

1: Enclosure smoke filling revisited | Fred Mowrer - www.enganchecubano.com

ENCLOSURE AND LABOR SUPPLY REVISITED no significant relationship between enclosure and migration. The coefficients are generally significant, including the enclosure one, but excluding the urbanization coefficient whose failure to achieve significance may be a result of collinearity with the size variable.

A second stage, the enclosure smoke-filling period, follows; this second stage is the subject of this paper. It has been more than 20 yr since Zukoski first addressed the smoke filling stage of enclosure fires in terms of thermodynamic control volume concepts and fire plume entrainment, yet his analysis remains pertinent. This paper reviews and extends fire modeling concepts related to enclosure smoke filling developed by Zukoski. The mass-based analysis of Zukoski is recast in terms of the volumetric flow rates typically used for ventilation system design; it is extended to consider global average temperature rise and the effect of a spreadsheet template is developed to compare hand calculations based on a global analysis with numerical smoke filling calculations. Results of this comparison suggest that there is little difference! Introduction The analysis of enclosure fires is often considered in terms of energy and mass balances associated with control volumes designated on the basis of observations in actual fires. Based on such observations, enclosure fires can be characterized in terms of the four stages illustrated in Fig. The methods and algorithms used to simplify and analyze the mass and energy balances applicable to each stage differ! To a large extent these differ! This paper addresses the second stage of enclosure fires, the enclosure smoke-filling period. This stage of enclosure fires is of concern for many fire safety analysis and design purposes, particularly those related to available safe egress time ASET [1] and smoke management [2]. It has been more than 20 yr since Zukoski [3] first presented a simple analytical model for enclosure smoke filling based on energy and mass balances for upper layer, lower layer and global control volumes in a closed-room fire. The Zukoski formulation still serves as the theoretical foundation for other enclosure smoke-filling models, including the ASET model developed by Cooper [4]. The four stages of enclosure fires. This model is still widely used; it is included as part of the FPETool [7] fire modeling suite. This discussion revisits the formulation presented by Zukoski, recasting the formulation in terms of the volumetric flow rates typically used in ventilation system design and expanding on the formulation to address the issues of global temperature rise and oxygen depletion in closed-room fires. A spreadsheet template has been developed to perform the calculations described in this paper. Some implications of these calculations are discussed. General phenomena Zukoski [3] considered the case of a fire in a single closed room. The basic phenomena of this fire scenario are illustrated in Fig. A fraction, s , of the heat released by the fire is lost by heat transfer to the boundaries of the enclosure or to other surfaces within the enclosure, while the remaining fraction, $1-s$, of the heat released by the fire, a fraction is radiated away from the combustion zone while the remaining fraction is convected in a buoyant plume that rises from the fire source to the ceiling. Control volumes and terminology used for enclosure smoke filling analysis. The plume entrains surrounding air as it rises. Combustion products and entrained air are transported along with the convected heat release to the ceiling, where the plume turns to form a ceiling jet that spreads radially beneath the ceiling. When the ceiling jet reaches the wall boundaries of the enclosure, it is detected downwards. For purposes of modeling enclosure smoke filling, it is common to neglect the ceiling jet altogether and to assume that the enclosure begins to fill with smoke from the ceiling down. The developing smoke layer is normally treated as a distinct control volume assumed to have uniform properties for zone modeling purposes. The upper and lower layer control volumes are assumed to be separated by a distinct thermal discontinuity. The upper layer descends within the enclosure due to the entrainment of fresh air from the lower layer into the fire plume and, depending on the location of leakage paths, the expansion of heated gases in the upper layer. Once the smoke layer descends to the elevation of the fire source, the fire source becomes immersed in the smoke layer and further entrainment of fresh air from the lower layer ceases. After this point, the smoke layer continues to descend due to gas expansion only. The intensity of the fire may diminish at this point due to oxygen depletion within the upper layer. The expansion of gases within the enclosure forces the flow of gases from the enclosure through available leakage paths. In the baseline case, designated as Case 0, the entire enclosure is treated as a single, mixed

