Paid

Their research considered about of many manufacture physicals contribulias bortes many of all briefs from spycal accesses are writered. E obly Most of today's fracewards physicals are address and masket forces on the sign address todays for a contention on these forces account to every subors the forces account to every subors the forces account to every subors of a force in a subors manufacture.

Bone physicials have come to there that the four forces may themselves be acubeds of a single were more taken. force one we cannot perceve because a weeds its power only in dimensiona be yorld our own. This theory—child the toroes of nature are pair of a larger feld in called the united field thereby.

The this at MUI say they have donewhat amme of physiotis cornor. They have behave they diam appead with the feature of the disease they diam appead with the disease they dism. According to SCI, deep meditation completely quarks they and allowing of born the site of pure consolutions and the site of pure consolutions and the united the dist current dy contemporing physicals are one and the same.

El Rosinberg, a professor of physics at messey lowa Statis University in Arress ductatis this characteristic scalable and believe mittel in casay. Some have come here to gue balas. Bull haven to some have one levetato his or har way over from Fair heil. Whether anyons can be price the apprinces as immater of philosophy and buff, not any known specific prescub.

Indeed such a spectracular claim if true would give moditators unprecedenied power over the fate of the world it would meen that they could mertially infurnce the superforce setting up vibestores that would infact all the similar locks. Thus they could supprated all known physical constraints. They could countration gravity instraints electromagnetism, and lespitog over normal barners of gappe and time. Although they don't coptant how, ML also claim they can over influence distant events like wars or the functions of the dock makent

Its no supprise that such claims have sparked the two of more than a two in Supporter 1967, for maintons, pulsar inearchains asserted the minist would inman built durate the minist would inman built durate the minist would inearchain asserted an interactive pair. Concretel, provided an interactive pair pulsar account signal in Construction thread a account signal in Construction thread a account in the minist was during thread a account in the minist was during thread a account in the time thread status thread a account of the time thread in the account of the time thread status thread and our metabations influence "

Every the Malanceho Timural and Laters and the Instrument of Laters and Andreas many monotonic for the security and the disclor wavel because situation means many monotonic situation means and the security of the security of the construction of the security of the security arrows of Marcine C. Offices, device of the security of

Most cost to object resolution Most cost of the second second second second way well write most and the second second second people and united later reflect the same studied gentilateres projected by many of the collapses.

The Matanda and his researchers soon class up with a new explanation one that amoughd the skeptics to and TM-Sidhi mediation actually magnited the Super Rationou effect the longer was it necessary for 1 percent of the popula-7 class ton to medicate now peace and prosperity could be enhanced by the square root of 1 percent.

What isseage? I correct the new heory would allow small numbers of expert meditions to produce econous effects Toward that end, MEU researchers burched he genetics experiment all all. They called for 7000 people—the squase road of 1 percent of the work's populeten—is come and medities at MEU.

The case of Takes Tacked to Fair the bar the three werk gathering—called The Taske of Lappe— a Docember 1965. Oversiving the Shall loan They care from The Shall loan They care from the groups throughout the work the Catabasen Example. A three takes the takes the Laboration of the takes the takes the Laboration of the takes takes the takes takes the takes the takes takes the takes takes the takes takes takes takes takes the takes tak

The strategy was for the leaders to decide on goals and for the modilators to meditate until those goals had been

On his clesk are three items that you don't generally see - in college physics: a floral centerpiece and two pictures of bearded holy men, the Maharishi Mahesh Yogi and Guru Dex?

achowed in one respect they talked Despite the goal of mid weather the wind will factor plunged to 85° boliow 2800 Sione owners actually sold out their supples of overcosts and glows to TMesi term the Carabbaan

Noretheless, the mediators worked hard Theymediate for house on and in the harger and domes while doctors of MU researches scorred newspapers and manued computers, analyzing data turbe Sager Relatione effect. Each day one parameters' such as stock earliest reports and onne and socialer telefactors residia. David Come Jentson, charamén of psychology at MU A particularly good mean team social contra scheme.

Then the day after Orisstnas: the onical moss of 7,500 meditators was teached. As a result, doctined MU mesoarches; theme was a doctatos in inboccas descrea an increase in the world about index a doctaase in 2 will's fatultes, increased patient applications and inclusions titles amou whon after three weeks the mechations with num. MUIs teaches the mechations with num. MUIs teaches the mechations with num. MUIs teaches the mechanism with num. MUIs teaches Dilbeck reported that 'world stocks world back down and infectious devices world up' As far as Dilbeck, Orme-Johnson and other MU experts were concerned. The Tester of Urgala had been a success.

And they say Buper Radiance continues to exert its infuence today Taxos each day students, leadly and communitymembers gather in the Domes of Pare Knowledge, they runnber 1 820 emagh. MU says to ensure the contience of the two excite limited States

In one of MUt) lases and bagan oogs a pape of CHUt Internation CHUT International International International International International International International Control Records on Strapp Deltas Lascone Appointers in Strap Others Lance Church Records on Strapp Deltas Lascone Appointers in Strap Strappointer International Internation

If the seems suspicious to individe that the pages wert through a rightware review process before acceptance was compare. While one should have serous reservations about neisenth of a saving in highly unplusified assumptions' tags throo Russet, ethor of the saving hand the server han Manuel savid hardty that is acceptate to demain special research service.

In the wake of the meyor platicities will the also seakarist a new long form goal permenent communities of 7,000 modelstors. If hereins and at a motionson center intoia To sublimiting model strong makers and a submitted widely, actually set 30 million per year. The result of textisation pacels there of as head of textisation pacels there of as head of textisation pacels.

After such rises, it events almost pethy to sait to actually see a dismontation of thigh thing. The thing is another key to the Spence of Creative Intel geno-Like Super Radance, it demonstrates that mediators can surmourt normal boards—in the cable those of onvity

The public relations director leads the way to the clome, a vest hell wiskhed with a offluse gather light. Two athlatio-toole mg young men wearing "retnits and kong, Demo-Johnson sits on the stage rooting over some cherts.

"Here we piptled the otherwhoelevel" he says "its higher immediately prior to "togic flying" Coherence Omer Johnson contreation wat the

Anatomy of a young star-wars scientist who, blinded by his idealistic vision of his work and an ambitious nature. was seduced into helping create what could be one of the most territying weapons in history

INTERVIEW

PETER HAGELSTEN

In October 1986 at the tender age of thety-two, Poter Heatheven made headings by quiting the Lawrence Livermore At times during those conversions, he seemed almost over-vational Laboratory During ins 11 years at the Livermore, wholmed with set recommand And it seemed to ma he was California, lab Hapalatan had distinguished himself as a key figure in the development of the nuclear-bomb pumped X-ray lases a contensione technology of the Strategic Defense Initia two (SDI) At the time and for meny months alterward, he re-A sect to discuss his resignation, but several colleagues ported that have an entit contribute with wooncos work. Happingan our with which he happed to inside the inter workings of living cets Hed creamed of revolutionizing biology--not wartive I first spoke to Hagelstein in 1987 at his atma mater MT where he had returned as a professor. We continued to talk internationaly-both on and of the record-throughout the next physics tinal. In 1972 he secured a National Ment Scholarship

year while Hagabisin pondered the prospect of going public he seared at Levermore. "When one is young," he said, "one is ovrtanly chosen and nave. What I want through also showed can only hope to do better a whole ke better as one goes on Growing up in California. Peter Hagelstein showed an early geneus for methemetics. As a high school senior at Canoga Park High School, he found time to tutor advanced-placement physics at a neighboring high school learning most of the ma-terial as he taught it has then samed a perfect score on his

PHOTOGRAPHS BY KIM STEELE.



It was made clear to me that if I wanted to be involved in any laboratory X-ray laser program, I'd have had to contribute within the weapons area. So I made a Faustian bargain. It wasn't worth it—not even clease ? and wont on to complete undergraduate studies in electrical angineering and consular spance at MIT in two years.

To community produce work, Hagangene needed Francul ad the Hertz Foundation, established by retrial care magnetic John D Hetts, chlered bu lanerst stoaed So ha appeled sol wide on tournations chief security. Wood Hist foundations chief security. Wood Hist foundations chief and the hydrogen bornts. Education and directory emertus of theal elements this.

In 1975 High status was accepted by the Hart Facultation, and Wand semmity offered hern a summer pile at Livermost A first Hagatamin turned it down. but when his vacabon - and smirtor - pilot action and the down at the solution of the mature taken to a weak both of the down mature taken to an even at a solution of action of the solution of the solution action of the solution of the solution mature between common and Mill. Then has astiod in at the lob coord resolution on pilot. You prevent her that acclusion

Hagaman magand Tail To Kity Is observed holy separates (2000) been of body separates (2000) 7000 augument). With list h doesn't light to body and the second to could "protomyon" also also and topologic the list body and the second to could be also addresses werd and to any set doesn't body the second hole could be also addresses werd a factor of dhinguing batware wet and could autom the out because between wetter and cultors in the list memory presented

Hegetiven's proposed take works operating the weins works with the brough the citizations, bunch buck through the citizations and coll man a proposed takes the computer works and bunch the magnet of the citization takes and the takes the magnet of the citization three-americand and controllations. He takes and the takes the magnet of the citization the second control takes the takes and the takes the magnet of the citization takes and the takes the magnet of the citization takes and the takes the takes and the takes and the takes and takes the takes and takes and takes the takes and while the layer right plane. Through the work works down and takes the takes and takes the takes takes and takes and takes the takes takes and takes the takes and takes the takes takes and takes the takes and takes takes takes and takes takes and takes takes takes and takes takes and takes takes takes and takes takes and takes takes takes takes takes and takes take

During his tenserial Learnaire, Hagesterwacked intra-accritic distantion (7) Group, a lab socion headed by Wood and decorated to "pariculi projects" including nuclear weapon design Hisgestein shumed weapons wolk, conceintrating on XRASER, a program of thousands of lines of computer code exsantal to developing the X-ray lease George Chapters, a senior research physical was Hapiteon's nerres's in what turned out to be a rise to develop the X-ray leaser. A member of the Livermore satabistment, Cheptine wis the first/to suggest a practical way of "pumping" the laser with a nuclear bomb

According to Star Warnow, by William Broad: Chaptene's Inst bomb-pumped Xmy later experiment in 1977 was a warbout. Sensors monitoring the undergound nuclear explanon tailed to recast the data Chaptere sought A year and a half later Chaptere sought A year and a half later Chaptere sought A year and a half later Chaptere sought A year

At a 1975 meeting to distermine the tossibility of Chapteria abainst, Hogel also notecat a glich in this competent calculators. Hageleten was binghted and would shock everyone of a subtorquant meeting by proposing the own takperment. He give was to animative bias, calculated in the underground rulese bias, code normed. Dauptini, set for the Neweak. Test time in the 1960.

The Dauphin test was a stumming soccess for hispelation it was also he worst rightmass this opportment had led the groundwork for mittary upplications for the X-ray later. The proposed space based "obtinisme weepport" would consal of an orbiting platform: a nuclear teerb single with up to 50 kmp internet.

Each laser could be locked interprint entry on energy langets in space. With the borns, the lasers would fire simular results, drawing that enormous, drawing the structure power from the storms fixed before the a second before the space.

Aftar the success of Dampin I Hi Livmorphise establishment of Almod Publishin. "Si-Russine targets" if his aspession to public secretistic waters and market approximately and money mergeoway, and market all provmoney mergeoway, and market all provmoney mergeoway. Biol Market all provmoney mergeoway. Biol Market all provments and the secretistic and the secretistic money mergeoway. Biol Market and the descence histo biol Market and the approximation of the secret of biologic mergeo target and the secretistic and the market and the secretistic and the secretistic market and the secretistic and the secretistic mergeoway. The secretistic and the secretistic mergeoway and the secretistic and the secretistic mergeoway and the secretistic and the secretistic and the secretistic associations and the secretistic and the secretistic mergeoway.

