Playground 101
Building and Maintaining Relationships
Lessons You Should Have Learned in Kindergarten

Preparing the Next Generation of Investigators

ISASI 2013
Vancouver, B.C., Canada

August 19-22, 2013

John Purvis
LW3002

_John Purvis has been in the aviation field for 57 years and, for the last 31, has concentrated on accident investigation and airplane safety. The final 17 years of his long Boeing career were spent directing its commercial airplane investigation organization. Subsequently, he was an aviation safety consultant._

_John holds University of Washington degrees in Mechanical and Industrial Engineering. In 2001 he was given ISASI's prestigious Jerome F. Lederer Award. He is an ISASI Fellow, AIAA Distinguished Lecturer (ret.), Professional Engineer and pilot. He is a docent at Seattle’s Museum of Flight and a member of their Board of Trustees._

_**Introduction**_

Clearly, this is not a technical paper – I ceased writing those when I retired almost 15 years ago. It is really a collection of my observations, gathered over many years in the field of aviation safety.

It is a fact of life that when you retire and get older the information you dispense gets softer. But that doesn’t make it any less valuable. Any good investigator, especially the new, tech-savvy, next generation, needs to master all aspects of the job, both the technical and the personal. This paper concentrates on building and maintaining relationships to make your job easier and more productive._
Can anyone learn to build relationships? Yes, of course! Even the shy person or the introvert – even an engineer! I was the consummate shy and introverted kid, right from my first day of kindergarten. It was traumatic. My mom walked me the seven blocks to the Lafayette Grade School in West Seattle, and then left me to fend for myself. My comfortable neighborhood was gone. Here were all these new faces. Some of them were even girls.

I was on my own. There was nothing left to do except find my little seat and hunker down. Eventually I looked around, reached out, and began the mission of making friends. And in my case, I’m lucky to say some of those kindergarten friends are still close; people with whom I socialize today.

In those early years I learned to share, to participate, to reach out and to be a friend. These were invaluable learning experiences that have become the basis of my philosophy when working with officials and associates around the world. I was still shy and introverted but eventually I outgrew my fears. Kindergarten was the beginning: my Playground 101.

**The Case for Relationships**

In our field of accident investigation the importance of building relationships before you need them cannot be overstated. In my opinion, relationships make our world turn. The benefits are so huge compared to the small costs of accomplishment, it would seem negligent to avoid the task.

Major aircraft accidents suddenly bring together many diverse organizations and investigators who are strangers. These folks come together into a highly-charged atmosphere where tensions, emotions, and loyalties are at a peak. Conflicts can easily arise. These conflicts could very well degrade the quality and timeliness of an investigation.

To avoid such conflicts and the possible loss of valuable investigative information, preplanning is imperative. The financial and manpower costs of building relationships by personal contacts, attending meetings, frequent emails and the use of other media are relatively small. The effort and cost of holding contingency planning meetings with what could be essential players in an accident are minimal compared to the cost of friction and distrust which might exist without it.

**Choosing the Right People is Critical**

I believe that people who lead investigative teams should be selected on their ability to communicate and interface with others. These are the prime qualities. The necessary technical skills can be readily obtained through any number of training institutions. Of course, this assumes that the person selected has the proper education and background to begin with.

When I headed the Boeing team I hired an average of about one new investigator each year. I estimate that 50 percent of my selection criteria was based on the interpersonal skills they exhibited during their interviews. Many of the candidates were people I had known for years so
their abilities were well-established. Each of these individuals was already a degreed engineer with a variety of background experiences within Boeing and with broad company knowledge. Walt Disney had an underlying ethic which applies here: In his view “You hire the attitude. You can train the skill.” I never considered myself as having been a particularly good accident investigator technically, but I selected good people and then helped pave the way for them to do their jobs effectively.

Some of the major qualities to look for include:

- Technical expertise
- Experience
- Reputation
- Trust/Ethics/Credibility
- Communications
- Ability to work cooperatively in a group but still perform independently

These qualities indicate that a candidate will be successful and assure that he or she already has an appreciation for the importance and value of relationships.

Of course, more training and on-the-job effort is required. In my case each new investigator was paired with an experienced investigator and usually sent out on his or her first accident as a trainee to gain experience under the guidance of someone else. Eventually they were sent to either SCSI or USC for their formal investigative instruction, which earned them a certificate.

[In my personal case, my own certificate had to wait until after I retired. Budget and time restraints always seemed to get in the way; I was sending our new investigators to school and never could find the budget or time to complete my own training. Eventually I did obtain a certificate on my time, paid for with my own nickel.]