control volume assumed to have uniform conditions throughout. The other two cases, designated as Cases 1 and 2, address the descending smoke layer explicitly in terms of upper and lower layer control volumes. Leakage paths are assumed to be at floor level only in Case 1 and at ceiling level only in Case 2. Global issues Zukoski [3] addressed the pressure rise that would occur in both sealed and leaky enclosures by first neglecting the descending smoke layer and treating the entire enclosure as a control volume. Some fire models calculate boundary heat losses explicitly, usually in terms of one-dimensional heat transfer through a slab. For the present discussion, a constant heat loss fraction, s , is used, such that $Q_{loss} = sQ_{fire}$. Values near the high end of the range would be appropriate for spaces with irregular ceiling shapes, small ceiling area-to-height ratios or where fires are located near walls. A value of 0.1 Mowrer [8] found that a value of 0.1. Temperature predictions are sensitive to the selection of the heat loss fraction. Because the heat retained in the gas volume is proportional to $1/s$. Further work is needed to characterize appropriate heat loss factors to use for design purposes for a range of enclosure geometries, boundary materials, surface conditions and fire sizes and durations. Zukoski [3] only considered the adiabatic case of no boundary heat losses for most of his analysis. The sealed compartment Neglecting any fuel addition associated with heat released in the space, the mass flow rates into and out of the compartment are assumed to be nil for the sealed case. The volume of the compartment does not change and the total mass within the compartment remains constant. Assuming ideal gas behavior and constant specific heats, for the sealed compartment Eq. This may be a real issue for fires in pressure vessels, including submarines and space vehicles, but is not usually significant for typical buildings because they are leaky by nature. The leaky compartment For the case of the leaky compartment, the entire enclosure volume is considered as a fixed control volume, just as it was for the sealed compartment. In this case, the pressure rise in the compartment caused by the release of energy is assumed to force flow out of the enclosure through available leakage paths while at the same time preventing mass flow into the compartment through these same leakage paths. Consequently, for the leaky case, Eq. Based on this analysis, Zukoski concluded that an assumption of quasi-steady pressure would be satisfactory for most cases. In all the cases considered by Zukoski, the pressure rise was so small that gas density and pressure were virtually unchanged. Klote and Milke [11] tabulate the global temperature rise. The average temperature rise of the fixed control volume associated with a leaky compartment is considered. First, the mass balance for the fixed control volume is introduced, recalling that the pressurization of the control volume caused by heat release from the fire is assumed to prevent mass inflow. Global temperatures calculated with Eq. Rather than apply Eq. Assuming that air entrainment occurs only laterally, this control volume will not have mass inflow across the lower control volume boundary. For this scenario, air entrained into the fire plume is simply recirculated from within the fixed control volume, with some gases forced out of this control volume due to expansion. With the smaller control volume defined in this way, the temperature rise expressed by Eq. Fixed control volumes used for global analysis of enclosure fires. Oxygen limitations There is a limit to how much heat can be released within a closed room because the release of heat is coupled with consumption of a finite amount of oxygen from the air in the enclosure. Since it is assumed that oxygen cannot enter from outside due to pressurization of the compartment, the fire must eventually die down due to oxygen depletion, much like the familiar candle flame trapped inside an inverted jar. The heat released by combustion in a room fire is related directly to the oxygen consumed. As an example, consider a case where $s = 0$. For a heat loss fraction is 0. While potentially significant from a thermal injury or damage standpoint, these values are below the temperature rise of approximately K commonly associated with ashover conditions. Lower heat loss fractions and higher oxygen consumption fractions would be needed to achieve temperature increases associated with ashover. The enclosure smoke-filling process Zukoski treats the enclosure smoke-filling process in terms of two limit cases, as illustrated in Fig. In Case 1, the expansion of gases in the upper layer pushes fresh air at ambient temperature from the lower layer until the smoke layer descends to the floor. At that point, smoke at the upper layer temperature and composition would be expelled. In Case 2, the expansion of gases from the compartment is assumed to occur directly from the upper layer from the start. Cooper does not address this scenario. The rate of upper layer descent for the two cases derives directly from Eqs. A spreadsheet template has been developed to perform these calculations using a simple time-marching algorithm based on the Euler method. Calculations and comparisons with experimental data

The enclosure smoke-illing spreadsheet template includes calculations and graphs for the global case Case 0, the door leak case Case 1 and the ceiling leak case Case 2. The global temperature rise associated with Case 0 is calculated using Eq. This represents the analytical solution for Case 2 for power law fires, permitting evaluation of the accuracy of the Case 2 numerical solution for smoke layer descent. Experimental and predicted results for smoke illing in a 6 m cube [18]. The maximum fire size is also specified. The fire grows according to the specified power law relationship until it reaches the maximum fire size and remains constant at the maximum size thereafter. Decay and burnout are not considered. The spreadsheet template currently keeps track of the oxygen concentration in the smoke layer using Eqs. Consequently, nonphysical results can be calculated if the oxygen limitation is exceeded. The user must visually scan the oxygen concentration output data to determine the time and conditions when the oxygen limitation is exceeded. The calculations performed by the spreadsheet template have been compared with experimental data. The first comparison is based on a fire test conducted by Hagglund et al. Karlsson and Quintiere [19] note that for this experiment there was a delay of up to one minute for the fire to reach its steady value of kW. To evaluate the effect of expansion on smoke descent, the results of this simulation are shown along with experimental data in Fig. At later times, the smoke layer descends slightly more rapidly for Case 1 than for the other two cases. This is due to the increasingly important role of expansion in Case 1 as the smoke layer nears the fuel surface. Experimental and predicted smoke illing results for BRI experiment [20]. Cooper [4] has previously noted the increasing importance of expansion as the smoke layer approaches the fuel surface.