The sale soft spoken baby found Ho getters have with the wide will do small chickeen reair Cambridge. Massechusets - Ho taeches al MT and onerrusal his research on the X-ray laser A6 ho is all lasers to accincib by the government concering details of the dowlogment of the X-ray laser, the datas in backsto have basen gloaned lists other sources notes hu Show Mansen.—Bill Mosekey

Denvi Are you happy to be back at MTP Heighteen 1 struck have come back years earlier When all's said and done. going to Livermore was a major matthee. If I had to choose between spending an hour is one of the andess making a la Livermore or an hour in a classition. If choose the classitori. Teaching is were worthwhile whereas at Livermore I distinctly do not have the impression, enpeably toward the end, that what I was classing whereas it is a start I was classing with the start whether it was classing whereas the start was classing with the start what is a start was a start with the start was classing with the start was class

Onwy: Do you toach X-ray lasers!

Hageisten its unikely three would be enough local interiorial at MT to sustain a clean in Xing lasers Subdents here are basedly interested in preparing for employment in instative or academic after MIT Coverely here aren't many gots in the X-out learn baser baserses.

Once Are you still working on them?

Figulation (III) working III: develop a microsoft of the second of early the second of the second of early the second of the second of early the second of the

Regroups the two ig gains a list scores of with a walk before blocking pittors from the wount prot the cellular application will be wount prot the cellular application will be wound prot the cellular application will be compretent scores to participation of scales. The declarant magnitude the most score is the score means scale to have the declarant magnitude through water blockgoot samples must faint be being screed. Because here, and before being scheme the bears of the week with the block the bears of the week with the throw werk who.

Own: As a gred student what was your vision of the X-ray laser?

Hageleten Initially I didn't have a pertinularly good quantitative adea of what an X ray was: I have about deniasi of hore. My tantasy was to do horiograms of mocomodeculas, ar langle the injustmes of backgr, and then job each for a phone call from the Nobel committee. That was way rapes

Cever Was it disappointing to learn that the X-ray learn couldn't penalmas the intense of twing palls?

Hagelstein Disappointment shoul a maconception based on ignorance and maivele is no disappointment.

Orse: Do you have any patents?

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Hageleter: At Livernore anyerse you published a paper, it would automatically go through the Patent Office. In Broak days you don't benefit much. You got one dayler for each caterst.

Omni What about at MIT?

Hepatens, Isakes MT associatorsee at the regalax in the did day six had no patent rights may [Hepatian blocks of [O1, will will "Patrix involtes To transaturated patrix to the involtes a block of hepatho parons of the first hundrad thousand dollars, hereity/will operate of the nee hundred thousand dollary are tilene paront athousand dollary are tilene paront athousand dollary are tilene paront athousand patrix in the low bas an externely geneous patent policy i aught to dir the patents adomitation lead

Centry You've said that you look upon your years of Lawrences as a moltake

Hageletives. Are you familiar with Patrick McGoottanis The Presider (a Sixtes TV series)? The question of why I reagned from Livermore has been asked to many

I had those standard sorts of nightmares about tech falling out, about dying, about bad things happening right and left. Technicolor nightmares. Some nights i ddrift sleep at all ?

times it sounds like a rerun of a Preprier oppoole (immernicade) of one of The Proorient sayings: "Outstands are a bunden to others' answers a bunden to oneself." When caked why he resigned trum Britshirteligance the prisoner stad it was a matter of concence.

The made to public statement to to why leavaged and in not porgibilities to peer manoid to be involved in weapons work when studying at WT or when combradels with the notivity light form have well to Learning. New for the sen combradels with the notivity light form my work within a notivity or the sen or the sentence of the sentence of the sentence sentence that will be a laboratory X-my later program of all of Learning.

Other: By enormous secretices do you mean weapons work?

Hagelstent, The slory is a long one, but in a natural, I work to Livermore to do laboratory X-ray teor research for my reparant entrest on the peri of the Livermore ever program for this work. Only also the first underground lest of the nuclear-cheen K-ray task tim 1978, were

there escable resources in this avail it was later mode clear to me that it il worked to be involved in any laboratory X-my lawar program. There is contribute in the weapons area. It was a hard, personal comporting immedia a Fasefaint bargein. And in warnit worth il-meth even Oscie.

I worked long hours year after year on the orde XRASER, atomic physics cocks. say lasers. When the nuclear-driven X-ray reviews and meetings on this project, but I switched to a night achedule to avoid them I was ultimately summoned into Edward Teller's office on the alternoon of Thursdaying Day [1979], With lens of millions of dollars being committed, lab worked on X-say lasers. That s why I was called in to that review George Chapline nucleor-driven X-say laser program. Al that time he had a large bucket plus casts now seem obsoure Chapline and I somehow didn't get along so well [ksughs] Wore his X-ray lose' project to succeed the would also get resources to do a laboratory X my laser proport And I

Onve. Chaptere would not have revised

Happiten Trains a very coller very of pacing a Avveys, the Thimkeyson and meeting—Chapters was proteining. Take preserver, to avain entaties in Chapter lookupitens Somehorp techtiles (Chapter solutions) for solution (1997) and the Chapter solution of the solution and the Chapter solution in this rest work) and the Chapter solution in this rest work) and the Chapter solution in this rest work) and the Chapter solution of the Alah to handly advected to advect advected to advected to

Hagestein Of Gourse Triad hose steden som of nghaman about toth bining sur Nightmore about dyng. I has ing sur Nightmore about dyng i has paning aftr and Bil. That Sterharder reptrosterupt aborn and bill the Stading and Bil. I had Sterharder Displands appendent born and has bouched i was below if he project table, there was a charact hist my future was becoming braffix

Ones, Did the nontrares end?

Hagelden Well no but while happened was the it was labe—two or three in the maring I was busy working on my the so Lowel Wood my thesis adviser came by andsawd, "You're n a good mood, and marine working The intest striving bit of evidence was an instrument panel eportedly viewed by each abductee



while ecology by he assuption to Burling on Vermost of Burling Chargebrain the active Chargebrain the active sign or party amployees peed a bright is availed sign of the southwest which active southwest which active southwest here active southwest bind of the southwest many According to the southwest active southwest bind of the southwest bind b

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Dorng his seesons, Michaelidencobschyng Invoid) spore bosala the UPO, stand up betwee his occur parts. He also deantod Janet Hing on a recongular traba detraba de la lower door the UPO-recus door the UPO-recu

scriving convergences of detail, explains Webb, wes an instrument panel waved by sech abducted on the well beyond free examinution tables. This device was depicted

rever decused the roudent with each other Michaels, young companion, Javel (also a pasudonym) apparently didn't rocal the encounter at all. Both of hem let for home when the camp closed a law weeks later.

The expand to the empowher darks can't come with 1970 align Monther Strategies (Income CLINES) in sum patient in CLINES, in Numerican Tensor CLINES in sum patient in Strategies (Income CLINES) in sum patients and strategies (Income CLINES) in sum patients and strategies (Income CLINES) in sum patients and strategies (Income CLINES) in summarized and strategies in the Schwart Strate remembered the locare in plan strategies (Income CLINES) in sum patients and strategies in the Schwart Strate remembered the locare in plan rate Schwart Income Strategies (Income Strategies (Income Tensor Schwart Income Strategies (Income Strategies (Inco

To further explore the modent, Webb had two clinical wondates work with the withesees in separate seconds in enough detail to furnish rather convincing evidence, I invicciment of a shared abductori experience "

A detent opport on the case has been drend by Refer Dave, polyterea terretion to approach a particulary. If the University of Harintzahy, "Bold hows shaced, while the most opport of particulary," Bold hows shaced, "Meth may be an ensure of year of the Bale of Drevers ("Meth may a common by and the Bale of Drevers ("Meth Composition) and the Bale of Drevers ("Meth Composiality postballs Bale tab), the Montel & testmany indevide postballs Bale tab), the Montel & testmany indeunder and testaced a UIO eccount to physike in Largement in promes, the regist hows converted the integrand excounter ends a UID approaches in a red."

These verses have dotave considerable from from Wold-"Extensive background character checks" he says, 'revested Michael and Jamet to be horest, credible persons who dot not pergeterale a hores or suffer atoms sort of Mattery, ather extension or michael and SCOTT ADAD



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he phrases Hallowed be hi name. Thy kingdom come dow to the depication (depice) as we also have bright-build dotting indepices (bright-build dotting indepice) (bright-build bright-build dotting indepice) (bright-build dotting indepice) (br

To beck up his claims Robbins ports to the Copto Gospel of Thomas, a compliation of savinos by Index within Defeetin A. 40 with 300 Net Assessmend (146 he inde 1940) is the Depaid of thomas indexess the Jawa developed by the second second developed by the second second term of the second second second the second second second second term field second second second the second second second second the second second second second terms for second second second second second terms for second second second second second terms for second second second second second second second terms for second sec

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They also I nove to watry wood, testogene Mail of neurous memories agents, or potentinus, potential agents, or potential terminal of the Dask. Agent seet them to cathinate the instructure weeks in the cost. And cathinate they deal According to their reservchers, familiar backware, carried and According to their reservchers. Safetti the (potential Carriada) software the (potential Carriada) software the (potential Carriada) software the potential Carriada) software the potential Carriada Software to Software the software to software software

The conclusion one can dow is that the canades was being grown agriculturally says framew Walkington, charman of the department of geography and geological the University of BL Ackimski in File Socialist Meshington and colleggue Jack Joins Seconsed the Issailand Iam Kacong Are Loch in File Camabas of locatly his same age has alsobern Joard in Field Apart from its welf-knownmodern user cenned on lamp of end as a contention of madematic central and when added to builter. I search of the search of added to cather as a way of making it cauge to impet any Whittington. As for wery European sub-time the time specifically for the build-troper properties. The time search and build build

Chen Bast of instances to that the ploter was bonned in a reason opcounded by welganus fertions of the oddry "Weether of not file yused the carringtes it welganus proceeds of for some mystic purpose I couldn't say, any Weethington Bast addits Jarvis, "the doctine of these poccesses but call enablightements myst have controlled welgan before the proving of hermp





AUTI # MATTER



AUTIMATTER



NUMBER OF STREET, STRE

Who has exercise particiand shap to ecolosionally to appear without is too in the area of the Asteric Ocean aputhoast of Fonds Internal and to Bernode Transfe? After 43 years of silonce, a "alterna man has come howard with a GMA

As a voirty Narry pict George Thelead dams, the partograder in the most anous Bermado Therefore anounce the most becoments in Straffic New Narry Averager anglares disagnetic particular the straffic of the Departed Instrument particular the most of the particular the most of the most of a packet New Narry A Maren Manhar Living Today around Department and a baseline of the most of the Narry Narry Mark Contents to the Narry Narr

He look of before dawn is a TBF Average plane of his own from his Opa-Looka base and climbed to 1.500 base 244 Net, Annual immedianty, itempo hengis hengis to happen Louid static nade he sabo universitier and he compare hives and he had researched he heading heading had the sensition he connected head heading heading had the sensition to the right chough his softwards sensiti

The regist way his recalls seemed unusually dark There were no stars or surface lights to kell up hom. down Everything was pitchblack in every checken Tens general to bit crowing.

