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NASA After Challenger: Restoring an Image

In June 1986, William Sheehan, a former public relations executive at Ford and former president of ABC News, became a consultant to the National Aeronautics and Space Administration. Eleven months later, Sheehan accepted a full time position at NASA as associate administrator for Communications. His priorities were to develop policies for information dissemination and media relations, and to restore NASA's image in the wake of the destruction of the space shuttle Challenger on January 28, 1986, and the deaths of Challenger's seven astronauts.

NASA had experienced one earlier tragedy. In October 1968, three Apollo I astronauts had died when a fire swept the launch pad. NASA was severely criticized for the news blackout that followed and its reputation was further diminished by the safety defects and cover ups that came to light in the investigation that followed the accident. But that tragedy proved to be a learning experience for NASA. New policy and major reforms resulted, and when an in-space explosion threatened the moon-bound Apollo 13 in 1971, the NASA Public Affairs Office (PAO) responded with a steady flow of information. News organizations were impressed with NASA's handling of the Apollo 13 crisis—so much so that they nominated NASA's PAO staff for a Pulitzer Prize.[1] And on the heels of this success, NASA enjoyed almost fifteen years of positive news and an excellent rapport with the media. NASA's image, in fact, became so positive that it took on near-mythic proportions. For almost fifteen years news from NASA compiled a new chapter of the American dream that promised ongoing conquests in the new frontiers of space.

Then, on January 28, 1986 the dream became a nightmare as the nation watched the space shuttle Challenger disappear in what appeared to be a devastating explosion. And to the consternation of the public and the press, NASA had nothing to say in the minutes and then the hours immediately following the loss of Challenger. NASA officials confiscated film footage of the launch from all the media camera people covering the event, and suddenly even the weather forecast at launch time became confidential information. Although the PAO had a press policy in place that told officials they should have released a statement within 20 minutes of the disaster, they did not make a statement until nearly five hours after the fact.

NASA responded to the Challenger disaster very much as it had to the Apollo I fire. A siege mentality took shape within NASA, and yet the press could not (and did not) grant NASA the time it needed to get organized and find an explanation. In the days that followed the Challenger tragedy, almost 15 years of goodwill between PAO and the media gave way to an era of tough investigative

[1] Sam A. Marshall, "NASA After Challenger," *Public Relations Journal*, August 1986.

Professor Stephen A. Greyser and Research Associate Norman Klein prepared this case from public sources as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation.

reporting that eventually exposed cover-ups and a host of safety concerns. During the winter and spring, NASA came under growing criticism and attack—from news organizations, media commentators, government officials, a formal presidential investigating commission, and even some within the agency. The criticism focused principally on what some saw as NASA's overzealous censorship and "information management" following the Challenger tragedy. However, it also extended to NASA's actions regarding both the decision on launching the Challenger and NASA operations in general.

The June 9 "Report of the Presidential Commission on the Space Shuttle Challenger Accident," substantiated much of the criticism that had appeared in the press since the explosion. It went on to flesh out a larger picture of NASA as an institution that was responsible for a flawed and tragic decision.

This was the legacy that Bill Sheehan confronted in May 1987. By this point, it was clear that NASA's public image had deteriorated substantially. (See **Exhibits 1** through **7** for comments on the breakdown of the relationship between NASA and the press after a long period of positive coverage and friendly relations between NASA's public relations staff and the media.)

Background

Author Michael Brody wrote the following in the May 12, 1986 issue of *Fortune* magazine.

> The agency's leaders have been preoccupied with raising money for NASA from Congress. To win over the politicians, they have set goals for the shuttle program totally out of sync with the resources at their command. Organizational components that were supposed to work closely together—the Marshall, Kennedy, and Johnson Space Centers—have behaved like quasi-independent baronies, uncommunicative with one another and with the top.[2]

Brody pointed out that NASA's administration offices are located in Washington, while its component organizations are scattered throughout the United States: the Jet Propulsion Laboratory in California; the Johnson Space Center in Texas; the Marshall Space Flight Center in Alabama; the Kennedy Space Center in Florida; plus other support facilities scattered through the Sunbelt. A glance at NASA's organizational chart would suggest that Marshall—the rocketry center in charge of the space shuttle's main engines, external fuel tanks, and booster rockets—cooperates closely with the Kennedy Center, which handles the assembly, servicing, and launching of the shuttle. Marshall would also appear to have an essential relationship with Johnson, which oversees the entire shuttle program. But Brody reported that Marshall's managers had been "jealous rivals" of their counterparts at the Kennedy and Johnson Space Centers.