2: New Babylon Revisited

Where interior exit enclosures are extended to the exterior of a building by an exit passageway, the door assembly from the exit enclosure to the exit passageway shall be protected by a fire door conforming to the requirements in Section

I poured the floor last Monday and it turned out phenomenal. John and his crew from High Def Concrete knocked it out of the park! I had asked for a machine finish, and by the time that John left that night at 9: When I last updated you, I had just finished the slab edge membrane attachment to the footings and was working on installing the RockWool ComfortBoard Semi-Rigid mineral wool panels. I can advise that this product stood up well to the rigours of prepping for the slab pour. I was able to walk on the product without significant compaction but did use plywood kneeling plates as the concentrated weight on my knees would leave a noticeable divot as also occurred with the XPS and EPS panels I installed in the science lab. Compared to the rigid foams, the mineral wool is also easier to install because it is more forgiving due to its slight ability to compact. This really helped to maintain the required elevations of the floor. The only down side is that in the confined space of the basement, the air quality got quite poor and I had to wear a mask, and even then my chest was not happy for a day or two after handling. As spray foam readily soaks up water, I used mineral wool to fill in around this irregular shape. Something you could not do with rigid foams. This was the EPS panel for the sub slab building science lab. I also was impressed with the durability of the 15 Mil Perminator membrane I installed below the slab. It was fairly easy to install except that due to its thickness and rigidity, any creases folded into it at the factory were difficult to get rid of and therefore air seal around. But its thickness meant it stood up well to construction activity and resisted all tears and punctures. There was no way you could pull the edges hard enough to flatten out the crease, so you had to run your finger along it to flatten it out. The Perminator membrane was sealed to the membrane I previously installed along the slab edge that was tied back down to the footing providing an air-tight continuous interface. The only thing I would have changed if doing again is to have used the Perminator membrane around the internal footings instead of the VB Poly I did use. Back in Jan , I had not yet researched what sub-slab membrane I was going to use. The poly flaps had been protected all this time with strips of plywood, but there were still a lot of holes that needed to be sealed up prior to the slab pour. For any floor drain penetrations, I was able to cut a hole in the exact location by folding the membrane up against the drain and then marking with another loose piece of ABS. For Drain Penetrations, bring the membrane up to the drain and fold over. Place the same sized pipe against the drain and trace. Your left with a cut-out in the exact location needed. The membrane can now just slip over the drain pipe as long as you have not fastened the far end as it needs to be pulled up to get over the pipe before settling back down into position. On all penetrations, I was concerned that the slight compression of the mineral wool, would just tear any taped seal I did around the penetration. So, I instead made a ring of membrane that I knew would stick well to the Perminator and then I used my favourite liquid flashing material: R-Guard Joint and Seam. This provided a very flexible, air and water tight interface, and was fast and easy to install. This is the sub-slab insulation science lab area. With the insulation and membrane installed on all four lab panels, I built the bucks that will later form the concrete lids over the test lab. I also installed some rebar to reinforce the edges as I will have a rolling jig to lift out the 4ftx6ft concrete lids to remove the insulation samples for testing. The last task was to install the slab edge insulation. Now slab edges are negligible down 12ft below grade except that the perimeter drainage system is constantly removing thermal energy from the perimeter of the foundation, so some insulation is still useful. To set the elevation of the XPS slab edge insulation, I measured down from a laser line. I held the strips in place with blocks of wood till the foam setup. The top edge of the strips provided the grade line for the top of the concrete slab Now to the title of this entry " Slab Happy. This was not randomly chosen but represents an article written by Joseph Lstiburek at the Building Science Corporation. Joe further previously elaborated on the issue in his article Concrete Floor Problems discussing the California practice of placing sand between the vapour barrier and concrete to the same end result. So why should it go above? Simple answer " Physics. You see, when the membrane is put below the insulation, it means that there is no barrier between the insulation and all that bulk

water incorporated into the poured concrete. This is only part of the problem, the second part is that although it was wetted by liquid bulk water, its only drying capacity is by vapour transport up through the slab, and this is a very slow process retarded even further by the fact that as the interior of the dwelling becomes heated, the vapour pressure will always be pushing downwards. The insulation stays saturated for years, if it ever dries out, and wet insulation is pretty much useless insulation! So always put your membrane in contact with the concrete. Now that this milestone is behind me, I will frame out the remaining walls in the basement before re-starting on the exterior of the dwelling.

3: Enclosure - P2P Foundation

Re: Enclosures Revisited «Reply #10 on: February 25, 2006» I know that for prototyping you can use anything, I even have a couple of prototypes done on tin cans, that is the reason that I never worried about enclosures until I decided to start selling some of the things that I do.