Research finally cave a horsess to up to the summable in could left by the position of the sum the two systems that I water is allow sum to the option, atthough my compares still indicated a course of only hundred organite."

reactions as chart or the area, Prestand scon liganol out that he was approaching Andros listend. Using his wetch and the suit to find his hus heading, he was eventually able to find his way back to the an base. As he reared a point about a mile north of Birmin his radio and compare bagan working normalik bagan.

Investance musics that which he bread to rotate his cooperation to a series officer the told music hasp my tale to repeat Nawy bottos would never accept the sites that a compass would not up the way i said mine haad done the

path he and the meshig Navy panes were effected by & imposing district in the earth's imaginetic held. I protobly avoid because if task and because I was able & group of appends protobly avoid because protobly avoid by the protobly work of the protobly work of

Federated scotts at takes free the messary Avergens and the Munner were zagoed by sensitivity take the planes temply kind theating unuedlo in a subtern developion into the Finde Brait Somewhere in this hundred miterweb comdor they perbetty rain out of her — Sherry Baker

CORE-LONGS

It is support one a definition of the units r Beorge wants Process buil Grappe pouldhin care has work along and say field if Grappe your has a change of heart, George your has a change of heart, George you has a change of heart, George you see, in a Carmage goose, and Carabe and 1000 pound black down that might not wan notice if the admission of George of Ferrers At and George Jones of Georgenite Terrines was first noticed George and Gradel's strange relationship three years ago what it came time for the goese to mate

At this the Joneses and thought old Guorge had been duit in the sun too long, but after a while while the goole wouldn't stop following Giftcas and oven started sleeping, with ter they liquetd

Then leggerers he have been appreciated on the years symbolic control of don't have been appreciated on don't have been appreciated on don't have been appreciated on the symbol of the stray too not go been appreciated on the application of the stray too on the series too and the captain of the ded got a stray them can appendic both as the them can applicate both applications who stat that Cognitized including formation with second that the series of the stray the stat that the series of the series the second both applications who stat that the series of the series the second both applications who stat that the second both applications the second both applications

Yes George must know sumething because he apportunity wants nothing to do with the read of the large flock of george on the farm during mating season, and he shows no internal in any other cow to a finance.

Also Gesce seems to be physicing hard to get. Accord ing to 3 M. George trees to coll and the shope that Gesce reluxes to take an oppore part in the relation to take an oppore take the beat they for George Ac Ac and George Take the power spars I may be assessed about the goose the consequences could be developed to the goose the consequences could be

"I'm all clean come and dirty

GATES OF BABEL

CONTINUES FROM FROM FROM ST

t to NcCure "Listen to it" he said

McCure took the accorder and sumed too Every water boomdout — have it Bob You can't make polar launches from the Cape not with Marm and the Carboen sends in the way that you'll got a case shot down the Pacific straight to the South Pole

There was a aftert pause. Then another voice centinued. But sn't it rue that a lot of congressmen have been criticaring the shuffe complex here since the Chalknoor clearler?"

He gasped, and his grip on the recorder tightened consubavely. He turn blod with it punching several buttons until instal off.

I was his voice

Bitt shalang. McCure looked up at hm. What is the?" The contrained advances in the other and dependent in the directions of the blackhole Eastly bort forward he should be writering the sound a which is barries an writering the sound a which is barries and the sound of the sound and the point "No combined on a facture point". No combined on a facture point, "As a combined on a facture point," and a sound of the local sound and writering the local sound and writering the local sound and writering provided the strategy sound the barries point and the point of the sound of the strategy sound and barries and the sound of the strategy sound and point of the local sound and sound the strategy sound and sound the strategy sound and sound the strategy sound and sound the sound the strategy sound and sound the sound and sound the sou

He looked at McCune and smilled "Nou were petity amused"

"I don't remember any of £"

This tag running sets' dated and the locate back the two-it. Netbody does have seen tags, or Adapt Science Angel the seen tags, or Adapt Science Angel the sets the set of the set of the set of the the startic Berr. Caser's memory the series despited this does in the the series despited this does in the the series despited this does the the memory and the set of the the set of the memory and the set of the set of the memory and the set of the set of the memory and the set of the set of the memory and the set of the set of the memory and memory an



for work but were just windering abound not isouring what they work how for " He diseach is every as in in part. "Some of the best men Twe ever lensers, lobelsmuscl Their whole less taken from them." He shock his head. "It look us days to get a handle on it, weeks to balave it. Some of us never have."

He set plenty for a moment tables contraining "Wata" a locupter of months we set up a network, and planded geting data that the observations—the uses. Type things page gets and the system of the detection of the system of the system database of the system of the system of the system database of the system of the system of the system database of the system of the system of the system database of the system of the system of the system database of the system of the system of the system of the system database of the system of the system of the system of the system database of the system of the system of the system of the system database of the system of the system of the system of the system database of the system of t

"We don't know how they did it entret, a takened whus a field, consisting we can't even understand, but they wiped the idea of space travel from the mino of the race."

The part the multi-in pair and started the segmen field and additional the segmen field and additional to the generation and additional to the generation and the segment of the segment to the segment of the segment of the segment to the segment of the segment of

McGrine restruct that the wea gapma of the mean weat hand to the weat theory of the mean weat hand to the weat theory there weat remeans basing through the mean sense means theory of the last or means another theory is the the last sense through the theory of the last weat the theory of the last of the very subtracking gaps version hand the theory of the last of the last of the sense of the last of the last of the sense of the last of the last of the theory of the last of the last of the mean field sense of the last of the theory of the last of the last of the mean field sense of the last of the mean field sense of the last of the last mean field of the last of the last of the mean field sense of the last of the last of the sense of the last of the last of the last means of the last means of the last of the last of the last of the last means of the last of the last of the last of the last means of the last of the last of the last of the last means of the last of the last of the last of the last means of the last means of the last means of the last means of the last means of the last of the las

Was there such a thing? No, he said insity "No that a esano. There isn't any thing like that. People would know. The government. There'd bis mone avidance. He was beginning to babble, and he cat homse' off.

Not triving his eyes off the road. Everly nodded "On there is You can theck up employment Tigues to source protecsons recorporation-conv, executionorganese, and receased to extra later the organized and business in the later to the organized set to the set of the convertigent of the set of the set of the convertigent of the set of the set of the convertigent of the set of the projection of the set of t

Theard about that "McCune said "He had a breakdown He made a crisry speech in the Assembly They were going to send him home."

"Yeah" sad Every smillig brank 'A crazy speech All about weather satelless and what had happened to his country...

MoCure shock his head "I don't care to abli mixine. These aren't any things up there. If you think

Churcheng, Eventry rapped here have: Course and your housed in between Theory and your house and the between the provided in the second of the

Everty models. "Sure: No hand faelings" He shut the door and dhow toward the blockhoude. McCare took a slep in the devolution fins calls but Parlimean was standing there and he turned away in the devolution of the area.

They were both rules They assident possibly believe that story God alone brow what they were actually doing here. Held thought Everth was normal, but no le was just as bed how held Performan over talked here into this, serviny? Washoff the ever ferent to ave no?

He locked pair the dures at the gray colors. The which some the have increased and grawn colder, and the odd to trag thirmaking light heirness. The source again corres upon the areal of the sea which telding an ochor of the last that he far over He wainset the dime which colors and alterness. The cases both new rift is call so that the alternal in packet colorad and alterness. The cases solide was dimensioned by the packet packet and the back and the locket colors. If the packet pocket. There Parkmann colors to the packet pocket. There Parkmann colors to the packet pocket. There Parkmann colors to the locket packet by the locket to the packet pocket. There Parkmann the locket packet packet to be and the locket to the locket packet by the locket to the locket packet to the locket to the locket packet to the locket to the



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Our founder-who perfected the charcoal mellowing method in 1866-started our distillery

on this very spot. And from that day to this we've avoided any changes he wouldn't approve. You see, when it comes to smoothing whiskey you still alongside his statue reminds us of that. And, we believe, a sip of our whiskey will remind you.

SMOOTH SIPPIN' TENNESSEE WHISKEY

Terrene Works + 8-425 should be along \$5-50 years + Statist and Retaining Art Devel & other law Young Devel 1 (participity) 242 Terrene 2022 It accord in alwaps refet, it by the specilight on Elevity mick. It was againstic, gearing white in the hand gains the subby wrigh, the wide body the angle for insight from the bill. A polytax road in the mod of the billing sciency into the might will be always and subtraction of dataset. Manning, the ditox the image away and durithed toward he can taken shoot in tout if it, dooling the way, McCuro alspoot and attend attem. This amplies the safe thread attemt the might be also the safe thread attemt of the polytax states and the safe the safe the might be also the safe thread attemt. This is approve the safe thread attemt the might be also the safe thread attemt the might be safe thread attemt the might be safe thread attemt.

"It's an arplane," McCune should "Hou brought me have to see an arplane?" Ho had to push past, but Parkeson gebbed has ann and hold hen there, miking foedly "So fir an arplane, What about the rest?"

"Do you think I'm crazy?" He tiung an arm toward the sky "Something coming down from those lights up there?"

Parkinson yanked McCune closes, nearly pulling him off his less "These lights up there"

Chin trambling McCune looked away "The stars" he said, his voice a croak

"Hight," aud Parkinson, shaking him "Bul what on they?"

McCure looked up at them, the cold data in the sky, nearly washed out by the glare from behind the bics/shouse His ryos estamed to Parlonsoms gmostig lace. They'ra lights up there?

MCLORE had no weeks to wet as use ming, adown the notation 11 wait as use here and the second second second second bright excepts to make time second second out and elevations in the genome. We do in all directors, but these week here a director and the second second second out and elevations, but these week here and more second second some the second out and elevation of the second second out and second second second second second out and second second second second out and second second second second second second second second second package and the second second second package and the second second second package and the the second second second package and the second package in bottom package and package in the second package in bottom package and package in the second package in bottom package and package in the second package in bottom package and package in the second package in bottom package and package in the second package in bottom package and package in the second package in bottom package and package in the second package in bottom package and package in the second package in bottom package and package in the second package in bottom package and package in bottom package and package in bottom package and package in the second package in bottom package and package in the s rotate, doesn't revolve, dopin1 move at all two seen Mars rise in fort of it and it's just a spot, a particle. Do you know what that means?"

McCure admippeds (hock its host and jurned back to the car his results out bindly water Reviews in the loss of the hitting him in his loss The data water open inder the shart it and pumped down the loss the nearest of the water water open and terriback with the users), but officing the loss of the analysis of the shart of powering the first of the car the too powering the first of the car the too with the shart of the loss of the loss powering the first of the car the too with the shart of the loss of the loss of the back additional of the loss of the loss of the back addition of the loss of the loss of the back addition of the loss of the loss of the loss of the loss of the back addition of the loss of t

It stepped a low-test away, and the bigman lianed out the side window. Now you knee Domy, he side in a part voce "the cent get through to team. Sometimes if's pance, sometimes contempt commones contaient, but I slavage and the same way. They we loat it, and they cent out them?"

He looked over at McCute and seamed about to go on but instreed just desproy his wats and instead away

McCure winked to target Hernach too tar ha keya and hod to all the case but the engre died, and for a moment hu was connected that hay had done something to it to keep him here. He sharps place, and was about ho or out the done when he engre case it and here car shat toward, nearly hething healman. He do not tool back

Broathing heavily. Parkinium watchoo the tarlights receive. His looked up at the castam sky, his expression unreedible, then turned to Eventy. "It's over," he said

The big man shock his head "No. Its not over not yet anyway". He bid alekt, looking out over the dark isal as if here was assessing out there that he warned buil did not guite knew how to oblain "Therefit all us, here an we are IT bo a hardroad, no guardism built (partner you her. Somedry we'l go out here and ask here abuilt hold how thin they are"

Parknoon rubbed his face rocked, then waked head down back to the truck. "I guess live made a tool of myself," he guess he oof in

No, you don't he big man repled "Its something we all go through" He looked back at the blace the town and burkings notify loat against the black of the test. "Fille of passage," he read actily then resump around and stanted his tuck toward the oate

As they went up the namp to 101 they passed McCure parked at the solution of the road. He was borking at a cossistin the had bound in the postert, workining how that gother there, and he tabled to see them Built don't matter. They had notring more to say to time, and after at the don't know them any more DO



element of a broader calegory called music friedler which includes any the alse precenter incorporative music incoers the tat lady angs. Period in music fination of a angs, darloss, acts, and probably performs activation.

