GroundEffects™

Reporting Maintenance and Groundcrew Error Reduction Efforts

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Editors Note: *The following is an article written to show the events and reasons leading to Sikorsky Aircraft's Human Factors Training...*

Sikorsky Aircraft Corporation...

Human Factors is a broad and often overused term in aviation. Until fairly recently, accidents were blamed on 'Pilot Error', and left at that. As is unfortunately typical, it required an accident to spawn a more detailed investigation into what caused the pilot to make an incorrect decision. See sidebar #1.

Following the Aloha and United accidents in 1988 and 1989 (see sidebars), in which material defects should have been found during maintenance or production procedures, investigators also took a closer look at what used to termed 'Material or Maintenance' accidents. An accident is not caused by one failure alone, but only when several different failures begin linking together, creating what investigators call the 'Accident Chain'. Breaking any one of the links in an accident chain will prevent the accident from occurring. It became apparent that human factors in maintenance could become a part of that chain. Training and awareness in these human factors might help prevent these links from forming. See sidebar #2.

At Sikorsky, following a close call when a maintenance error was detected in late 1997, Production Flight Operations and Product Integrity personnel began an investigation into the cause. They made immediate changes to some of the tools required for the task, as well as the paperwork documenting the process. Although this particular near miss would probably never happen again, some similar event would likely occur in the

Human Factors Climate After Reorganisation

- Gisele Richardson

About six months ago, at a dinner party in a city in the U.S., I turned to the stranger on my right, and to start the conversation, said to him, "I understand that you work for Such-and-Such Airline". He replied: "Well, you could say that. Actually, I used to be with ABC Airlines" (a company that was taken over by Such-and-Such). He launched into a discussion of the differences between the two companies, and his comments ran something like this: "We were the older company. We were more profitable – we must have been doing something right, but they imposed their systems on us". And so on, all of his words clearly indicating a sense of loyalty to his old company rather than to the new entity and clearly indicating a feeling of having been done wrong. I was surprised and curious about his unprovoked comments. His feelings were quite strong. "*When DID the merger take place?*", I asked. "Five years ago", he said.

MARSS

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AIR CANADA

Help us to prevent accidents before they happen!

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future, unless we could change the way we look at human factors in maintenance.

Chris Lowenstein, an Aircraft Safety Investigator in the Product Safety department, surfed to the FAA web page, and found a great deal of information. The FAA, Transport Canada, and the British CAA would soon be hosting a worldwide conference on the issue. Chris, along with Rich Friot, Manager of Flight Operations and Ron Irons of the Product Integrity department presented a plan to upper management. Shortly thereafter, Rich and Chris went to London, England to attend the HPIM conference.

At the conference, they learned about many of the recent developments in maintenance human factors. They decided that Sikorsky should use a training program to increase awareness among the personnel responsible for maintenance and inspection of flight aircraft. The evaluation team was expanded to include representation of hourly personnel and managers from Stratford and West Palm.

The team concurred that an outside supplier should conduct this training. Considering the intense emotions involved in changing 'company culture', the team strongly felt that only an outside supplier could effectively teach this course. Additionally, the team believed the course should be conducted off-site, away from the distractions constantly present here in the plant. Upper management strongly backed this program, and wanted to ensure that it was 'World-Class'.

The team attended and audited additional classes and conferences in Montreal, Canada; San Antonio, Texas; Manchester, England; as well as one class conducted in-house. After attending six different symposia and/or training classes, an outside consultant was selected to perform the training.

The course starts with an introduction to the course objectives and rapidly progresses to include a self-evaluation of personal characteristics, behavioral analysis, and general human factors information. The course uses a number of actual case studies to demonstrate these concepts.

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Feedback from participants has been remarkably positive. Many employees remarked that they were amazed how the program enabled them to look at themselves in a new light, and see how interactions with others affect their job performance.

Tracking human factor incidents in the hangar, such as minor dings to aircraft, etc., we are seeing a decreasing trend. While safety is a difficult thing to measure, this appears to be related to the increased awareness in the hangar.