Managers in other parts of the Boeing Company also selected new personnel based on their people skills, especially in Sales where good relationships equate to survival. One very successful former vice president of Sales, who was also a friend, was quoted in newspaper interviews where he highlighted relationships as a key factor in his success. I noted his remarks and tried to emulate his success. I believe the factors he quoted are equally important to any accident investigator because we both operated in customer-centric environments, frequently in the international arena. He described the importance of building relationships across multiple cultures and ethnic origins. To him the following traits were of vital importance:

- Develop and nurture relationships as much as possible
- Truly like people
- Enjoy pleasing people
- Strive to be liked
- Be willing to help people

He also focused on the importance of languages. You can’t be expected to speak your customer’s native language, but you should learn a few key words. Yes, No, Please and Thank You are where you start, along with the daily greetings. This executive also emphasized the importance of having empathy with other cultures. Make the connection with their culture and,
in as much as you have time, immerse yourself in it. Learn their history, appreciate their foods and learn what is in vogue now. Try and learn of their current events and politics. That is, in general, be familiar with the culture. You also need to have a fundamental understanding of the political and economic environment in which your customer operates.

This sales executive’s most important value was “to have common sense.” That will take care of 90 percent of any situation. Always be yourself – as he said, who else is better qualified? Make sure always that you exhibit trust, credibility and integrity. You cannot train for these -- they must be inherent in the personality.

A different executive, also a vice president of commercial airplane Sales at Boeing, echoed a similar philosophy. He pointed out that at the heart of any sales campaign is the relationship you have with your customer. You should strive to know your customer better than they know themselves. He further pointed out how important it was to be available to your customer 24/7. When you visit attempt to get to know everyone from the receptionist to the janitor to the CEO. Make your visits spontaneous, walk the hallways, learn the environment, know the people. Relationships and trust are the “beginning and end” of this business.

While these are examples for sales folk, I believe they are equally important attributes for accident investigators. Obviously, there are major differences. Sales people have the luxury of time while investigators hit the ground running. As much as possible, you need to have the basics of these relationships well-established ahead of time. Waiting until you need them is too late.

On business trips or when returning from an accident investigation, stop enroute to visit other government agencies, companies and even your competitors. During my 17 year tenure leading the Boeing air safety group I made over 70 trips to Washington, D.C. and my staff made many more. On each trip, I visited the NTSB and tried to get to see the FAA accident investigators as well. It became a standing joke that the NTSB was going to set me up with an office, perhaps with a bed. I was there often enough that twice I launched myself on accidents from Washington, D.C., right alongside the NTSB team. That meant quickly buying some appropriate clothes and borrowing a camera and other gear.

The purpose of my trips to DC was to build relationships on all fronts. And not all of the 70 trips were stand-alone – many were made while going to and from other places in the world. This was a cost-effective way of doing business. And I believe it paid off.

Clearly, a single individual can’t devote full time to making contacts. You don’t need to do this alone. Your other investigative team employees may have already “been there and done that” and you can ride on their coattails and share in their knowledge.

When Ron Schleede and I taught Investigation Management together at SCSI, he would often relate the story of building some early relationships with the Chinese. While at the NTSB, Ron made an “ice breaking” trip to Beijing in the late 1980s. That trip and a subsequent visit by high level officials from China to the US did not turn out to be as productive as everyone had hoped,
at least not initially. However, the first Boeing aircraft were due to go into service in China soon and Ron felt they needed to be prepared for the potential of an accident there.

Eventually, Ron managed to invite a delegation of “worker level” investigators for a visit to the US and the NTSB. That delegation included a person who was his counterpart in China – chief of major investigations. During this visit, numerous discussions were held at the NTSB where the Chinese were able to meet their NTSB counterparts. They discussed contingencies should there be an accident involving a Chinese airline in the US or a US product in China. As part of the visit, Ron arranged to host a typical American barbecue at his home and he invited the senior investigators from his office to join the party to meet the visiting Chinese delegation. These IICs also serve as US accredited representatives on overseas accidents. It was an informal social event in his back yard.

Sometime afterwards, in November 1992, a China Southern Boeing 737 crashed near Guilin, China. The airframe and engine investigators arrived in Guilin ahead of the NTSB. The early group was prevented from joining the investigation because the Chinese did not know them and were reluctant to give them access to the site or information. When the NTSB investigator/accredited representative landed in Guilin and exited the airplane, he was met by the smiling face of the Chinese investigator-in-charge with whom he had spent time at Ron’s barbecue. The entire NTSB team was welcomed and given access to the investigation.

Where and How to Build Relationships? Right Here -- Industry Meetings

To me, the most effective and efficient way to build relationships in our field is to attend meetings such as this ISASI seminar. In fact, I believe this is the single most important opportunity for you and your staff.