In England and Wales the term is also used for the process that ended the ancient system of arable farming in open fields. Under enclosure, such land is fenced enclosed and deeded or entitled to one or more owners. By the 20th century, unenclosed commons had become largely restricted to rough pasture in mountainous areas and in relatively small parts of the lowlands. It often entailed the changing of agricultural practices from communally administered landholdings, usually in fields without physically defined territorial boundaries, to agricultural holdings which were non-communal. Former ways of providing food and sustenance - strip farming, labour relationships based on obligation and deference, widespread access to, and availability of, common land for grazing, hunting and collection of fuel - were denuded and done away with in the name of efficiency, progress and private property rights. This definition would apply accurately to all forms of enclosure. In a more recent commentary, Boyle agrees: It acknowledged the royal forests as common land that could be enjoyed and used by all citizens including serfs and vassals. This law remained in effect for over years until it was superseded by a new statute in Bollier, Today we face an unprecedented situation where the private sector is drilling for oil in the oceans, releasing vast amounts of carbon into the atmosphere, patenting the genes necessary to cure diseases, privatizing water, and claiming seeds as its intellectual property. Its long reach now penetrates segments of society previously considered off-limits to commercial interests. This includes public education, scientific research, philanthropy, art, prisoner rehabilitation, roads, bridges, and so on. In our time it has also been an important empirical fact. On the one hand, the fall of the Berlin Wall marked the beginning of the current moment; on the other hand, the vain security fence between Mexico and the United States, and the hideous gigantism of the Israeli wall immuring Palestine, also define the current moment. Enclosure indicates private property and capital: The enclosure of the commons has reappeared in the twenty-first century owing to four developments at the end of the twentieth century. First was the uprising in Chiapas led in by the Zapatistas in opposition to the repeal of Article 27 of the Mexican Constitution that provided for ejido, or common lands, attached to each village. The renewed discourse of the commons formed part of the struggle of indigenous people against the privatization of land. If the cowboy novelist implied a relation between the fence and money, Pramodya Toer draws attention to the relation between crime and the fence, or the criminal and the indigenous, using the example of Buru Island under the Suharto regime in Indonesia. A second development of the late twentieth century bringing about a discussion of enclosure and the commons was the development of the Internet and the World Wide Web as a knowledge commons. Finally, a fourth factor in this renewed discourse was the collapse of the USSR and of the communist countries of eastern Europe, which made it easier to discuss the commons without automatically being suspected of ideological intercourse with the national enemy. The key point has been, however, that the relations in question are of a peculiarly uncommodifying character. As the editors of *The Ecologist* note: Unlike most things in modern industrial society, moreover, it is neither private nor public. Some time ago I would have been very inclined to go along with the persuasiveness of "resource-commons" language. Like most "commons" theorists, I, too, have become, in spite of myself, a theorist and critic of enclosure. I have found in my own analysis of the process and practices of enclosure that resource management discourse tends to be both symptomatic of and constitutive of the dynamics of enclosure. This is, of course, quite obvious in the case of the discourses and practices of apologists of parliamentary enclosure. People called commons that part of the environment which lay beyond their own thresholds and outside of their own possessions, to which, however, they had recognized claims of usage, not to produce commodities but to provide for the subsistence of their households. The law of the commons regulates the right of way, the right to fish and to hunt, and the right to collect wood or medicinal plants in the forest. The enclosure of the commons inaugurates a new ecological order. Enclosure did not just physically transfer the control over grasslands from the peasants to the

lord. It marked a radical change in the attitudes of society toward the environment. Before, most of the environment had been considered as commons from which most people could draw most of their sustenance without needing to take recourse to the market. This change of attitudes can be better illustrated if we think about roads rather than about grasslands. What a difference there was between the new and the old parts of Mexico City only twenty years ago. In the old parts of the city, the streets were true commons. Some people sat in the road to sell vegetables and charcoal. Others put their chairs on the road to drink coffee or tequila. Children played in the gutter, and people walking could still use the road to get from one place to another. Such roads were built for people. Like any true commons, the street itself was the result of people living there and making that space livable. In the new sections of Mexico City, streets are now roadways for automobiles, for buses, for taxis, cars, and trucks. People are barely tolerated on the street. The road has been degraded from a commons to a simple resource for the circulation of vehicles. People can circulate no more on their own. Traffic has displaced their mobility. Enclosure has denied the people the right to that kind of environment on whichâ€”throughout all of historyâ€”the moral economy of survival depends. Enclosure undermines the local autonomy of a community. People become economic individuals who depend for their survival on commodities that are produced for them. Since intellectual labour is at the center of the productive scene, the merchant no longer possesses the juridical or material means to impose the principle of private property. When immaterial goods can be reproduced at will, the private appropriation of goods make no sense. The possibility of getting a dissident voice through their channels is increasingly scarce, and the use of copyright as a means of suppressing freedom of expression is becoming more and more fashionable.

4: The rectangle enclosure and point-dominance problems revisited :: www.enganchecubano.com

Open Fields and Enclosures Revisited Opposition between 'community' and 'market' originated with nineteenth-century social theorists like Marx () and Tonnies (), who con-