Plans are in work now for a shortened refresher course to maintain this high level of training. We also plan to present our experience in implementing this training at a workshop sponsored by the NTSB in April.Human Factors in Aviation Safety

Side Bar #1

United Airlines Flight 173, a 'pilot error' accident, was an essential turning point. Flight 173; a DC-8 landing at Portland, Oregon, on December 28, 1978; had a corroded landing gear fitting. That, in turn, led to a 'gear unsafe' indication in the cockpit. The gear had actually free-fallen to a down-and-locked position, but had damaged the indicator switch in transit. The Captain of the aircraft spent a great deal of time troubleshooting the problem himself, waiting 28 minutes before contacting United Line Maintenance by radio. The landing was further delayed, because Captain delayed his request to the lead flight attendant to prepare the passengers for an emergency landing. The aircraft was in the general vicinity of Portland International during the entire time.

A partial landing gear extended landing is an emergency procedure, but it is a relatively benign event. The flight attendant advised the Captain that the cabin would be ready in ten to fifteen minutes. At this point, the Flight Engineer said, "Uh, fifteen minutes is really going to run us low on fuel here…." Unfortunately, the Captain was fixated on the gear problem and the cabin preparations, and did not appreciate the seriousness of the fuel state.

Shortly thereafter, the number four engine flamed out. It was rapidly followed by the number three, number one, and number two engines. Flight 173 was now the world's heaviest glider and was too far from the airport to land. The DC-8 crashed in a wooded suburban area of Portland. Of the 189 crew and passengers on board, only 10 were killed. Part of the reason for the high survivability was the absence of a post-crash fire, because there was no fuel left.
As a result of this accident, United Airlines began training cockpit crews in "Cockpit Resource Management", also known as CRM. This quickly came under fire from Captains who referred to it as 'Charm School'. The First and Second Officers didn't like it either, believing that they would never be able to effectively communicate with the Captains who were the 'kings' of the cockpit. United persisted and quickly overcame this initial resistance, and their CRM program became the model for other airlines. Later, the program evolved to include the flight attendants and became known as Crew Resource Management.

As other airlines recognized the importance of utilizing all of the combined talents of flight crews, instead of the sole judgment of the Captain, CRM gained acceptance. A classic example of CRM in use was the United Airlines Flight 232 accident in Sioux City, Iowa in July 1989. There, the three flight crew, plus an off-duty pilot, successfully piloted a crippled DC-10 to an 'impossibly difficult' landing, allowing 185 people to survive what experts have since called an unsurvivable in-flight engine explosion. Many pilots have since attempted this maneuver in a DC-10 simulator and virtually none have successfully landed.

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The Birth of Maintenance Human Factors [SideBar #2]

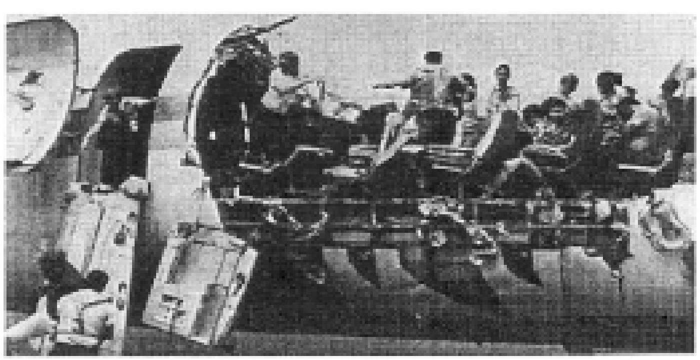
In April 1988, Aloha Airlines suffered an in-flight fuselage separation. The 737-200 aircraft climbed out of Hilo, and leveled off at 24,000 feet en route to Honolulu. Without warning, eighteen feet of the upper fuselage from just behind the entry door, all the way back to the forward part of the wing, tore away from the aircraft. The pilots were able to land the aircraft, despite the loss of the #1 engine. Only one person, a flight attendant, was fatally injured.