Look around you. Look at the roster. You’ll find folks from all areas of the industry, everyone from investigators to government agencies to suppliers to large and small manufacturers, airlines, unions, consultants and retirees. They are here from all over the world. This meeting is saving you considerable travel and affording you the opportunity to begin building some of those relationships that you probably should have started years ago.

These are the people you will be facing when the firebell rings and you find yourself suddenly launched to an accident at some location or country completely unknown to you. You probably can’t afford to visit all of these places ahead of time so here, at meetings like this, is where you can interact with many of the people from these areas before the need arises.

While the technical contents of this seminar are important to communicate new and useful information, it is during the breaks, lunches and social events where the real work takes place, especially the work of building relationships. In 1995, while we were planning the Seattle seminar, we purposely scheduled breaks and lunch sessions that were longer than usual for exactly that purpose.
Take advantage of these opportunities. Be present at all of them. Don’t socialize just with the easy ones, the people you already know. Break out of your comfort zone and meet new folks, especially from areas outside your own country. Don’t use this time to grab your cell phone or I-Pad and hide in a corner to conduct routine company business. That’s a waste of this valuable, unique venue.

If your organization or company has sent more than one representative, use this opportunity to spread yourself out among the attendees to cover more ground. At the seminar itself, sit separately, scattered around the hall, not with your coworkers. You are here to build corporate relationships as well as personal ones.

Another way to meet people and build relationships is to become an active participant and partner in ISASI and these seminars. Run for office. Head committees or working groups. Give papers. Lead panel discussions. Sponsor a seminar in your area. Provide regular financial support. Become active in your local chapter or society. Do whatever you are asked to do. Become a source, not a vacuum. Share your thoughts and ideas and, especially, listen to others. This is a good, cost effective way to get to know others as well as get others to learn about you and your organization.

There are many other similar opportunities each year around the world. Some examples include Flight Safety Foundation meetings, ALPA seminars and chapter and society meetings outside your area or in other countries.

Another classic example of building relationships early involved an accident in Japan. In the early 1990s, Ron Schleede had built a very good relationship with one of the English speaking JAAIC investigators. Occasionally they would speak on the phone and discuss contingencies for accidents occurring in their respective countries. There had been some concern in the US about how flight crews might be treated in Japan if an accident occurred there.

During an ISASI seminar around 1992 or 1993, Ron introduced the safety manager from one of the concerned airlines and the head of their ALPA safety team to his Japanese contact. Over lunch they discussed contingencies including how the flight crew would be handled should there be an accident in Japan. A few months later this same airline had an engine fall away during taxiing shortly after landing. There was a small fire but no injuries.

Because of the previously established relationship, no problems were encountered as a result of that event. The NTSB team of technical advisors, including the airline and the pilots union, were welcomed to the investigation and cooperation was excellent. (The NTSB did not send any investigators to Japan. However, at the request of the Japanese, they did work with the airline in the USA and their reports were forwarded to the JAAIC.) Several safety improvements resulted from these cooperative efforts.

To me, Ron is the consummate “relationship-builder.” If you want tips on the best way to do it, talk to him. He knows more people than anyone. Of course, from my own experience working with Ron, not enough can be said about his positive influence in the 1985 JAL Flight 123 accident outside Tokyo where the 747’s pressure bulkhead ruptured.
The NTSB ICC initially assigned to that accident was not able to get his technical advisors (including me) involved in the accident and up to the site in the mountains. Ron’s expertise was pressed into duty and his quick appearance onsite helped resolve these matters. From that point on the US technical advisors were a full part of the investigation.

Some relationships are fortuitous and can come in handy over the long term. Kevin Darcy, one of my investigators, was in a work-study program with PanAm while he was in college. His father Chuck Darcy was a flight engineer for PanAm and had been based on both the east and west coasts of the US. Fast forward a few years -- Kevin is a newly-minted Boeing investigator attending an accident investigation course. There he gets to know one of the investigators from Pratt & Whitney.

Eventually, and this was very early in Kevin’s investigation career, he was launched on the PanAm Lockerbie 747 accident in Scotland. To get there from the US the Boeing team took a PanAm flight where they were greeted by Bill Doss of PanAm as they boarded. It turns out that Bill had known me for a long time and also knew Kevin’s father. In the UK they were greeted by the Pan Am station people who sped them through customs. Kevin believes that having a relationship with Bill Doss through me and his dad sure made his arrival easier and it afforded him some standing with the station people.