Conclusion Introduction A faraday cage is an enclosure with electrically conducting walls. Electromagnetic waves cannot pass through a conducting wall, so an enclosure with conducting walls stops electromagnetic waves from either entering or leaving the enclosed space. Such an enclosure is usually called a faraday cage. We call them faraday enclosures to avoid confusing them with animal cages. Outer dimensions are 91 cm wide, 60 cm high, and 65 cm deep. This enclosure ships as seven panels and four struts that our customers assemble themselves. For same enclosure with door closed, see here. These signals are easily swamped by interference. Without a faraday enclosure, a mobile phone base station can disrupt reception from implanted SCTs at a range of m. With a faraday enclosure, the same disruption will not occur unless the base station is 50 m away. Outer dimensions are 62 cm wide, 33 cm high, and 64 cm deep. This enclosure is large enough for two rat cages side by side, and provides feedthroughs for three antenna cables. Another reason we use faraday enclosures is to guarantee that no detectable signal from our transmitters emerges from your telemetry recording room. In other countries, the MHz band is licensed for amateur radio and radiolocation systems, and regulations prohibit our system from radiating intentionally within the band. This chamber, set up at the Society for Neuroscience Show in, provided superb reception for randomly-moving transmitters on its carpeted floor, even with its reflecting mesh lid removed. When the antenna is 30 cm from the transmitter, our signal is attenuated by at least a factor of one hundred see Reception. When the two antennas are unfavorably oriented, we can suffer another factor of one hundred attenuation see Omni-Directional Antennas. With conducting surfaces nearby, we can suffer another factor of ten loss due to multi-path interference see Multi-Path Interference and Radiated Power. We can end up receiving only ten parts per million of the power we transmit, or 3 nW. If we are to be certain of accurate reception within 30 cm of an antenna, the ambient interference in the ISM band must be less than pW. A faraday enclosure, consisting of conducting metal walls and one absorbing wall, provides a factor of one thousand attenuation of ambient interference. In our basement laboratory, interference within a faraday enclosure is always less than pW and reception within a faraday enclosure is robust. Five front-loading faraday enclosures on top of one another with rolling wheels underneath. The stack can be moved around the laboratory. Our faraday enclosures provide connected, conducting walls with one microwave-absorbing surface. Steel mesh allows light and air to enter and leave. A microwave absorber in the ceiling stops the interior from resonating at our operating frequency. Coaxial feedthrough connectors in the back wall allow us to insert one or more antennas in the interior. Ethernet and USB feedthroughs allow us to place webcams and location trackers into the enclosure along with our antennas. The enclosure not only reduces the power of the interference at the receiving antenna, but also, by trapping the transmitter signal in a finite space that does not resonate, we increase the minimum power we receive from the transmitters. Our operating range within such enclosures extends to all corners of the enclosure itself. By surrounding an IVC rack of eighty mouse cages with steel mesh curtains and a back wall of absorbers, we can record from dozens of animals at one time with one Octal Data Receiver. Before you select a location for your telemetry system, we recommend you check the location of local mobile phone base stations. If they are within m, facing directly towards you, and you are high enough off the ground to be directly in their line of transmission, we will advise on measurements you can make of the interference power so as to determine whether your preferred space can support our SCT system. Versions For a free-standing system, we recommend our FE3AS as the most compact, effective, and economic enclosure. The FE3AS will house six mouse cages, three on the floor and three on its shelf. It provides robust reception throughout the enclosure with two antennas, and near-perfect reception with four antennas. The front wall of the enclosures is a large door that swings down, giving access to the entire interior space. All our front-loading aluminum-frame enclosures can be stacked up into towers on wheels that provide mobile telemetry for dozens of animals.

5: Global Economic History: A Very Short Introduction - Very Short Introductions

THE ENCLOSURES REVISITED: PRIVATIZATION, TITLING, AND THE QUEST FOR ADVANTAGE IN AFRICA Rogier van den Brink Daniel W. Bromley** *Cornel 1 Food and Nutrition Policy Program.*

A bit more than a year time has passed since the dipole based front loaded enclosure has been finished in its final form and did set place in my everyday audio setup. Today, after that time, I can say this was one of my most important steps in my whole audio life towards a refined, smooth and absolute natural audio response. Since last February these speakers have given me so far the rare present of hundreds hours of inspired musical listening pleasure, were the technical aspects of its origin did step into a background role. All these loudspeakers are quite well known and have several fans around the world. They all show up with similar audible characteristics and attitudes. Their very conspicuous presence of articulation, illusion of space and exceptional dynamic abilities, which are common similarities independent of size and enclosure principle, have made Tannoy to a classic in audio history. They perform in a well known robust tradition where other similar vintage makes from Altec, Jensen, Stephens, University and more are gathering, but were refinement and natural aspects do not play the foremost attitude, instead their typical common habits are more or less similar cheeky frequency ends. The latter group extend this spectacular attitude into the region of lower mids as a result of the too short and too small opened backing horns, mixing up with a cocktail of unwanted wooden resonances as a result of large interior surfaces of the horn development. Excuse me, these classic speakers might be able to fulfill the claims with typical attitudes of electrical amplified performed rock music, but for lovers of naturally performed and articulated music with delicate dynamic structures such designs are of no use, unable to represent a full spectrum of micro dynamic information. For audio gourmets these classic designs need a lot of work to be a final choice. A loudspeaker is one of the most important components in a audio set up. If it is unable to transform the signals without harmonic relevance and dynamic finesse, other components will not be able to catch up the loss. My enclosures did lead my long term relationship with Tannoy Dual Concentric alnico drivers into a complete new adventure of unknown land. Within several articles I have honored the "best audio set ups I personally have listened to" and I am still in hope to extend this experience one day with a larger wooden horn like WE15A in a similar refined set up. My own unique way to follow such exceptional sets uses a Tannoy Dual Concentric speaker in combination of dipole enclosure, where the purposed half is formed to act like a front loaded horn development and the backing part acts like a traditional open chamber. The medium frequencies response between and hz will be mechanically amplified and supported, a tonal spectrum where a cone speaker of such mass and size is physically limited in its ability of resolution finer harmonic details. In the same time the funnel does act as a extension of the cone, who itself is already a seamless extension for the high frequency driver. So the horn is enabled to conduct lower frequencies with its wider and longer opening development. Not only to my personal taste the Tannoy high frequency horn is known to be one of the best two or three horn tweeters built ever. It shows up with a exceptional rare attitude, its seems to be unlimited extended in its higher frequency performance, since it is at the same time completely acoustically invisible, as any for hf-horns typical superficially is at the same time completely absent. Horn development as seen from the mouse, the funnel extends the cone, who itself seamless extends the hf-horn. Additionally the funnel enables the cone to conduct a larger air mass. The dipole principle for low frequencies was a early simple invention to obtain fast and naturally sounding low frequency response in early cinemas of the to years. Together with the open baffle principle, which is physically seen as a similar design, it was in these days preferred over any closed or ported cabinet design. These came into account when the amplifiers started to be powerful enough to drive small enclosure types to allow complex filter units for massive corrections of low frequency radiation. The dipole shows some advantages comparing it to other designs, like the fastness of the transients, the completely uncompressed tonal expansion and the non-existence of any wooden resonances, which are typical for all cabinet principles. Open baffles mostly fail any acceptance in living room surroundings because of their space consumption a square meter plus wings is a minimum to obtain some LF below hz. The folded baffle into a such dipole design ends up with a quite room