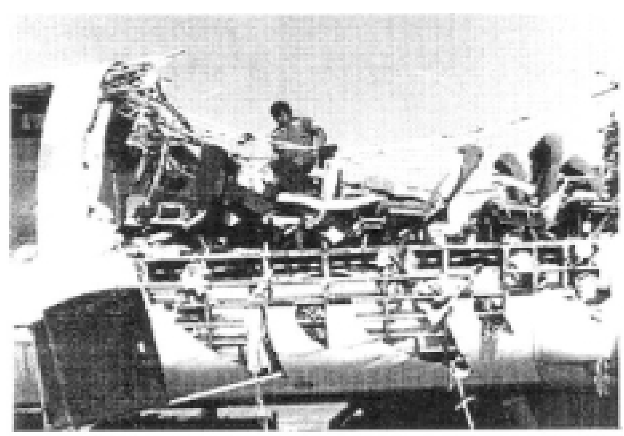
This particular 737, because it was used for frequent short inter-island hops, had the second highest number of cycles (1 takeoff and 1 landing = 1 cycle) of all 737's worldwide. Boeing had advised Aloha in October 1987 that they were concerned about corrosion and repairs to the aircraft. Additionally, there was an FAA Airworthiness Directive (AD) and a Boeing Service Bulletin (SB) requiring inspection for cracking. Aloha had complied with the FAA AD, but not Boeing's SB, which was more detailed, at the time of the accident. The AD was accomplished at night, with two different inspectors. Why didn't they find the 360 detectable cracks that the NTSB believes were present at that time??

Visual inspections repeatedly conducted on aircraft with no findings lead to an expectation of no finding. Repetition, boredom, fatigue due to late hours, poor lighting, and difficult working conditions on top of the aircraft all contributed to this error. Further, there was little formal training for the inspectors. Finally, pressure to keep the airplanes flying may have been so strong that insufficient time was allocated to these inspections.

This accident spawned a number of initiatives in Human Factors in Aircraft Maintenance. Continental began with the Crew Coordination concept. Northwest began a program. Even Boeing developed a Maintenance Error Decision Aid (MEDA). The FAA contracted with Galaxy Scientific to develop and disseminate information on the subject. The FAA, CAA, and Transport Canada began holding annual symposia. Now most major airlines and several manufacturers have Maintenance Human Factor programs in place. Sikorsky Aircraft was the first helicopter manufacturer to utilize this type of program.

Aloha Airlines - en route to Honolulu





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Editors Note: *This article which started on page one is an impresive article by Gisele Richardson of Richardson Management Assoc. The article deals with a subject that we are all aware of Company Mergers. With the big merge of Canadian Airlines International and Air Canada, I thought this article to be very appropriate for this very trying time for many AME's and pilots... Unfortunately the article is quite large and will be split into two issues. The short story you read on page one is a true story...*

So for five years, he has failed to accept the merger and for five years the company has been deprived of his full commitment. Is he the only one in this company with his views? Probably not. Is management aware of this and doing something about it? Probably not.

You, too, may have a friend or acquaintance who has not put the past to bed on a merger in which he was a participant and you may be surprised by the tenacity with which he holds his views.

As Many As 90% of the Mergers NEVER Live Up to Expectations!

- Gisele Richardson

FAILURES

The fact is, most mergers fail to get the best value out of both companies. Mergers are conceived with high hopes and with visions of winning scenarios, and yet recent research shows that "the performance of most of the acquired companies deteriorated significantly after acquisition.... And AS MANY AS NINETY PERCENT OF THE MERGERS NEVER LIVE UP TO EXPECTATIONS". These are pretty shocking statistics. I quote from a recent article in the New York Times: "Why do these financial and strategic factors – purchase price, expected economies of scale and in the projected earning – that they examined in deciding whether to merge or acquire in the first place. Usually, the executives find some flaw in the initial assessment – a high price , say, or misestimated earnings. The problem is that these standard analyses have not improved the success of the combinations. For seasoned acquirers, as well as for novices, the disappointments remain high." The fact is that in most mergers, no time or expense is spared on financial and legal planning; potential market shares, balance sheets, benefits of technology, and the rationalisation of routes and staff and equipment are projected, BUT little or no attention is paid to the critical element which must make all of this work: the human infrastructure.