Arrow of all the composes who might have tacked a concretent adapt. Gase was the most leady to compose a liabilitic tagget is seence follow of tagenesis of normal taken, of cause have begreated in this adapt works. — a sufade spacetal print is adapt works. — a sufing Branch and an Earth-ortaling Pobert E Lean Davi WarS, a collaborative ethor. Eth the started and Robert Warson.

Gases most scont work 1000 Anplance on the Root is billed as a 'soone-fector music darefit with its scolar her by playwayth David Honry Hwang (M Buchtly and coonce decay by Jer ome Setti. 'Scence lecton is naily just buczewst'. Classica sign.' down mick of ing 1000 Arptenes scores lectori it gets people to the headat'.

The story of a rom who beloves he's been abducted by all-sha. NOO Alpaness was respected by the oal-Yo accounts of people who ray hey've hed contact with estatemetricis. The open may, a more laculatilities a tight of thercy in a contex, you might cell it a documentary make owner.

Blave also points out hat his open 704 Allang of the Representative for Pland all is mere allagory than science foton lasado nith ence thy Done Leverg, who write the opent's libraria. Final All is bible of an allene cadealion finalering with an impending ce ango "Received the come layer disappears, so Lossing bet automather allowed the subjection mother pland" (Sina any).

Whetever labels are attached to bearico-label oppass there will be more of them in the faters Glass. for one at already collaborating with Losarig on The Manages Between Zones Three. Four and fives, beside on another novel in while Lessenc colls har 'social' factors from 'some in Lessenc colls har 'social' factor.

Scence fictor has broome to respectable that scence factor operas will an alamas anyon's task Double Micro's Atherbin Besides, adds composer Divisi the faure of opera in America is the audemos that comes to see compting new, comething America's

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I need send as prymet tow I will be hild for the user percent of \$455 * in first capati monthly insultanees of \$75 * inth, beganing when my sword is ready to be act to not I will receive the 440? x 557 solid out well deploy at no additional detery. When we think

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INTERVIEW

CONCINENT FROM (INC) 75

The off y reason you could possibly on a grand model of a finite scenarity of wring well. Disparsis apparent? "In them motion well. Samod togoily find aware into a scropy and separated find possible in 1 is actionary togo and motion of an effect that was grang on The near disk. They diamy from the actimative of an effect that was grang on The near line of a design mean. Linear borners in that contrastructures. The possible mean that contrastructures that was plated on the screen that we have the screen the screen the screen that we have the screen the scr

Greev What data was faal? Haquistein: Loan?

Higherian (can't good datas, Ting good datas, Ting these througs are closed thread througs are closed thread through a second ternative ways of ternative ways of thread elegan te week, and than a night manu-ful gobiest and are a night manu-ful gobiest and are night manu-ful gobiest and the second thread elegan te week, and than a night manu-ful gobiest and the second thread elegan and the second data and the second post is thread whole, who were the manuta terms thread the post with the ment that might be reached to the data the design the data the design the data the dat

right, and when I get that tried I be-

drunk. I don't drink at 66, but to have mad such a proposal at a meating like that ha out to be douriercovers or madness.

Ultimately Lowel promoted the weapons division management that over the weekend we would trisin up the monitors worth of alkelisatens that heat gone rate outlicins: there hashin event been anotes thoro. But Lowell promotes them were hand it in the following Monday That weekens! worked on my thesis.

Sunday evening Lower came by to see how the report was coming Texplaned that Inach't workarton & That monitereal in weapons received, and yet here it was—the author of a new approach to descring a funder-divient X-ray later The lab paid offer people to work on weapons, but to me it was anathene it tow at hist post it had to extract mysel from a very baid stateat. If it do a cas autoor showing my proposal dont work then Lowell and I could go to rearrage most and as a Sonry we music a mutate. Thet would have been entamatoing, but I would have poten-out of it

So fiddithecalculation, and something wont terthby wong. The computer code said if was working! I figured my stupped code was just inecuping again and that as scenas I found the bug mit. Lifour tan and to this Lowellikept coming by to see how progress was going. After hours of tumpo to its threads to make the scheme ment date carte around (November 13, 1980) I dich t sleep at al. It was delayed a day but then it succeeded Oters. Det the uccerent artail an un-

deground nuclear blast at the Nevada Test Site. The tame as the one that powand Chapters later?

Hapekaam his k was a shit il would be imprudent for ne to say much more. Below the stat the anti-kept ning. Word that gaten auroit the orbes classified physics community and a lot of the unclassified community. A lot was going to be done and that there was a more a Dawd and Gatah two of affar. Chapter was a smoot 7 division physic and and and in the amount a exclusion.

Some gruys know.

notwork it dawnedion me that it worked for a reason. At least in theory it were a very good ktea. And that has got to come close is being one of the work rightmates cotopt e real to

In those days there was no 500 Buy Oraphine was deel exerce should not right worlds fait Knay kaar He wards to pad down on his insurine George F Oncolon, mantar of the X-ray kaar A on port or an other he world by up and explain how his invention caulo be used as weapon and get kapted at Ortari ware not and get kapted at Ortari be-tweapon.

After my propositi was made, others, worked on it 1 had worse rightmates during this period. Eventually the expermean the time and neocrices avaiable to me were very small compared to what Cheptine had acoase to The order of my experiment succeeding were about a million to one A consideration of misclos is the only explana ton of misclos is the only explana ton for misclos and the second ton t

Betwee the story is was laceng a conucleum liftne copartment liked my reputation as a been seen would ve been anexed to be the story and the story and the story and the story at the story ment succession.

Hell, the apportant a works, and when learn to the lab from tark say, paged about to set to the non-tark say, paged the set of the right density is and the set of the set of the right density is and the set of the set of the right density is and the set of the set of the right density is and the set of the right density is and the right density is and the set of the right density is and the right density is and the set of the set of the right density is and the set of the right density is and the right density is and the set of the set of the right density is and the set of the right density is and the set of the set of the set of the right density is and the set of the set of the set of the right density is and the set of the set of the set of the right density is and the set of t

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easi hard to day with nordin indigration. The carry, i dark which in this, i backalo werehoody in the planot herew 15 media an importune contribution to wellapore work. Another acide and Whait would a prefinational do? And profite hortor we that the amount of memory and elliot gamp of the municationed X may litter with information wellaw that an information acrossibility of planot and wellaport the consoling on the based. At the litter we working on the based of planot are wellen planot.

Onny: Were you friends with some of these people?

Highlight Cutte a five, paciple who Device 3 might be write 3 might them and all Dis over a whole they might be all the second in which they may advance 3 might be and all the second whole it is a second all week, an large part of the program wings water plat, make a officience. In processing all blocks of the weight be appendix all blocks by X-my latest program winning all blocks by X-my latest program wings and all blocks be able to all the transmission all the transmi

Geyns is it any consolation to know your weapons work might have made you is here tike Oliver North to some?

Hagelateir: The world has bought into an annys race of frohlering proportions, and I regard i as maches on a paretay scale. Service can not the eventual consequences its only a multiple of the blanch how avecoses service of Still and the new class of versions cannot prive control sequences of the version have control sequences in the version have regard and the very lentified base drawn by object he walk and compose they avoid to a some a resignation? I see a treatment and compose they avoid to a some a resignation? I wave is to avoid a the specificity. Meant and Bahman equipting coopercity.

Hagelstein (loughe) Armapatkluch IgN? Onne: By helping to create this weapon, how was allocated the arms mor?

Highliters The development of all May laws reak processing methods. The development of other seeponds in the mean generation is grant and will call call be development on a grant and will call call be development of the set of the set of the development of the set of the set of the call and tables and of the set of the will all the "the beads of the method set of the the development and the set of the set of the end of the the end of the set of the end of the



them. The examination of the X-Hay IBBOcount safets whether or not a war battle Green What was tilles working for law's Hayabtaser. I has made to the the the theorem the the the theorem in the the book my tend. I was again mitschool to have mattering in 1976) in methodood to have mit 1976, and he shock my heart Arther method in 1976) in methodood carlies in mit Teles and shock hai hand in 1981 in the shock my hand if hink it was in 1984 the he recompanies with was in 1984.

One area my whe and I dove him from the amport, and he takked to my whe. Ha has a score paramote and made a doep impression on her She and I hed yood the her, set your inversed yoo, but of the her, set your inversed yoo, but of ward Toker. Two not even spent works hours mits pressence.

Geeni Did ha ofter you any moral support when you were feeling so depressed about your weepons work?

Happitas When The Anony operating the International When The Anony operating the International Int

Hegeletein, When you must with Edward Teller, he talks, you leten

The set of the set of

Hegeleter: This means has become enter lances to vitances by now Ho possibly more symbolic their important, even the symbolic teris in semiting one puts index platine word to place up a good by Bette gut weeds to know haw he Kray man worked in a simple, induke way. The program keider were out on tased A the sime he program was auph as well semitime teristic teristic places have been been as a simple induke place. The hole means are also been places had may call as a simple to be places had may call as explain to before what he wanted to how

Letected not to be nected in Bethe's visit, utimately out of embanassment about my involvement with seespons work. Yet Bethe was discated with the enseme to be quadron. This was bad

22 OMNI

for the lab because he would have attacked the program on a lechnical basis had his questions gone unanawered.

That wanked the other ngft before and had not gone to bed unif accound eleven in the remming. The call calls at quarter to three in the aftercore. I concerve wasn't obegoing well those days and that a bad research with makehour before a bad research with an eleven of the status results and thans before an hour ago? I said I weart tweet I was repposed to bait any mailing.

Hold Lowell That to get up, shower, shaw, and get dreased. He said, "Don't bother with any of that, sait come immediasity" So I polled on some clothes 1 had a day and a half a growth of basist, my har was uncombaid. I drove as fast as I could to Bieler's office.

That on risking what Bethe was misted on taking subsidiary and the subsidiary was and the subsidiary and t

By the three fore had bet Lowell was in his norm and is well protywalneyed, is a lower had i hadde it or degriner, daw how it is obtained wells down and and and i hougast in the missis and gat the number it was the angle number i was houge because it have entrancia inapped to their all baha. I was an horin the made increasing a particle physics, there made increasing a particle physics, there

Onsy. Bette is a part of the organized scient to opposition Did he ask you why you were working on weapons?

Hapeteen He said nothing nonsochncal period He opposition to Stolicid not oscope notee at Letroma Thee easi no question as to which acts of the lence he sat on Lidd feel (noomfortisbile being in a lab trivolved with a program to which he was so stornaly opposed

Orner What puzzles me is how you could last almost eleven years in an environment so blatantly antigonetic to your peace of mind

Happiasen Whon I got to Livermore, I was toki auplicity that I would rever have to do verspore nearch to guard can clink ive, with that. And the resources possbilities, and potentials of the list average recompose Are adulted at MTI I had never seen resources like they have at Liver at one.

more Academia is not that not

When they used "Well, and to an inportion with incomparements will be incompared with the second second second second test and the second se

Onvi Do you consider Lowell Wood a Svengxi?