Once he got to the accident scene in Lockerbie and hooked up with the AAIB, he ran into the earlier-mentioned Pratt & Whitney investigator and more of the Pan Am folks he had met the previous day. In fact, one of the Pan Am structures investigators was a person he had worked for during his college work-study program many years prior.

So rather than being an unknown “new guy on the block,” needing to establish himself in the investigation, already Kevin had formed relationships with Pan Am and the Pratt & Whitney investigator. Right away, he became part of the team. Of course, during that investigation he made more contacts and relationships with most of the AAIB inspectors and the NTSB ICC. In addition, he met other NTSB personnel who became critical to his successful efforts on later accidents.

Kevin believes all of these relationships were hugely helpful during his career.

**Internal Relationships**

Another recollection: At Boeing my group investigated only the commercial airplane accidents. However, scattered around the company were other Boeing investigators who covered Long Beach products, military fighters, tankers, B-52s, helicopters and such. Many of us had never met one another – initially we didn’t even know some of the others existed. We thought there would be a benefit from bringing all these people together and talking about common problems and goals. My boss at the time was against the meeting mainly because he saw it as a waste of time and money. However, by the time he learned of it, we were already well into the planning and felt we shouldn’t stop. It turned out that Boeing had 20 ½ investigators (one did it half time)
at its facilities around the US. We did hold the meeting and it turned out to be a great success. An NTSB board member was also in town at the time and attended our pizza dinner afterwards. This was the ultimate experience in building both internal and external relationships – all for the price of a pizza!

Lesson learned: Internal company relationships are just as important as the external ones we have been discussing. In fact, they may be more important. You need to have good internal relationships to do your job well. Building and maintaining relationships within your company involves a whole different set of topics – there’s enough material in THAT chapter to produce another ISASI paper.

Fortunately, in today’s environment, the rate of major accidents has been greatly reduced. However, that can lead to complacency and an idea that there is no need for continuing formal investigative units. In my first meeting with a new boss, he questioned why the Air Safety Investigation group still existed at all. He claimed that by then the industry knew what caused airplanes to crash and asked why we should waste our time, effort and money going down these same paths. This shows that you need to keep people aware of your unit’s mission through internal relationships and communication.

Internal relationships involve assuring that you and your organization are well enough known throughout the company to get the executives to value your worth and obtain the support and cooperation necessary to do your job. I use a visual that helps: Picture an iceberg. The actual on-site investigation work is represented by that small tip, maybe 5%, which sticks up above the water. The remaining submerged part, the other 95%, represents all the background effort that most people don’t see or know about.

Besides internal relationships many other specific areas are not being discussed here that have value. Consider: the press and other media, lawyers, insurance people, consultants, service suppliers, military, other government agencies and so on.

Competitors and Cooperation

One final story highlights another facet of this business: You and your competitors may be arch rivals on the sales side, but when it comes to safety, it is always about cooperation and sharing.

Back in the ’90s, before PowerPoint existed and when transparencies (or viewfoils) were the vehicle of visual communication, and when Boeing and McDonnell Douglas were still separate companies and competitors, I was at a technical meeting with my counterparts from Airbus and Douglas. Yves Benoist was the Airbus investigator, and Steve Lund, the Douglas. Each of us had a few minutes on the agenda to explain our organization and its approach to accident investigation and safety. We had done this several times before and each of us knew the other’s story pretty well.
The day we were due to present, Yves was called away to an accident. He handed me his stack of viewfoils, and said “Here, you’ve seen this before, please handle my presentation for me.” I agreed. Of course, when you have viewfoils, someone needs to turn them. So here I was, the Boeing guy, giving an Airbus presentation with Steve Lund, the Douglas guy, turning the viewfoils. The impact of this cooperative spirit was not lost on our audience.

A Final Thought

There is a passage reportedly from St. Exupery, that airmail poet of yesteryear, where he was lamenting the loss of pilot friends who had died in accidents, ones who he would never again see. But it applies equally well to relationships. He said: “It is idle, having planted an acorn in the morning, to expect that afternoon to sit in the shade of the oak.”

So, I’d like to echo his words and reinforce the thought for you, the young, next generation of investigators who are emerging as our leaders of tomorrow: Start building relationships NOW and work hard to maintain them – attempting to accomplish this when you need them is too late. Yes, it will take some time, a bit more effort and a little extra cost. But it is an investment that will pay dividends for the remainder of your career. And right here, today, is the time and place to begin.

Remember: Nobody cares if you can’t dance well. Just get up and dance.

Note of Thanks: In the preparation of this paper, the author would like to acknowledge the invaluable assistance provided by Ron Schleede, Kevin Darcy and Keith McGuire. Three finer people you cannot find. With deep respect: John Purvis