Indeed, PEOPLE are the root of most acquisition and merger failures. Or more accurately, management's neglect of the people issues is the major cause of their company's failure to perform. By poor handling of the people issues, management creates a set of winners and a set of losers. The perception is difficult to eradicate, and is a costly impediment to success.

CULTURE

Culture may be the most important single definer of success in a merger. And yet, not only is it rarely thoroughly explored, it is largely ignored.

Our company culture (like our national or family culture) is an environment in which we are immersed, form which we rarely distance ourselves enough to be analytical about it. We take it for granted. A friend of mine asks, "Does a fish know he is in water?" and yet our culture underlies the process we use for decision-making and for justifying our choices.

The importance of company culture was pointed out to me recently by an ex-military pilot, who worked for a company largely run by ex-military, and which merged with another company with a similar staffing pattern. Both were surprised to find that they had totally different ways of thinking in spite of their shared background. The fact is, employees take on their company culture.

The company culture defines the way in which problems are expected to be solved, whether management and employees see each other as antagonists, whether win-win solutions to conflict are expected or whether there is usually a loser, what is the quality of relationships with the unions, the degree to which employees control their own job, whether management is transparent or secretive, whether management decisions are driven by expediency or politics or decency, and so on and so forth. Clearly, if two companies have

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significantly different cultures, the merging of two groups will be extremely difficult. I believe that the usual approach to cultural differences – that is, to ignore them – is the main reason why resentments are found alive and well years after the legal and operational merger has been completed.

> **"Great empires are seldom the outcome of small minds".**
>
> *- Gisele Richardson*

Imagine a company that sees itself as A Class Act, large, secure, influential. The takeover target is a company that sees itself as a plucky little contender. How to create a new self-image that will encompass the identity of both groups?

What if the survey suggest the two companies are incompatible? Just as in a marriage, if it looks as though it won't work, it probably won't.

THE TRIBE

Why are these people issues so sticky and so tenacious?

We are tribal animals. We identify with our tribe. We find our tribe in our families, in our friends, in our employers. Even the rebellious loner finds his tribe among other mavericks. If our tribe is maligned, we feel the insult personally; if our tribe is conquered, we experience its shame. If our tribe is scattered, we experience confusion and vulnerability. The pilot telling me about his ABC Company was really telling me about his tribe to which he still belongs, although for all practical purposes, it is now extinct. "My tribe", he says, "was more noble and more ancient than theirs. But they did not respect our wisdom and our traditions." For five years – and likely until he retires – the company will continue to squander the enthusiasm, the commitment, the problem-solving contributions this good man might be making – and likely, is unwittingly sending out invitations to him and to numerous others for malicious compliance.

You are perhaps thinking that he is being ridiculous. After all, the merger is a 'fait accompli', he can't turn back the clock. Five years have gone by. "Not only that", his boss will say, "but the idiot should be grateful that he has kept his job and he should be working his butt off to make the company a success". Of course. That is a perfectly rational view of the situation. It's also totally irrelevant since it overlooks the key element, the emotional response, a profound and powerful part of human beings. **AVIATION'S ACHILLES HEEL REMAINS ITS MANAGERS' DOGGED RESISTANCE TO DIVING DUE IMPORTANCE TO EMOTIONS IN THE WORKPLACE**. What would you think of a captain in the cockpit saying to himself and to his First Officer, "I don't understand the stuff presented by that display and I am not really comfortable with it, so I intend to just ignore it. Don't worry about it, things will fall into place"? Yet that is too frequently the attitude of management towards critical aspects of human factors. They don't quite understand because they've never taken the trouble to learn, and of course, they're comfortable with what they don't understand, so they avoid it.