Heighteen Act vermane I got used A lot dimensulation goes on at that let. but it wears Lower Wood who did met of the mangulating. I'm of delanding other the Heatt Foundation or Loweff's technicawe of recruiting young people. But lots of groups after as do Smigs to inclutifiest

With respect to the timer functions that the impact call adjust of load an object instead of the second second second performance of the second second second to start the process all over agen. The second second

Omni Have you been approached by membrants of star ways since interno?

Hapitation The been contacted by an entit liet of groups to genus takes but, two amenged to stater clear of the polytox seconded with the shaft. Then is angutary bad possible house a lot of suchcal information about. X say there but can take any enything technical about them clearts any enything technical about them clearts and the clear about them clearts and the clear about the shart the clearts and the clear about the shart the rest of state wars. If where to significantly in would be accel of approach

The attempting thy control are a tracher of lack-test mutual associated registering, physica, applied physics and so fact. That is my yob, my columed, my profession at the motion. The waylife at MT works docent testes a to of time for political activities. If m is applicable cachata in the full place. I would like not to become a tool for one political (pace)



material enhancing its sensitivity to pairma rays are emitted because all umer surbace metanals are sometided anniarity by optimic rays. PL integligations have proposed that this sense protection of the proposed that this sense protection of the proposed that the proposed back three days after laword. Once in orbit it could determine within the weeks whether water ceases at the true poles.

A small term at JPL has also come up with an representations alternative to the Databast mission. If the tools tooks motion of the Quarkast could be reglaced by an-drive angines, which are compare and perform before than characterized notiities, the mention Lanas Palar Proble could be observation and participation of the performance of the performan

When earling view of the directs, the cluster their Photowards obtained wrong of solar costs, each ten meters long. The direction photomer The norther would power in an express. The norther would photo that are based or them sustained for a long time, would hrong the photo ten long time, would hrong the match ten would be applied of the artificial rest and them space risk ten imports. The tage that the would be table on the words.

It is transitionally estimate to notice what the offst compared with the score of typical space measures is negated to apply apply the transition that an expection would be mercine that the spacebase to apply the start of the start products and the start of the start of applications in the years of explorition to any mercine the start of explorition to apply and returning us to reach the high horizon to apply the Start Start and an endang us to reach the high horizon to apply the Start Start Starts Start Start Start Start Start and an endang us to reach the high horizon of space Start and an endang us to reach the high



Down and out in a daze And links: Working on the name chain

GAMES

By Scot Morris

In oncert Greece Gaecilies cut a make to confine the Norobaux, a recent years the Agerman have conatructed similar takyoniths to bries an assement (Immun the bries), observed by the bries, observed by make to a bin chalange which is why I was exclude which is solved the phila chalange in wear sales of a priori that matters

Table your way through the maces with your mind websad of with a gancol Using your imagination toi foe gothways that are sometimes haddes "behind the situature

Hausekeeld altited clasmig the 'docase, as he calls them when he was a lawtenvare in the U.B. Naw, 'Lused them as a game to keep my mind althirt altway have altago when I was on motinght watches at a shops altago the probably no concidence that the mazes have the beet pipes, bloss and ducts abovert a Naw who

To get mise it lescentived data imagine entities of the red and mise, then their your way through the convolutions of the dher free work of the dher free work of the dher free your the table when the tables are out of when they contained in the redorn they are going or for our consisting. Theise table containing. Theise tables of the surpoint maze called Prench Horn, with the



solution (15) Thy solving the other makes. Weakd (no 2) Oyns (no 3) Tweater (no 4), Limbo (no, 5), and Roundaboot (no 4) Solvino fons appart on page 190 Twe MARK Chabril Cauter

When I m relacisced as the Greve General Editor people obtainais, "What's your laworing game?" I brefly convelop these I have released in my monthly colorem that level coming back to the one I meat only paging Links a game that needenovate screener to boards, no manera no exactement whiteower

A rendampetise gema, Linka request players to ball nerms back and birth Only proper names are slowed—those of charactres personalities, or groups, whatter living, dest, or toosing. The geme can be played alone or with a group of these peope or more but it best with hose players all moves batter and no one is landful to inter und.

Tobegin, I give you a name. A The object for you is to come up with a response iname one that has an association with A For example. It i give you Lowence Week, you might



Reprod with Lawrence comp Table Table Table comp Table Table Table comp Table easy name just to keep the party going

The names below will lake you along the Appella ton The

Deerge Buhr Moses, Jesus, Christean Bernsch, Gary Hart Mile Love, Lucile Boll, Moly Picher Donen Geer, Dek Clink, Drubby Disckor Oliver Tweet Oliver North Ferm Halt Burth: John Deers, Devid Lettermen Varna Withs: Shirety North Extension Devid Lettermen Varna Withs: Shirety North Extension List State March Extension de file Rese, Tel Network State State Chrono de file Rese, Tel Network State State Chrono de file Rese, Tel Network State State

DE CORN

Jim Bahvar, Neiser Coolio, Jaik Christ Bonzenn Speci Leonato Kinzy, Die Fortes (Kiny) Pranisiper Bee, Rebort Parer, Johnny Appleseet, Johen Volke, Isaan Niwerz, Julich Newkon Flucks, Italia Sunak, Esther Flucks, Eximit, Esther Fluck, Bahvar, Julich Newkon Fluck, Bahvar, Julich Newkon Fluck, Bahvar, Julich Newkon Findy, Bahvar, Julich Newkon Findy, Bahvar, Julich New Bern, Jaken, Peter Flucks, John Hemann The Integols Hermann The Integols Hermann Vick Car, Fielddy Fendes, Robert Englund, Queen Skaboth II, Don King, Marty Allen Lou Costello The Who, Keith Moon Nail Amstrong

Not only must lither is dia name, but i must ask more whether you will be able to retrace my thought processes to see how i carres up with it. Byou cant, i must come up with an alternotive name with a simpler tink.

After you receive a name, rat these of how it test in cutte previous one so that ou understand the tink type don't petrid, say so and if yours not sure ask. Often the link one plasion finds is not what the other intended

The sender is required to withdraw a name and try another if 10 he recover desard know the name or 20 he accesser tarks the kni is too difficult and that he is also difficult and that he is association.

If you tunk the recover will have difficulty with the connection, you may phrase your offering in a way that will high For car angle. If take your M chael Douglas, and by we drave of his movies. If geny outperty Hall Mick Jaggen's githwent " (Dee gue cussion no. 1)

Adapt your game shategy bitte person you are playing with Pemeinbor he or she is a partner, not an opponist. Play within he sphere of common, heard invariance.

Interestion window beer, and he only accords a by congratulating each other on the deventees or opcortees of a link. (See people who protest that hey don't like games usually dropy the minicanoodtee challenge of Links.) Links can also be drawed

Links can also be payer solitant. Try to find the links in the examples gave balow if you're feeling clever then enter the now Links. Competition that tobase the rule

32

What is the trik between each set of nemes? 1 Michael Douglas and Jenry Hall 2 Minute and Bo Develo 3 William.Cody and O. J. Simpson

4 Jack Webb and Hobinson Drusse

 Fechard Gere and Peler Selena

 Chevy Chase and Gerald Find (fee anis)

7 Plane Descartes and Mr Ed

 Gale Starm and Hip Tam 9 Jonathan Winters Boring Byrigton Domis Summer, and Lee Majore
Creek Elice and Ecoed

Herringway

Answers on page 100

COMPETITION #49 LINK

Dan Quayte, Big Bird, Cooke Monster, Famous Arros, the California Raisne Minnosca Fats, Joe Mo Carthy, Cherlie McCarthy, Hawdy Dootty Dan Quayte

The challenge is to simple in raines bigshife. Interest as above, bathing and reaching with the same raines. The galaxie price, and raines and price bench carcinal KWH00 personal word personale that includes auch features as a babli in dark drive and babline kond neuros and babline kond neuros at 519 Daniel 97–900 Deplet Derry that can keep halos of achiedules and satisfie power will spowe at 519 Daniel 97–900 patient of achiedules and spontments and sate 1500 names and phrane indiced phrone unrest spo-

Send one entry only on a card, to Onve Competition #49, 1955 Broadway New York, NY, 19752-5055

Entries must be received by June 15. All entries become the property of Orice None will be returned DO

GAMES

U-Force and in Mkp 7sorth



and (with the addition of a

Real men, of course, don't

-Bebl attime



CONTINUED ON PROF.23

Inside Degraming to see the light Close closed investigation of another side. These what a typical Acardinetic benchmarks areas looks also activity balow gating nearly to satis. When investigations are solar they go not what we call the source mode. They down these are comprosed down toeses the particudant. The closer parts accord and the source of the source of the source of the source of the particution and the source of the particution and the source of the source areas experiments with a source of source areas in althoughts, with a source of source areas in althoughts.

Otean clocked to a state of in army of Sow Brough chambers in which ha has been monitoring instation in crown-difrom Sou can keep parentes allet for two weaks after they ve setted and metamochrosoft, without gwarg them any constress without one particulate source of nation (Oteon said

Beinged Thosew Adub Person in provide the Adub Person in protect with an antibiotal Mathpatanes tool, bac cost own has been reduced by 20 to 30 provers. Adub Person in Sector 10 to 30 provers, Adub Person in Sector 10 to 30 provers duration in the sector theory and the sector adubt Person in the Adubters The sector adubters and the protect to adubters. There are adubters and the protect to adubters and the sector adubters adult adubters and the sector adubters adubt

In 1995 on these starts of the Disut Bitmen field with these listed 27 and 20 bitmen field with these listed 27 and 20 bitmen field with the promotion of the disuble of the starts and the start of the disuble distance is a start of the start of the distance of the start of the start of the operated is increased with the start operated is increased with the start operated is increased with the start of the start is the start of the start of the start of the distance of the start of the start of the start is the start of the start of the start of the start is the start of the start of the start of the start of the start is the start of the start of

Not all revertions the warm sale a built Grows have associated and any operation of the deen when the 1000 hybrids. The government, undertook large-scoler mangrown redoming. In the Pelaparas in 1985 the Used National Food and Agreceives Organization (FAO) begins repertiments in the restoration of Sala grasses. To cale the FAD has had sub ocss with six different see grass specific

Coral meths are not a 100 claide Throughout most of Oceans needs as man headly an onne places such some the index could communes and some of the word comaged, server in respontions for the source of the rest of the source of the source source of the Control Aquinds government is absorbed. Control Aquinds government is absorbed as coldobar on the multi-produce like by appre programs to ind alternatives for the interement.

There say now 10 potaction more assis incorrest and 20 mProva New Guress A good suint. The potalen New Guress A good suint. The potalen New even is environment. In a model Rudy/of the Carabaan nearly all the outtrees auryout of an amore mervine and probative pressure. In a model Rudy, of the Carabaan nearly all the outtrees better any environment of the batters. Buologic present of these courtees had baten size to prevade for enlogement.

The freet example of real construction most agree sittle Great Barrer Reef Marine Park. That largest of reef patks gives protection in one form or architet to most of the 1,200 mile length of the workin created neef

At the BBI spinocount i lated Renard Rectington 2 adolgst with the Cleant thream from Automative Cleant thream from Automative Design and the spinocount of the Design and the spinocount of the Design and Design and

Kenchington and most of his collenguases GBRMPA are loss troubled by the population explosion of startish than by outneedes of another animal

"Right now his issue wetsing with is lourem. Knochrights said. It's grow by they line percent a year over the last four or five years, and the indutry expectation is that if will grow by five arem said over the most three yours. That's achierometed doubting rate.