friendly size of typical classic speaker enclosures here my speaker dimensions are 90 x 55 x 45 cm, HxWxD. But the backward radiated energy makes a delicate room positioning necessary. The speaker radiates wide parts of the frequency spectrum in anti phase mode, a effect which makes a minimum distance to the backing walls necessary to avoid problems. Anything closer will result in typical phase erasure and adding effects, both can degrade the tremendous abilities of the speaker. I have positioned mine with a distance of 60cm from the backing walls. On the other hand the funnel helps to direct and disperse the forward radiated energy, which is a another welcome advantage, this helps to keep the vagabond room reflections in almost perfect control and limits further room treatment to a minimum. If you can set up the speakers with such space, you will be rewarded is one of the most dynamic and expressive loudspeakers available, together with a rare freeness of resonances and a exceptional refinement of finest micro detailed harmonies, most other speakers of that league cannot compete with. My speakers show up with the typical grill cloth at the back opening of the enclosures. Detail of the backside, the former installed sliding mechanism is completely redundant. So I have removed the rails and fixed the inside enclosure, the shown felt seals are not any longer useful. The former planned blinds to adjust the backward radiated energy are as well completely redundant. Here the reconed Monitor Red with specially designed crossover to complete the enclosure design with front loading. Later versions show up with higher paper cone weights and less optimal impedances for low power tube amplifiers. No other duplex speaker design in history makes such a seamless integration of high to low frequency with front loaded funnel possible. More than this the speakers are able to work in a highest possible stage of harmonic audio response with a almost invisible holographic dynamic soundstage other speakers of that size do not follow. This speaker works so refined that it made possible to detect several limiting aspects in my chain, which in former times I was not able to detect and resolve. I hope that such design will find some more interest in the coming future, Volker.

6: Community and Market in England: Open Fields and Enclosures Revisited - Oxford Scholarship

The last time we tested the Thermaltake Max5G USB Enclosure, a motherboard issue caused us to publish erroneous results. We're revisiting this product to bring you more accurate performance results. Last month, we did a review on the Thermaltake Max5G USB enclosure. We were unable to.