In my experience, problems in aviation groups are rarely related to competence. They are almost invariably related to psychological issues the impact of which management tenaciously refuses to address seriously.

The critical role of management in a merger, then, is to devote time, thought, energy to create a new tribe – a tribe which incorporates the best features of both partners, a new tribe to which members of both original tribes will be proud to belong. This is the most difficult demand made on leadership at the time of a merger and it separates the sheep from the goats. As the English politician said, "Great empires are seldom the outcome of small minds".

MANAGEMENT, CURE THYSELF

For a solid foundation to be laid for the new entity, management has first of all to get its own act together. Who constitutes this new team? What difference are there in their view of the world? Are they prepared to respect each other? To despise each other? Do they share a common vision of the new organisation? What resentments, angers, guilt's does each member of that group have to resolve before really getting on board?

Bear in mind that quite often the two groups were competitors. They may have previously seen each other as enemies. The smaller company may have, for years, measured its

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success by "victories" against the bigger one. It's a bitter pill to swallow. "We lost ..." might be their conclusion. Whether or not the employees feel that they have been sold out or betrayed by their own management, the management of the smaller firm may indeed feel that they have failed the people who depended on them.

Members of management, too, bring to the partnership their own feelings, beliefs, values and personal quirks; if these are dealt with early, the group can come to a smoother, more collaborative transition that is conductive to real synergy. The pay-off in establishing this early is enormous.

There may even have been a certain amount of denomination – as there is in war – ascribing to "them" (quite normal human beings) characteristics more appropriate to serial killers of the Marquis de Sade. These perceptions of self and others have to made to surface and have to be resolved.

How to do this?

Once the new team has been selected, team-building should be the first priority. This intervention should not be a task-oriented exercise – task comes later. It targets the psychological issues. In other words, the focus is not WHAT are we going to do? But rather, HOW are we going to work together?

At the risk of sounding as though I am preaching for my parish, I must tell you that I believe that it is essential to have outside help in the form of consultants or counsellors to accomplish this. By definition, management is part of the problem. They belong to one side or the other. Their view is clouded by their own culture, their own values, their own way of doing things and, as I have said elsewhere, by their Hurry Up which may be chewing at their heels. Outsiders or consultants must be involved who (a) have solid experience in intergroup conflict resolution, (b) bring an objective viewpoint to what can frequently be highly emotional decisions, and (c) know how to explore negative emotions and channel them constructively.

With their help, management must take the time to define what outcome they want to emerge from this marriage. What kind of company do they want to be managing when the dust of urgency clears away? This question is not related to routes or development or aircraft of projections of bottom line, but rather to the values that will drive the company, the desired climate within the organization, the quality of relationships, the ability to bring out the best talents in the staff.

Applications of the new values will define how the company deals with redundancies for instance. Who do we need to do the job? How will we select our staff? What are the criteria? What are the desired outcomes? Will we be guided by equity? Do we want the best person for the job? OR do we want to work with people whom we know and are comfortable with? Do we want to eradicate the team integrate? What values should prevail to make this safe, successful, happy company?

Once management knows what their shared vision is of the company and where they are going, they can see more clearly how to get there, and who has to be in place to do it, what are the critical success factors, and so on.

> **Trust, of course, lies at the heart of any well-managed company.**
>
> *- Gisele Richardson*

The same process needs to be carried out with each key group: Get the past out of the way, and get on with the job!

It is most reassuring to the employees to see management pulling in the same direction. If you and your wife are fighting, and are keeping it from the children by fighting only behind closed doors, don't fool yourself into thinking that the kids don't know. In the same way, if the management team has rough interfaces, no matter how slick a face they present, the employees know it. My experience is that if gossiping were an Olympic category, several aviation companies I know would be in running for a Silver, for sure. Whether they like it or not, management is transparent to its staff.

TRUST

Trust, of course, lies at the heart of any well-managed company. It becomes all the more crucial in times of uncertainty, in times when there is a genuine basis for anxiety.