On the Carel Barrier Neal in the Coroll Sea, as elsewhere in the ocents the thomest problem is not Acarthealar or any other achinocens. The problem is Homo sports CO

This is the second of a three part series of the state of the occurs.



Below are the answers to Paul Houseriveld's dages (page 96). Each Higarate tube is given a different color here to make the answers easy to follow.



OLUZ ANDATES

1 Jerry Hall is remanding the Stone 2 The Ten Commandments and the move 10

3 Simpson played for the Buffalo Bills and Coving place was Partfalo Bills

4 One portrayed Prickly and one be inended Pricky

5 Bare starred in American Gipolo fand repolion are ?

6 Chase often nameked Ford on TV also Chevy/Ford

- 7 Putting Descartes below that horse
- 8 Both fame Hill and last names that
- 9 Seasons including The Fell Guy
- 10 Martia and Pape DC



FICTION TO THE PROMISED LAND

BY ROBERT SILVERBERG

They came for me at high noon, the hour of Apolio, when only a prev man would want to go out into the desert. I was hard listen to reason was like trying to get the Nile to flow south They weren't reasonable men. They even had a wid metallic special consticuted way that tanatics like to affect. As they awappared about in my kille cluttered study poking at the

of the colleges of the Errore. messible forces, as remote and territying as pods of old Argunios come to Ma 1 feit The older and taller one

called hmael Elevant Tome ke an Acusten and he was of an Alguptan. The other, strum and freewily muscled. with a behoon tace worthy of about him. But I know he was Northe other, Arguptian Both with an ease that no cutecher otrecure tribe Perhaps De haps he smoly liked to preof God's torpotten people. I

photograph of me on the lacket of my account of the Wate of the Brunchaton and at me again, as though lining to sataly timeet that I maly

noticied "Good." he said He told me to pack 8 suicess hid as though I were going down to Alexandria for a weekend holday "Moshe sent us to get you," he said "Moshe wants you Moste media you his has emportant work for you"

"The Leader." Eleazar said, in lones that you would ordinerity reserve for Ptranaph, or perhips the First Consul. "You don't know anythen about him yet, but you will All of Accurates will to serve a calm it was like a detern know him soon. The whole world

"foure going to write an account of the Exodus for him,"

- We're not taiking about ancient history

The Exclusives free thousand wars aloo, and what can you say should at this late risk money that it's a clarged

Di Filippo looked blank for a moment. Then he said, "We're

happen, the new one, the real

vours wants to do it all over isted with the first \$seco? Do we neetly need another one? that would be any better than

You'll see What Moste

road Getyourthingstogether Dr Ben-Smeco "

ran? Could I suggit them? I would not let it happen. Time for some show of ferriness, 1 on his authority Surely they wouldn't attempt force. What were Hebrews Thry wauld respect a scholar Brusoue cosp tabels he melaned my head. "I'm atraid not it's smply not possible

way "Come on," he said out

the lapped the book and ported questionnoly to me and 1 drive and Moshe and to net you them below sundown My serve of hebbicscreak came sweeping back. "Please have work to do and....

KIET BE VOU BID

The street was sized and empty with that foriors molday sun is at its height. I welked between them, a prisoner, thing

A MYSTERIOUS SUMMONS AND AN ARDUOUS JOURNEY TAKE A FAMOUS WRITER ON A PLIGRIMAGE THAT RESTORES HIS FAITH IN THE IDEA OF DESTINY



DRAWINGS BY BRAD LICLLAND petture was filtern years old. My beend had been block then effy "We've got a car wating soft outside. If's a four-hour The day of the Lawrend that the whole Dikki must be different and the normalies data was morphic howing a rap. The is amelied of copieng all, of anonyal bisections of cambridge of any bisection of the second second of the second second and any bisection of a second second of the second second second bisection of a second second of the second second second Bisection of a second second second second second Bisection of a second second second second second Bisection of the second second second second second Bisection second second second second second and second second second second second second and second se

 beging later, Mercuche Zannthamilla a lateringe for every oper and problema sepreter of the one mignetic composition of a control more provide avery been than well of our to partice. The second second second second second second second second track here much hereit are used as the one partice. The second second second second second second second the second second second second second second second the second the second second

"Look at them" Beazar taid sconfully as we passed the huge half-canad Sotapion "I hate the sight of them. This bolishness! The water And all of hem built with our lootsthem aways "In fact there was little buth in that. Partiags in the



nation of emotions. So I set quarty prepring only that these menand their Leader would be done with me in short order and routin me to my home and my studies.

"The Why cty." Eleager mutered "How I despise r!"

In fact it had always seemed grand and becafful to me -a measure of my assemidant stone might ray, though measing feet very might the insertien on the lisk star. Applicant: Even a lisbow must conceed that Vertile is one of the works grand costs. It is the most imperface, this star. Applicant asys, and to I am willing to believe. Rough I have never been beyond the bordings of the power of Applicant on my like

The spleroid old lengths of the Sacob Wey want by on both sade, the Sangko of las and the Rengle of Sacob want to Tangko U Juptor Ammon and all the work they or a function of them on that great boulaward whose parameters are lined with spleness and bulk segons tomps Mitmis and Gr-

Convert 1989 by Asberg Ltd.

time of the first Moshis we did indeed lator to build the Great Pyramids for Pharono, as it says in Scoptise. Buil there obuid never have been enough of us to add up to much of a workbore. Even now after a sokum

been note after a separatiacrog the Nile has loss loaded same loar throatiand sparatitime as end will adout herein throatiand of los Logit in a rest of the mitlion to Logit in a rest of the mitlion the Appphara test and, and the Appphara test and, and the Appphara test and an another and the Appphara processing and the another program and an and an another program and an another and an another and an another and an another an another and an another an another and an another an another and the another and an another exact to countwhere.

The temple district despeduwy brindus and we noved out across the loag, sin, string and of the Cester Augustus Bridge and into the teering solution of Hispathanothe existentiative of the wes, with the leaders and gold bazass, its mysia officiencies, is langle of the disability in a widerness of disability in a widerness of

Is pass, and cardebase, not we extension the second secon

breach was a shruppe. Wy clothing chang to my ston. The road was fine for a white, broad and sharph and wall panet, but free it nerrowed, and finally it was nothing more than a porticied while ribbon hall covered was nothing. They was before at highway matternance in the days of impease Home But data was long ago. This is the enk of the Consults and Hungs go to hall in the interfactive can be cause.

"Do you know what route we're taking Doctor?" Eleazas askied, broaking the taut skirnor al last when we were an hour or so into that bleek and misarable desert

My threat was dry as sinps of leather that have been hanging in the sun is thousand years, and I had touble getting words out. 'I think write heading east,' I said finally

"East yes It happens that write toxeling the come route that the first Mostle took when he treat to lead our people out of bondage. Toward the Biller Lake, and the Red Sau Ware Phateach's army oblight up with us and ter thousand innocent model doward." There was considered have use a

Social that were something that had here a something that had here a something and the here and the social here and a contract the laboration of Asson but from the moniling an everageate. Another graves were and the here that some the social here that the social here and some and some the Appurham and some and some the somethy for the gravest plane.

"Do you care Dr Benameor? That hay taloved us and dow us into the see?" That hall our nation, or more persisted in a single day in horrbie tass and perso? Their poung motines with balans in her arms were crushed beneed his wheels of Phereich's charges?"

"it was all so long ago" I sad lamely

As the words left my loss i innew how toolish they were, it is had not booin my when to minimize the deback of the Exocus i had mean only that the great disastar to our people was seeled over by thousands of years of heading that

whole could be an effective and hores, was waden in neutrain that operating opera on the time status and last the second status and the second status and the the second status and the second status and the the second status and the second s

"I was trying only to say-

What I had been trying to say didn't interest tem. His even

were strong in the case have a sum could out acceleration of the second structure of the second struc

centures. But it is not too larg even now. A new Moste is in the land and he will succeed where the finit one tailed. And we will come forth from Aguptis. Dr. Ben-Smecn. and we will have whet is rightfully ours. At last. At long last.

The stablick, working, more handlood by Machine Alexandro aurence i definit alternyt for aurence i definit alternyt for handlood by Machine Alexandro aurence and a stablic alternities and handlood by a stablic alternities

The Dire God anticle the how the "anticide to tension many Weinght these concerces Placetra se might have taken Synth take wein speed out a tifte interest around here permitted of the Poster Sau, But dia have souch have been the permitted on the Poster Sau, But dia have souch have been the Prostants and Alexander's Deexis, another Portrant, opportunity the statid dia models Format, whose dealing if were to impail eventy commer of the parent and concer 1 into Format Permitted and Networks (Sau and Network busbes) or of Permitted Sau and Sau and Sau and Network busbes and Permitted Sau and Sau and Sau and Network busbes and Permitted Sau and Sau and Network busbes and Permitted Sau and Sau and Network busbes and

Installed of large a Application under the moders Phranch, who is the pupper of the Fast Daniel, who have represent the Empirem of Roma, we would be living in Petershin under the large of the start Daniel of pressional or preferent and we would appear more prior of threship or Latin to our meeters in related would appears more perior of threship or Latin to our meeters in related in the sub-place would be the same of therein outs of more in the sub-place are some ower of therein and pupped in and in the sub-place are some ower opticate and og punders than more the south and the sub-place and punders than more



Non-building to strange and his larger was shorter 1. All my cash was sharter to somewhat local from superchart me in his race, and which of us fare would be the weer?

The sun shorted series herers up and the series of the I saw the date shadows of mountains to the workh and alread denie there was a village shead of us apringing up out of

investigation buts and some buildings artly about A well had been risene m of abovecround conduits can off in se charters in back of the control and I with other trucks, parked in front of it.

I had accord at the second bandrause. yet no atternot had been made to dismann or deterri 6. Shuffon d in Dir one in his note mind would corre out the Pharaphic police did not extend beyond the other, and the case officient of go softing around in these remote and detaytelul certs. We live in a decident

Eleazar surrying out of the ray back med to me and I hobbled after him After hours where a brank in the close what, and the reak of pascine furres had left me nausoaling. My clothes were The evening coolness had not yet de scended on the deant and the ar wis strange vacant quality the myred strains lies the exit of air the moon might have.

This cinco is Beth Iscael ' Eleana and "It is the captel of our ration "

Not only was I among fanatios. I had debauorunt grandeur. Or does one quel by on suppresidely with the other? A women weening man's clothing

game tratting up to us. She was young and very tail, with broad shoulders and a great mass of derk thick her turbling to her hewk's rose, too, but somehow it made her look all the more strking, "Wy saler Mreen," he said.

"She'll see that you get settled. In the monting I'll show you eround and explain your dubes to you

And he waked away leaving me with her

naisted, end set out at such a brisk page foward the permeter

Mnam unoaction for me, setting my little stock of fresh cicitings me to not undressed. I started at her astautidid. "You can't want what would be not on the share and "White would be been a' both I'l take your things to be washed." She mant have waited cutsule, but no. She shoot there arms inded, looking It was more a carro, rook, than a vilace i row a two doesn impatent i shugged and gove har my shut, but she wanted

right, available black with the stars burning like treaccord

snotchod away loo this that I was in this sign place rather that an error lawringer clustererst little flat in the Hickney counties of Manto But it was peaceful time Lights glammaned in the cistance I heard laughter the pleasant agant of a internasomeone anoing as old Hebrew soog in a date, inch work Even in my bewideren cardwhy I felt a strange trangetiku descending on the 1 knew that I was in the phasance of a true contraction allog one dedicated in some bigging one beyond

of how overwholming his physical presence was He had sourced memory has but now i matized that he was a clear talet then I by a seen or more and probably sets more hereing has been been were word a visit targin of date Biologication and active to be should be a state of the basis

You know the said. "we non t have any circulat at all that you re the point man for the oils. Mostas and I have chere used your locake many times. We apree that go one has a firmer

galan of the locat of history of the inevathe making of farment beings." To the I offered no resources

"I know how annoyed you must be at being probled like the But you are essential to us, and we know stard newsr heve come of your own free will."