Early history[edit] Conjectural map of a mediaeval English manor. Decaying hedges mark the lines of the straight field boundaries created by the Parliamentary Act of Enclosure of Boldron Moor, County Durham. Throughout the medieval and modern periods, piecemeal enclosure took place in which adjacent strips were fenced off from the common field. This was sometimes undertaken by small landowners, but more often by large landowners and lords of the manor. Significant enclosures or emparkments took place to establish deer parks. Some but not all of these enclosures took place with local agreement. Tudor enclosures[edit] There was a significant rise in enclosure during the Tudor period. These enclosures largely resulted in conversion of land use from arable to pasture – usually sheep farming. These enclosures were often undertaken unilaterally by the landowner. Enclosures during the Tudor period were often accompanied by a loss of common rights and could result in the destruction of whole villages. Foreign demand for English wool also helped encourage increased production, and the wool industry was often thought to be more profitable for landowners who had large decaying farmlands. Some manorial lands lay in disrepair from a lack of tenants, which made them undesirable to both prospective tenants and landowners who could be fined and ordered to make repairs. Enclosure and sheep herding which required very few labourers were a solution to the problem, but resulted in unemployment, the displacement of impoverished rural labourers, and decreased domestic grain production which made England more susceptible to famine and higher prices for domestic and foreign grain. But elite opinion began to turn towards support for enclosure, and rate of enclosure increased in the seventeenth century. This led to a series of government acts addressing individual regions, which were given a common framework in the Inclosure Consolidation Act of 1775. Sir Thomas More , in his work Utopia suggests that the practice of enclosure was responsible for some of the social problems affecting England at the time, specifically theft: They stop the course of agriculture, destroying houses and towns – reserving only the churches – and enclose grounds that they may lodge their sheep in them. Fynes Moryson reported on these problems in his work An Itinerary: Yet I must confess, that daily this plenty of corn decreaseth, by reason that private men, finding greater commodity in feeding of sheep and cattle than in the plow, requiring the hands of many servants, can by no law be restrained from turning cornfields into enclosed pastures, especially since great men are the first to break these laws. Anti-enclosure legislation[edit] The enclosure of common land for sheep farming and the consequent eviction of villagers from their homes and their livelihoods became an important political issue for the Tudors. Reflecting royal opposition to this practice, the anti-enclosure acts of 1534 and 1549 were aimed at stopping the waste of structures and farmland, which would lead to lower tax revenues, fewer potential military conscripts for the crown, and more potential underclass rebels. The Tudor authorities were extremely nervous about how the villagers who had lost their homes would react. In the sixteenth century, lack of income made one a pauper. The authorities saw many people becoming what they regarded as vagabonds and thieves as a result of enclosure and depopulation of villages. From the time of Henry VII onwards, Parliament began passing Acts to stop enclosure, to limit its effects, or at least to fine those responsible. The first such law was in 1534. Over the next years, there were 11 more Acts of Parliament and eight commissions of enquiry on the subject. In 1549, conversion from arable to pasture became an offence. Once again, half the profits from conversion would go to the Crown until the arable land was restored. Neither the Act nor the previous laws were effective in stopping enclosure, so in 1550 Cardinal Wolsey established a commission of enquiry to determine where offences had taken place – and to ensure the Crown received its half of the profits. Inflation and enclosure[edit] Alongside population growth, [16] inflation was a major reason for enclosure. This, combined with injection of bullion from the New World , increased the money supply in England, which led to continuing price inflation. Until then enclosures were seen as the cause of inflation, not the outcome. When Thomas Smith advised Somerset that enclosure resulted from inflation, Somerset ignored

him. It was not until John Dudley, 1st Duke of Northumberland became de facto ruler that his Secretary of State William Cecil in office "took action on debasement to try to stop enclosure. There was a desire for more arable land along with much antagonism toward the tenant-graziers with their flocks and herds. Increased demand along with a scarcity of tillable land caused rents to rise dramatically in the 1540s to mid-century. The 1540s appear to have been the point at which the rent increases became extreme, with complaints of rack-rent appearing in popular literature, such as the works of Robert Crowley. There were popular efforts to remove old enclosures, and much legislation of the 1540s and 1550s concerns this shift. Angry tenants impatient to reclaim pastures for tillage were illegally destroying enclosures. The popular rural mentality was to restore the security, stability, and functionality of the old commons system. Historians would write that they were asserting ancient traditional and constitutional rights granted to the free and sturdy English yeoman as opposed to the enslaved and effeminate French. This emphasis on rights was to have a pivotal role in the modern era unfolding from the Enlightenment. Coleman writes that the English commons were disturbed by the loss of common rights under enclosure which might involve the right "to cut underwood, to run pigs". Midland Revolt In 1549, beginning on May Eve in Haselbech, Northamptonshire and spreading to Warwickshire and Leicestershire throughout May,[citation needed] riots took place as a protest against the enclosure of common land. Thousands of people were recorded at Hillmorton, Warwickshire and at Cotesbach, Leicestershire. A curfew was imposed in the city of Leicester, as it was feared citizens would stream out of the city to join the riots. A gibbet was erected in Leicester as a warning, and was pulled down by the citizens. It is recorded that women and children were part of the protest. Over a thousand had gathered at Newton, near Kettering, pulling down hedges and filling ditches, to protest against the enclosures of Thomas Tresham. The Treshams were unpopular for their voracious enclosing of land "both the family at Newton and their better-known Roman Catholic cousins at nearby Rushton, the family of Francis Tresham, who had been involved two years earlier in the Gunpowder Plot and had apparently died in The Tower. The old Roman Catholic gentry family of the Treshams had long argued with the emerging Puritan gentry family, the Montagus of Boughton, about territory. Edward Montagu, one of the Deputy Lieutenants, had stood up against enclosure in Parliament some years earlier, but was now placed by the King in the position effectively of defending the Treshams. The Royal Proclamation was read twice. The rioters continued in their actions, although at the second reading some ran away. The gentry and their forces charged. A memorial stone to those killed now stands at the former church of St Faith, Newton, Northamptonshire. The Tresham family declined soon after. The Montagu family went on through marriage to become the Dukes of Buccleuch, one of the largest landowners in Britain. By the 1700s, when Stuart Kings examined their estates in order to find new revenues, it had become necessary to offer compensation to at least some of those using the lands as commons when the forests were divided and enclosed. Most of the beneficiaries were Royal courtiers, who paid large sums in order to enclose and sublet the forests. Those dispossessed of the commons, especially recent cottagers and those who were outside of tenanted lands belonging to manors, were granted little or no compensation, and rioted in response. In the valley are older enclosures and higher up on the fell-side are the parliamentary enclosures following straight lines regardless of terrain. During the 18th and 19th centuries, enclosures were by means of local acts of Parliament, called the Inclosure Acts. These parliamentary enclosures consolidated strips in the open fields into more compact units, and enclosed much of the remaining pasture commons or wastes. Parliamentary enclosures usually provided commoners with some other land in compensation for the loss of common rights, although often of poor quality and limited extent. Enclosure consisted of exchange in land, and an extinguishing of common rights. This allowed farmers consolidated and fenced off plots of land, in contrast to multiple small strips spread out and separated. Parliamentary enclosure was also used for the division and privatisation of common "wastes" in the original sense of uninhabited places, such as fens, marshes, heathland, downland, moors. Voluntary enclosure was also frequent at that time. Multiple larger landholders already held the bulk of the land. They also had to respect the open field system rights, when demanded, even when in practice the rights were not widely in use. Similarly each large landholding would consist of scattered patches, not consolidated farms. In many cases enclosures were largely an exchange and consolidation of land, and exchange not otherwise possible under the legal system. It did also