One of Murphy's laws states: "Sincerity is the key; once you've learned to fake that, you've got it made." Well, that won't do it.

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Management's responsibility, then, is to establish trust between different levels of management: management and employees, management and the union. Trust means that management is seen to be open, to be honest, and to care about the people from whom they are responsible. They must be seen to base their actions on well-thought out, clearly communicated, defensible and honourable principles. They must be seen to deal fairly with members of both groups. They must be seen to respect the staff of both groups. They must be seen to equitable. They must be seen to be willing to acknowledge and remedy their mistakes. They must be seen to be making sensible decisions. They must communicate the criteria on which their decisions are made. They must be seen to be working together and to have a clear directions and their behaviour must be consistent with that direction. Each failure on any of these points damage management's credibility and reduces trust.

As you know, it is under pressure that character shows. Management is under heavy pressure at the time of a merger. They may forget that the first gestures they make will define the future. These first gestures will be analyzed, discussed, exaggerated and perpetuated by the staff, whether the gestures are generous or disrespectful, whether they are open or manipulative. The effects of these first days will be long-lasting and perceptions subsequently difficult to change.

Some management groups start out with tough (and perhaps uninformed) decisions that are imposed on the staff; management assumes that its kind of bullying will get things started and that the staff 'will come round'. Again, first impressions are important: they are long lived and they tend to be accurate.

Early on, management will surely be heard to say, in its opening declaration to the troops, "We care about our people; we realize that you are the ones who are going to make this work. We will respect and protect you. We need you. We will do our best for you. Trust us."

This is what a friend of mine calls 'the sign on the front of the building". What really matters is what's going on inside the shop – the substance rather than the words. What are the operational realities in the back room: Is it "We care about our people"? Or is it "First comes profit and the shareholders, then our convenience, and then if there is any time and energy left over, the people"?

> **In any merger, the, there is perceived swallower and perceived swallowee.**
>
> *- Gisele Richardson*

How does management deal with redundant staff? Is the individual given two hours to clear his desk, or is a farewell party given for those who are leaving, celebrating the contribution these people have made to the company? What message does management's behavior deliver to the survivors? As the troops draw conclusions about management's intention and values, management, if it has inadequate pipelines to the troops, may continue on its way, unaware of the drain of energy, unaware of the causes for the failure of what appears to be a well-thought-out strategy.

In any merger, the, there is perceived swallower and perceived swallowee. Power is usually unevenly distributed, with the takeover company the top dog. How do they utilize that power? Do they genuinely want to make a partner of the other company? Do they want to crush the other group and are blatant about it? Do they want to crush them and lie about it? How the company in the position of power manages and expresses that power tells the world about its values and incidentally, gives the astute financial analysts material on which to base their projections of success or failure.

LOYALTY

Crucial to the success of any merged organization is management's ability to elicit the transfer of employee loyalty to the new organization. This is the ultimate test of leadership, and one for which too many mangers are ill-prepared. Unfortunately, "eliciting loyalty" is sometimes taken to mean that the "swallowees" have to gracefully accept their new bosses, and keep their nose to the grindstone. In fact, the difficulties of transfer to loyalty to the new organization apply to anyone. It is as dangerous – and much more insidious – to overlook the smugness and arrogance of the takeover company, whose attitude can be as destructive of team spirit as is the former's resentment.

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In a company that handled this well, steps were taken very early on to provide a **NEW IDENTITY**:

Example:

The company has a new name. It's a **NEW COMPANY** and every staff member or a stranger to the same degree. New uniforms are designed immediately – pilots from company A don't have to wear the uniform of company B or vice-versa. Belt buckles, tiepins, cufflinks, bumper stickers indicating previous allegiance are not welcome. Mangers and supervisors don't encourage reminiscences about 'how we used to do it at company A' unless there is a definite contribution to be made by examining that procedure. Both companies are referred to equally as 'donor companies' to the new entity. Management works hard to make the new group feel welcome. The new values do not support criticism of either donor airline.