"Crost movements always need need

"And the nature of your movement----"Arre." he said

His mercer was mechanical and aloo Guinton he was vacua of even evasive of things was the factory where the work sold but my request in hother earlies ton what unanswared He showed me The bound of Months, a private share's like Beazer said He ported out another the electrical parameter When I enked waking On the far side of it I saw e second group of crucia houses on the lower slope of a bar-special hill that I had not noticed the right before. "We have a population of five hundred." Elevane lokt ma. More than I had managed

What do you think?

E automati me the so menu of us could have migrated to the desert settlement without my bearing about it. Of call of every forty of us. That is a make

tance or even a thend of a friend? Accompnity not Well perfuse most of the settiers of Rath Israel had norma from the Habrary community in Alexandria, which has relatively little contact with those of us who live in Merriel Certainly I recogrized no one set I weised through the village

From time to time Figurer marks valued references to the Exocket that was soon to come, but there was no real informaton in anything he and, if was as if the Facekis were monoly some broht toy that he enjoyed oupping in his hands, and I was allowed from time to time to see its glearn but not its form There was no use in guisebothing terr. He amoly wellerd along



my comprohension. If I had depert I would have owne out among them and made myself known to them, but I was a shanger and alred For a long while I stood in the dareness Isterario wordence When the civil organ chill ward search it by swake unit down, or so it seemed proceed by that any clarity that will not admit aleap, and yet I must have sired at least a little while, for there were fragments of chearra diffrag in my mind in the morring, images of horsemen and charots of men with spoars of a great black-bearded anony Model holders with the tablets of the Law



lograng high above me, telling me only what he wished to tell There was an unstalled grandlosity to the whole mentionious Arguptos, why not simply leave? The borders weren't guarded years ago Eleasie and his friends could sottle in Palestina or Syna or anyplace else they liked, even Galle, even Hepanal, owno Nucura Forma far across the ocean, where they could the cars where a few wild-eved Hebrews chose to go. So wity all secrecy? Were these people up to something truly exhapidnary? Or. I wondered, were they simply criscy?

That afternoon Minam brought back my clothes, washed We wont clown into the village, which was read. Almost revenuence as at work. Minam replaned. But there were a few

This is Deborah she said, and issac and Joseph and Soul They creeted me with great to their animated conversation and clock and aim, treated on internacy, finishing her senwas making. I found that Why did # methor to me? Thoy were both young enough to

Unexpectedly and with toward my captors becan to chance Certainly I had had thers-the lots pomposity of had been seized und taker to the place-but as I mad charming gracely courteours

appealing. Preprier though I might be. I felt myself quickly bero claws no syncelly with them

that these were bury, determined tak, most of them young and shalle the world They were pessionate in the way that I impagenci the Helperwy of that and it-started Exocus had which they were confined, striving lowerd freedom and the tobil strugging to bring a new world into being. But how? By what means? I was sure that they would tell the more in their own good time, and I knew also that that time had not ver come. They were watching me, testing me, making pertain 1

Whatever it was, that immense surprise which they means to stating upon the Republic, I hoped there was substance to

I am old and perhaps time but far from conservative. Change is the way of growth, and the Empire, with which I unclude the Recubic that operably for unbload # is fail energy of change. For twenty centuries it had strangled manland in its borrion grip. The civilization it had constructed war holow, the life most of us led was a meaningless trais with neither values nor purpose. I had lait for years that the time was long overclue for some great revolution in which all hand. fast-frame ministrations with their trian of ancient and venorwhen all that is solid mells into air, all that is holy is protaned. and man is competed to lace with sober senses his real conditions of Me. Was that what the Exodus would brind? Profouncily did I hope so. For the Emore was defund and that its limbs hadn t yet heard the news of its own death

On the third gay Di Filippo knocked on my door and an

panced. "This Leader will EEB YOU FOR

The intenor of Moshe's dwelincrease not very different from mine a simple cot, one stark lamp a basin, a cupboard overflowing with books Mosho himself was smaller then i espected, a short comradiated tramendous, even in to be bold that he was Eleazar's older brother He ourly hair and his lerocacus eved and his sevence benk of he power was more lightly son his seemed passed con volleci-austore and mottwarmly and applopized for the he indicated a well wors now of my books on his shelves You uncerstand the Repub-Sensorn" he said "How con rupt and weak it is behand its

Influence has been How feeble to power The worki is wating not the question? What will it be?"

It was a pat, obviously preconceived speech, which no doubt he had cambally constructed for the rates of monaienta be. Yet he did impress me with his passion and his conviction He spoke for some time reheating themes and accuments that were long familiar to me. He saw the Roman Importum, as I did as something dead and beyond revival though shill moving with even momentum. Call it an Empire, call it a errors that had been thought extinct for thousands of years was ligions, languages, and rulers had been a shrewd policy for conduction, but it carried with it the assets of destruction for the



imperum. Too much of the world now had only the bareat knowledge of the two official languages of Latin and Greek and transacted as business in a hocigebodge of other langues. In the old impensi heartand rasil, Latin had been allowed to break down into recional dialects that were in fact serviciate languages-Galian, Hepenien Lustenian and all the rest pointed out, but rather the simple molocic, lazy fang called the prezeson needed for government. As for the religious diversity that the Romans in their easy way had encouraged, it had led not to the perpetuation of faillys but to the erosion of them. Scarcely envote except the most primitive peoples and a few unimportant impapeulated minorities like us ballaved anything at all nearly everyone place issuence instruct to the local version of the official Roman partheon and any other ready has no faith in any And a society without faith is one without a rusider-without

even a course

These things leads use, as as I dot, i dot anyon of weeky and deversity but as continvestion of the introvence of the end. This laws there would be the Period State when the things would be able to be manipad of the and able to ensure the state week is the could be manipad of the most be manipad of the state. Unlike manipad of the state state and the state is manipad of the state. In the manipad of the state is as the state used segment on a life out of Imperium warvad against one ensurements.

"And this Exodua of yours?" I read finally when I dated to broak his flow. "What is that, and what does it have to do with what we've been taking about?"

The end is near," Moulte and "We must not alwo outoffeet of destroyed in the check this will follow the fail of the Republic, for we are the instruments of God's great plan and it is expected that we survive. Come Let me show you correcting." We stopped outlook immediately

My first thought was that it was an ido, a Moloch, a Basi and I had a viscin of the people of Bath listed counting their bodies in pige grasse and dancing revised around it to the sum of dhume and tambourines. But their was toglishings.

What is it?" I select 'A sculpture of some son?

Moste looked discusted "Is that what you think? It is a vessel, a hoty ark." I stared at him.

Te in the probetype for our standing. Monthle read, and this voice took on an interancy fraction the Weak abids. These the heavements where we will go in stags like thress-covered God beward this beginness - and there we will admit, is in the new Eden that avvels us on another world, until it is take for us to name to tarth.

The new bolts-on mother words — My vacies was lead with debold A step is as belown the stars, as the Resum significant price of the step is and below the step is and the Resum step is a step is a step is the stars and a step operreter. Accused the qualitant of space times years so and concluded that new wen op produce ways to activately it and concluded that new wen op produce ways to activately it and concluded that new wen op produce was the step of concluded that new wen op produce with the step of the step concluded that new wen op produce with a step on the step what calls were the Wave?

Grandly he ignored my question. 'Our finest minds have been at work for five years on what you see here. Now the time to test it has come. First a short source, only to the moun and



back—and than deeper the free issuence, to the new world that the land may precipe to reveal to me as that the postness may plant the satisfament. And effect the—ship plant is sing, one shining and after another, until savery intrede in the land of Aquiptabilities conserved over motifier the promated land—. The year were plaving. These is our Exercise at leaf What do you think. On Ben-Streeger What do you think?

I thought I wan machine to the mode testylves and, and Moder Is increase two standards are proceed-and mine – with calculations of tested. If we all calculate and set leves in the they would be produced at it is hind calculated in the thought would be the tested of the hind calculated and game to mise in the day and calculate bit testers theoretications to bit with interrupt even that to say wayting theoretication in to bit with interrupt even that to say wayting theoretication in to bit with interrupt even that to say wayting theoretication in the same of the same of the same and even visually dauged in mitight allow only the same and be cores up the starting exercise this pace of the same of the same and pacing the starting even of the same of the same of the same and pacing the starting even of the same of the same and the same and pacing the starting even of the same of the same of the same and pacing the starting even of the same of the same of the same and pacing the starting even of the same of the same of the same and pacing the starting even of the same of

Thick gray cables ran everywhere, and subordinate machines Ferroe-read young men and women raced to and to carrying testes. Model accomplied up a nanow ladder, gesturing for me to follow him. We externed a kind of cable at the starshops narrow to: n that cramped and at but artess room I saw screens duis, more cables, thros beyond my understanding Below the cebin a spiral starcese led to a champer where the orew could sleep and below that said Moshs, ware the moderts that would send the ark of the Exodus into the heavens 'And will it work?' I managed finally to ask

"There is no doubt of it." Moshe said. "Our finest minde have produced what you see here

He minchined me to some of them. The oldest appeared to be about twenty-five Curicusly none of them had Moshing nactions look of lanatic zeal. They were calm, even businesslike

vessel to me its means of propulsion its scheme of guidarea, is method of escaping acha But yet I was swept under by the power of this convolton They spoke of "combuston 'of acceleration.' of 'neu-"thrust" and "freedom velopry" I barely understood a larth of what they were sayunknown mame Wity not? right fusi and eccritrolical copiomust go upward with ocus have the Way no?? Within First reserve starting mucht woll time Noshe had seferred me

of Moshe he was starting at the hatch of his starship, peening

My task, I already knew but which Eleazar told me again later that clausters and bewickering day, was to write a chroninte of all that bard been accomplished thus far in this hidden science, but no they dich t want a journalist. Beazer said, they warted someone with a deep understanding of the long reveals of history What they wanted from ma, I realized, was a work that was not merely journaken and not merely history but one that had the prolandity and eternal power of Scroture What they wanted from me was the Boars of the Exodus, that in the Book of the Second Moshe Thry own the a little officer in their library building and opened their sectives to me. I was

shown Moshe's early visionary assays his letters to intimate investes has electrices and manifestos insisting on the need for sake could have imagined I saw how he had assembled secantly and with some uncesiness, for he knew that what he tulest wath of the Republic down on him if he should be depowered-has cadre of young revolutionary scientists. I read kings memorania torr Elevrar taking date with his okier brother's termetic achieve, and then I saw Beezar gradually converting himself to the cause in letter after lotter until he became more of a zeelot than Moshe ferrard I souced by the cal papers until my eyes graw bleary, not only those of Moshe and his associates but some by Romans nearly a cantury old, and even one by a Tauton, arguing for the historical nacessity of space equipration and for its technical feasibility. I learned something more of the theory of the standard's design

side by side in one small the dark girt of her even maria me tremple. Otion I longed to neach toward her seed with incohine with annor with dischart, even with pairing man's feer of neecoon also I raminded myself that sho was the aster of these two hery prophets, and fish What I feared was being

The day Mosha chose for the starsho's boly was for in the year 5730 by car otherman reckoning. It was a beihast only automs day, why still in its fullest blaze of heel For three days perparatory had been going on around

but the inner circle of scientists, but now all daws, the whole village went out by truck and par and some even on foot to

The cables and support machinery had been cleared away The standard stood by soil solitary and somehow vulnerable lowership back by the sandy cleaning a shring uprait. roadia, slander traple. The area was roped off, we would which from a distance so that the searing fames of the improves been selected Jucifh who was one of the rocket scientists and Leonardo di Frippo, and Mirom's friend Joseph and a women nemed Satab whom I had never agen heline. The lifth of course was Moshe This was his chanol, this was him advanture he dwarn, he must surely be the one to ride at the

One her one they amanant term the blockhouse that was the control center for the fight. Moshe was the last. We watched in total silence, not a mumar, barety dating to draw breath





usin britant in the storning sun, and

They waiked toward the ship, mounted back at us and want up inside. Moshe hydrated for a moment before entering

Then there was a long work interments ble unendurable it might have been hour No cloub! there was some last stance We could have been statuss whispers. Then he trofted across to the utes went by kin, then he emerged smino notidino, and returned in Maseria like a thundercrack and a nose like the around the ship and there were flightlin of dazzing red fame. The Exoclus rose a few feet from the ground. There it

smoothly then, and spend on a studas though I had been struck, and I began to creer Tears of wonder and ce All about me, people were cheering also.