involve the extinguishing of common rights. Without extinguishment, one man in an entire village could unilaterally impose the common field system, even if everyone else did not desire to continue the practice. De jure rights were not in accord with de facto practice. With land one held, one could not formally exchange the land, consolidate fields, or entirely exclude others. Parliamentary enclosure was seen as the most cost-effective method of creating a legally binding settlement. This is because of the costs time, money, complexity of using the common law and equity legal systems. The primary benefits to large land holders came from increased value of their own land, not from expropriation. From this viewpoint, the English Civil War provided the basis for a major acceleration of enclosures. The parliamentary leaders supported the rights of landlords vis-a-vis the King, whose Star Chamber court, abolished in 1532, had provided the primary legal brake on the enclosure process. The economics of enclosures also changed. Whereas earlier land had been enclosed in order to make it available for sheep farming, by the steep rise in wool prices had come to an end. Enclosure was not simply the fencing of existing holdings, but led to fundamental changes in agricultural practice. Scattered holdings of strips in the common field were consolidated to create individual farms that could be managed independently of other holdings. Prior to enclosure, rights to use the land were shared between land owners and villagers commoners. For example, commoners would have the right common right to graze their animals when crops or hay were not being grown, and on common pasture land. The land in a manor under this system would consist of: The only boundaries would be those separating the various types of land, and around the closes. In each of the two waves of enclosure, two different processes were used. One was the division of the large open fields and meadows into privately controlled plots of land, usually hedged and known at the time as severals. In the course of enclosure, the large fields and meadows were divided and common access restricted. Most open-field manors in England were enclosed in this manner, with the notable exception of Laxton, Nottinghamshire and parts of the Isle of Axholme in North Lincolnshire. The history of enclosure in England is different from region to region. Parts of south-east England notably parts of Essex and Kent retained a pre-Roman system of farming in small enclosed fields. Similarly in much of west and north-west England, fields were either never open, or were enclosed early. The primary area of open field management was in the lowland areas of England in a broad band from Yorkshire and Lincolnshire diagonally across England to the south, taking in parts of Norfolk and Suffolk, Cambridgeshire, large areas of the Midlands, and most of south central England.

7: Sub Enclosures and Install Revisited

This chapter presents an alternative interpretation of the open fields based on historical research in the last thirty years. Open fields were an efficient institution for meeting the needs of small-scale, grain growing farmers.

8: Slab Happy - Revisited | The Enclosure

Sub Enclosures and Install Revisited.. If this is your first visit, be sure to check out the FAQ by clicking the link above. You may have to register before you can post: click the register link above to proceed.

9: Faraday Enclosures

The dipole principle for low frequencies was a early simple invention to obtain fast and naturally sounding low frequency response in early cinemas of the 1920s.

Finding Your Estonian-American Roots Conscious exercise and the transcendental sun X-ray absorption and x-ray emission spectroscopy theory and applications Caribbean New York The Oxford guide to the English language. The theory of African literature The elements of poetry Alfred Hitchcocks Mortal Errors The best loved religious poems Project arcade build your own arcade machine The Gourmets Guide to Northwest Wines and Wineries Boadicea, warrior queen of the Celts Senses of the horse From the weavers loom Secret World of Bears (The Secret World of) The Imperial War Museum Book of the Desert War Neurobiological research and the impact of media Fire precautions. A man of permanent contradictions Adventure Guide to the Virgin Islands (Caribbean Guides Series) Teacher and the crown prince 9. Why Are the Digital Humanities So White? or, Thinking the Histories of Race and Computation What Every Parent Needs to Know About the 1st, 2nd and 3rd Grades Portugal Business Law Handbook-98 The Long Last Call Soils and Land-Use Issues in the MacKenzie Hill Country (Landcare Research Science Series,) Encyclopedia of Jewish history Roasting the Swan of Avon Death Trail (Danl Boone the Lost Wilderness Tales) Generals of the Confederacy: Pierre G.T. Beauregard Four centuries of Greek learning in England Preparing art work Winning library referenda camapigns Can we on mac CliffsNotes, The grapes of wrath Good deeds gunboats Vernon Fishers File 00 The Gospels in the Schools, C. 1100-C. 1280 (History Series (Hambledon Press), V. 41.) Latin America in the twenty-first century Seabury and the Anglican communion Roland Foster