These appear like insignificant details. But they're not. They are a way of saying, "WE ALL belong to THIS tribe now". Management's consistency in reinforcing the new US is critical to the establishment of the new culture.

At the best of times, too many manager underestimate the importance of the psychological issues in the workplace and consequently short-change themselves of success, short-change their shareholders of profits that are attainable, and short-change their staff of job satisfaction and personal and professional growth.

This, I say, is at the best of times. At a time of great transition – merger or reorganization – to overlook the human aspect verges on incompetence and may threaten the very survival of the organization.

At the best times, introducing change is difficult. When change is imposed, resistance ensues. The aviation industry, as you know, is well supplied on the rebellious side; more than many other groups, your people are difficult to lead and impossible to push. Resistance – if it is not meant to bring about career suicide – is subtle and creative and can be very powerful.

Energy that might be productively invested towards the success of the new organization is spent trying to outfox the system. The longer this state of affairs persists, the more difficult it will be to remedy.

The neglect of the human issues leads, at best, to delayed transfer of loyalty to the new company; at worst, to a long-term hemorrhaging of enthusiasm,, commitment, morale and safety. These problems incur heavy costs which are characterized by their amazing longevity. They are rarely subsequently correctly attributed to the mishandling of the people issues at the time of the merger.

COMMUNICATE, COMMUNICATE, COMMUNICATE

An important part of acquiring the trust and loyalty of the staff is genuinely keeping the lines of communication open. Let the staff know what you are doing and why, and do so often. A friend of mine says, "Everything important I have ever learned, I had to learn at least five times". That is under normal circumstances! Transitions are a time of anxiety, resentment, excitement and high feelings tend to make us hard of hearing. Keep the lines of communication open: let the staff know again and again what you are doing and why; **TELL THE TRUTH**. And let your actions be consistent with your stated values and objectives. Distrust and irrational fears thrive in the dark.

Too often, decisions made by senior management, in good faith, whether they are reasonable or not are resisted by staff because of the lack of consultation, lack of explanation, lack of clarity and lack of participation of the relevant players. Too often, management's main weakness at this time is their propensity for Hurry Up, which I have described in other papers, and the Hurry Up's belief that "We don't have time to do it right just now, but we'll get around to fixing it later on".

The criteria on which management decisions are based must be clear – first of all, one hopes they are clear to management itself (does

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management have a well-thought out plan?) and secondly, must be made known to the staff, repeatedly; staff must be reminded of them each time a change is announced. Caesar's wife had it easy compared to management's need to establish its trustworthiness. Resources must be allocated to manage this process; among these resources is the time of senior managers who recognize the importance of building a team that will really work together. It also means that these managers must know and support the plan, that they know what needs to be attended to, they know where they're going and how they're going to get there.

> **"Great empires are seldom the outcome of small minds".**
>
> *- Gisele Richardson*

CAPITALISING ON STRENGTHS

It is self-evident that in any merger, each partner brings strengths, and the merger promises gains through synergy. Inevitably, one will have developed a better approach to maintenance, the other to the development of employees, or to cost-control systems. It is equally evident that were these to be examinded and shared in a non-judgemental, non-competitive way, everyone would win, and both players would wind up with what they hoped for: a situation where one-plus-one equals three. And yet it is also evident to us all that this best of all possible worlds is seldom attained.

How come? More frequently than not, the cause of this waste is one of the following: (a) the takeover executives simply impose their existing system without any examination ("We bought you; you didn't buy us"), or (b) in the absence of the bully syndrome, and with goodwill, decisions are made simply too hastily, or (c) too often by persons other than those who will have to make them work, or (d) in a competitive spirit which guarantees a second-rate outcome.

Example:

A compnay whose base is domestic takes over a company with international activities and hastily imposes its own flight planning procedures although it has no experience with the complexities of international scheduling. It quickly wakes up to a web of confusion resulting in crews having to operate with two parallel systems until the situation is resolved.