We were still cheeting when a white fam of unbeauble tubil, like a second overmanenting force, making up Crop to covering our faces with our hands

When I dared look agent finally that to ethic point of feeporeus illumination was streak of black smoke that smeared half could not see the tooket i could not hear

"Judth- said a cureler voice be-

I was too sturned to cry out But all around me there was a steadily rising sound of horror and desper, which begen tes a low choking wait and mounted until it was a shrek of the greatest inten-

once There was learly carso Propie mad Some were rolling on the ground some were beeting their hands against the sand "Mosher" they were screaming "Moshel Moshel Moshel"

Linologi toward Eleazar He was with faced and his eyes seened wild Yes even as I looked toward him I saw him all eves turned toward him. He swelled until he appreciate to be five cubits tech

"Where's the ship? someone cried.

And Elesson and in a voice like the sumpet of the Lord, "He was the Son of God, and God has called him home Screens Weis Hysterical shores

"The Son of God" came the on, from Inne voices, five a clozen. The Son of

I was awaye of Menam at my side warm, pressing close, her arm through ming, her soft breast against my ribe her kpis at my eler." You must write the book, she wrispered, and her voice held a terrible urgency "The book, you must gotten Bo that he will live forewee

"Nes." I heard maneff saying. "Yes."

in that morrier(of honzy and lottor I that has been analised by the fooding of the Nie, and I was uproceed and blazed in my seul like a second sun stat I was concused that I would to main here to write and proach, that I would forge the gospel of the new Moshe In the amitty of my soul and send the ward to all the leads. Out of these five today would come relarth, and to the peoples of the Republic we would bring so long in their barrenness and their throw off the shacklos of liver medera. would carry a new order of things. Were there offer works, and could we dwell upon them? Who could say? But there was a new trulh that we could teach op to the stars, and I would not let that new truth the I would write, and others hed written to all the lands, and the lander ship, and another, and another, and thes would carry us from the world of won all follow Him on writes of fame, up from the land of bondage into the heavens where He dwells eternally DO



CONTINUED FROM PACE 45

Idealize than a possible monotor payor or a king pith. Primotion accompts proleaser Hohard Quandt notes that at the partitus, "The sinvestment has no hulary—it liquidates deall in two minutes." Limitations on both the transaction time and the emution of mixet minutes in the paragraphic of mix. This is as true in thmance as all the care mutual windows.

The full-task the importance of transidentities: Commerce points and one of Wall Steefs biggest gambles, options task of the steep of the steep of the steep what in help you can't be advantage of options then by so could prove a steep of the steep of the steep of the steep of the magnitude of these in your could be always and its memory base of the steep of the magnitude of these in your and the steep option with the steep of the magnitude of these in your and the its a methow jow arrow if No spond your deale and these in

As is an intelling money on the Kernlack Decky Decky Dr. 2 is considered in set herewill be a 2-system apportunity his year. At the bagget mode, where considered in other approximation of the set of the set of the constant of the set of the set of the constant of the set of the set of the constant of the set of the set of the constant of the set of the set of the constant of the set of the

Design theory a hashing of tearing and allower herein a district the support hypothesis a nonhine and has ported to the feature of better and the set of the feature of the set of the set of the set of district herein is the calculated by the set of desch platty is greater at an all each them is the calculated by the set of the set of the set of the set of the presence of helps there is a first set of the presence of helps there is a first set of the presence of helps there is a first set of the presence of helps there is the distribution of the set of helps the set of the set of the set of helps there is the distribution of the set of helps there is the distribution of the set of th

To also the way the decege indicator works consider the case of a cool-black, cell named Snow Chell in 1996 he came to Churchi Down after commarking the Cellfornia piego rates but carried the signers of a decege bayer of 50 He had only two chiefs of another back, four. But he was a hat heres ofteng the commande of wands and the backdock patientage plan the crowel appear of two control owners and have not off as a twoto-one lawretin. Dray two horses in the control owners and the control owner manual Grower and a classic observation and Ferdender di patiente classifier de competante de control control owner the appear of the control owner the competante invest were bonned owner that houses the the metal were bonned owner.

Growy eventually tabled to be at the same their growing the characteristic to automously the same at the same their growing tables to the same tables to the same the tarened beat families on the same the tarened beat families of the same tables. The beat families the tables tables to be families the same tables to be families the same tables to be the same tables to the same tables the same tables to table tarend to the beat tables to target, investige to the same tables to targets the same tables targets the tables targets the targets the same tables targets the tables targets the targets the target targets the tables targets the targets the target targets the tables targets the tables targets the tables targets the targets the target target targets the tables targets t

In series years through a topological and to conserve figures years and the series of the series of the series from the series of the serie

Wry does charage continue to him doubtent?" If a nil ego problem. Homan aga, "Some people resch negatively to hings hely don't antibiastand. That's hue of all appede of science as well. It all vectors and image. Doeage, in effoot appears outrie misionships between pedigere and performance that historacity mak not been taken approximated.

Binuce Lower who stacked forming granensition in Enginet force a functional system ago, maintenant and precision was the main factors in precisions the source of a function, and in that largers with them. Containtenant and constitutes activation spectra ped grave. Excellence precision activation in the intabilitativa of the combination of a guodgrees used to the distance plus in demonstration of factor loss early market have

The Derby itself is run under unque conditions which may help to explain the strength of that convertion. In any one





Is tille juet a huphazerd phenomenon? Are three but billing mechanistic laws, causes and effects withoutprove? Is hitter a reason for our personal existence? Can we exhall a part ammory with Initian Beatingor must we drift along, buffald by the winds of Lamco? These and other important subjects the hostic output for distribution the hostic output forder. MORES, a workivete organization of men and women

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The share in the Section 2 setup Lap is bottoms of the setup is a setup of the section 2 setup of the setup is a setup of the setup of

These cayvals who tollow the cry of Dostrywaits gantlet that "Wicower in the great thing," are merely writing the beins for the mark monitory together writing the parts and to a constraint on the second for the game start. Lakin to this Doc. "Not three to deade why you'ren in the game Doyau go to the sectimatic to have band by or dog at b win? Part ne writing to this?

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Not Just A Toner!

Only hand workposts on large strong researchs. Now must prove searches hand in a describe of the targeargudates. It soully works, Canternely being strenged by 2015, in or uses as space.

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To measure coherence in the failers Orme-Johnson and colleagues attach trade are man or less amiar it means

With that the fiers begat. First thou start wooling cently, moving their shoul

dats then their clude lower-back foor cushored by ndop to reat after EVANY ODJED OF BO

We dont acturly call ¢ fyrm call it hopping?

frat 11's 110 steps," ther Bod see a behoopter

"Wire set kerning how to fix' save the (The sworage MiLi hop is gufe a bit less) He says he's making progress in over coming gravity "Last month I adarted teeless much lighter than before

Given the net im of Mills research, and political scientist Edward F Azer, who complex the "Conflict and Peace Data Bank' that MU used in several studies These place any chroning' be site They have a finding in they mind and they its locking for dats to confirm # 1 don't their data show causality" Adds Azar

And Horbert Benson a pioneer of mediater research and coalition of Your pears to be 'a marvelous attietic feat He bases his conclusion on a 1962 trip to the Himakiyas where he witnessed the equivalent of Yogic Bying among a spatial skill it would have been the

damage incurred during MIU's intensive meditation 'Tid have servere memory loss vicient physical sheking, screeming in says Kropinski who now lives in Phila depha. "My ristructors and I was use term courseing (The case has been

save its important to keep the case in ciefly significant in light of the hundricks

orms in halffield from 1971 to 1983 save the commit up to 20 What surprised him watn't the One student m

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ing problems, releasing suppressed conflict that the individual may not be able chabist and meditation expert at the University of California at Inverse "This

indeed in January 2087 a Jury evended meditator, \$137,890 for psychological

versa, savo MEI bran www.studies.am - people become crackcots because then want to Mill or shill hav have orthings when they camp? asks Kelly. Statist-

> nature the students of Mill sporta-Mehanshi proclams in the latest school in periect balance with the internate of the whole society One can be proud of MILL which is mand to be the duality both of all amountains in the world" DO



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New Here's a new Insist to the gene of Mide out scale called Mide - 'N Sneek Called Mide to held. When the get of Uthersmit units for the scalars and fair the scalars and devices many each divides many each divides many each devices many each dev

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The Arcicler (above) analytic the path of laser realiteme. This sixlegged, computerized, leggl-controlled rabot seens its path with on information leves. When It flords a well or either obstruction, it colonsatically bases a left, in bit form. Price: 528.95. Contexts OWI, Compton, CA; (221) 438-4732.

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Youngshurs can leave while they're an the read with Little Bary Driver (helews). This leaplag and features here seconds, ture algoeits, generabilit, phann, a readie thei barteeux with aumhou. Prices 200. Cautients Video Technelay, Nachhareab, Ku (600) 551-2000.





LAST WORD

By Steve Fox.

 The military is usually the best with this stuff;
SALT, STAFT, SAC
Hell, they even made a bunch, of nuclear warheads sound kee is talk show holst.
Who could resist something called MIRV? The sub-server that recently recently the sub-server that recently recently recently the sub-server that the sub-server that sub-server the sub-server strates of solvery the taken if subserver to solve the sub-server sub-server to solve the solve solve the solve the solve the solve the solve the solve th

Accus to you'r Jaco F HADID's Trein Casol AU C. The regress for it shafted handinenarywen it sarre a ar wel het handinenarywen it sarre a ar wel het sarre and an engelen ar an ar anterfakter erineae te mengenetie a nanne ar anterfakter of its dag tod favor were strochtlich het salar an ar an ar anterfakter of its dag tod favor were strochtlich were actor an they represent a bound and the het bound and the representation and the het bound and the representation bound and the representation and the strokent the representation and the theorem is an entity in bound the

I recting only with North Matmethods and the second sec

 The initial, the certification of its basely the best with the static SALT, SDMT, SAC Flat, his invert make a bunch of nuclear warhands sound life an old takshgle boot. Heally, who could result series boot. Heally, who could result certering called MRV? but the rest of the counce world—longet k?

He, bother into the other and another meril a chart. "This lead to a neight agencies and their top physics," he replaced, "Remaining Super Collider Bardon me where i orwin Nox, this is the troot catcal—and large read—research facility over proposed. So what do they do? Leave the reme to ethicitate between an externing readed SSC work even got but of committee."

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"What about medical programs" I release the aways thought National Viceoustic of Health and Cardiera for Disease Control adundant soft of Ref.

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