Another:

A domestic company merges with one having activities in the Far East; in what appears to them a sensible desire to homogenise job descriptions, and in ignorance of cultural and historical matters, and without any consultation, changes are made in job titles in the newly-acquired company, causing great loss of face to the oriental staff, several of whom resign. The company is left with an unfamiliar area to manage, with some key positions vacant, and with many of the remaining managers and employees filled with rancor that will likely not be expressed, nor easily put to bed.

Another example of an ill-though-out standardisation measure:

A carrier using Douglas equipment takes over a smaller carrier using Boeings and presses its system on the smaller outfit, who - in fact - have an excellent system. For several months, pilots put pressure on management, fearing that they might wind up in a situation where they would experience failure. mangement finally recognizes the need for change and implements it.

True, in the end, there is a favourable resolution, but the cost in safety, in frustration in loss of management credibility, and the divisive effect of this process will haunt the company for a long time. It will never appear on the balance sheet, but there is no doubt profits will be affected. ***TO BE CONTINUED in Volume 6, Issue 3....***

> ***TO BE CONTINUED in Volume 6, Issue 3.... Watch for the next issue of GroundEffects for the conclusion!***

Gisele Richardson -
President and founder of Richardson Management Associates Ltd, Montreal Quebec.

She is a Human Factors Specialist with a special interest in aviation. I heard her speak to an aviation group where she delivered "Cinderella in the Flight Department." This was over many years ago. I was so impressed with what I heard that I requested and was given a copy of it. Part of the article became part of the original Human Performance in Maintenance workshop.
Cinderalla in the Flight Department was Gisele's first well known ariticle for the aviaition industry but since then, she has continued to write many articles of interest for the AME.
Gisele can be reached at phone: 514 935-2593. Fax: 514 935-1852

We need your help !!

Our editor is having problem finding articles to go in to "GroundEffects" Send us an article based on your experience or knowleddge, that is suitable for inclusion, and we will give you a year's free "GroundEffects" delivered to your door.

Editor's chhoice is final!!!

From the Editor!

Welcome once again to our Summer issue of GroundEffects... It is hard to believe that summer is here again... The older you get, the faster time seems to fly. This edition of GE is dedicated to mergers because now a days, there seems to be many employees, managers and owners that have or are experiencing what a merger is first hand... Once again we have a tremendous article from Gisele Richardson of Richardson Management Associates, Ltd. The article written by Gisele, is fairly lengthy so I have decided to print half in this issue and then make you guys wait for the next issue of GE to find out the conclusion. I had at one time, thought I would just reduce the article to fit, but after reading through it, decided that almost every word was as important as the next and to cut out words would do not justice for what Gisele is trying to tell us. So, please make sure that you pick up the next edition of 'GroundEffects' to find the conclusion of Human Factors Climate After Reorganisation. Have you ever been involved in a merger of two companies? I have and let me tell you that everything Gisele says is true and more... Employees can remain very loyal to one of the original companies and never accept that, workers their once enemies are now supposed to be their friends and colleagues. While we are on the topic of mergers, I was having my morning coffee the other day and decided to pick up the newspaper for a little company during my java, and there on the front page is an article dealing with the unhappiness of thepilotsof a company that are merging with a larger company. The article went on to say that with the merger, some pilots will have a more seniority over the pilots from pilots from the other company with the same amount of flight hours... Of course, this is going to cause a huge problem with the employees... By reading Gisele's article, I can start to figure out where the larger company may have gone wrong and where the need to improve lies. The merger between these two companies has not yet taken effect but the war has already started. A war inside closed doors of the company, which is a war that management needs to contain now, in the early hours or days before it takes off to become a never forgotten war... All I can hope for is that Gisele's article is read and understood by the right people in these two companies and other companies that are becomong part of the global melting pot.

Remember that human factors is such a large discovery now a days and that most accidents can be prevented if one takes all of their emotions and throws them away... Please work safely and remember to always use a safety net in everything you do, at work or at play

Have a great summer everyone.... We will see you in the fall.

- Renée Seabrook

GroundEffects™

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