Brody also emphasized the fact that it had been Marshall's managers that had either persuaded or forced Morton Thiokol to override the objections of Alan McDonald, Thiokol's senior engineer at the launch site. McDonald had refused to sign off on the launch because he doubted the safety of the booster rocket O-rings that eventually failed, but his objections were "resolved" at the Marshall level and were not known by Kennedy and Johnson executives at launch time.

In a lengthy article in *The New Yorker* magazine, Henry S.F. Cooper, Jr. further documented the suspect decision making and lack of communication claimed by Brody.[3] Cooper listed the numerous instances of "scorching" of the O-rings that appeared in testing and in actual flights, and the first instance—in April 1984—of "blowby," a term that indicates that flames had blown by the O-

[2] Michael Brody, "NASA's Challenge: Ending Isolation at the Top," *Fortune*, May 12, 1986.
[3] Henry S.F. Cooper, Jr., "Letter from the Space Center," *The New Yorker*, November 10, 1986.

rings and breached the seal on a rocket booster. The fact that this information was not common knowledge at Marshall, Kennedy, and Johnson was one issue. But Cooper suggested the extent and importance of the problem by pointing out that the shuttle flight before Challenger had experienced two scorches and a blowby, and yet Astronaut Sherwood Spring, who had flown that mission, had never been given this information.

Why the Silence and Siege Mentality After Challenger?

William Sheehan had looked into the events that unfolded on January 1986, and surmised that the engineering mentality that drove NASA had played a role in the organization's difficulty finding the right thing to say. The engineers had in effect sequestered themselves with all the available data, including the media film footage, and were reluctant to make a statement until they were sure they had the answer, or at least a hypothesis that had substantial evidence to support it.

Sheehan also knew that Dr. William R. Graham had been assigned to NASA by President Reagan in late 1985, and had been acting administrator for less than a month when the Challenger was lost. Equally important, the PAO director at the time, Shirley Green, had joined NASA in December 1985. The fact that both people in these key roles were new was a key consideration.

Journalist Sam A. Marshall, pointed out that the organizational structure of NASA complicated matters for the PAO office, in that all of the Space Centers had a PAO spokesperson who was responsible both to the NASA PAO director and the head of the Center he or she served. Further, although the position of PAO director had originally been the equivalent of a vice president, it had been reduced to the level of director with the arrival of James Fletcher in the 1970s. The original PAO head, Julian Scheer, had described himself as "working with one foot in administration and one foot out as director of information." Frank Johnson, the PAO head that preceded Green, has noted that he and NASA administrator James M. Beggs had been colleagues at the General Dynamics Corporation prior to their coming to NASA, "so a working rapport had already been established." But Marshall stated that Green had not had time to establish a basic working relationship, and could claim neither the ties nor influence that Scheer and Johnson had enjoyed.

Frank Johnson also offered an additional insight on a possible cause for NASA's slow response to the media. He claimed that the media are not as significant a public as many might think, and suggested that NASA's primary concern in the Challenger disaster would have been the message sent to the President and Congress.

Sam A. Marshall's analysis of the breakdown of the relationship between the media and PAO included one final observation. It had been the administrator, not the PAO, who had attempted to "sell" the space program to both Congress and the American public. "Accordingly, says the PAO staff, the PAO served only an auxiliary role, arranging for VIP visits to launches for congressmen and funneling information to the public."

* * * * *

William Sheehan looked forward to his new responsibilities with several working principles in mind. One, he believed that the public had a right to know as much as NASA did about NASA events. Two, he believed that the PAO office must be the source of any bad news that might come from NASA. Finally, he knew he had to have complete access to chief administrators at NASA to do his job.

THE NEW YORK TIMES, SUNDAY, FEBRUARY 9, 1986

Journalists Say NASA's Reticence Forced Them to Gather Data Elsewhere

By ALEX S. JONES

The space agency's unwillingness to release substantive information on the explosion of the space shuttle Challenger has forced the nation's news organizations to rely for much of their coverage on information that was not officially confirmed and, in many cases, came from unnamed sources.

News executives said in a series of interviews that the intense public concern generated by the loss of the shuttle and its seven-member crew had created an urgent need for information.

They said they believed the public was entitled to learn as much as possible now, before its sense of urgency for correcting what went wrong could fade, rather than after a long investigation.

But they also stressed that despite the need for immediacy, accuracy remained paramount in reporting on the accident.

Coverage Varied Widely

With the main official source of news all but shut down, these news organizations said they were forced to use unofficial sources, some inside the National Aeronautics and Space Administration and some outside but associated in one way or another with the agency. They said that many of those willing to provide information did so on condition that they not be identified.

As a result news coverage has varied widely, with different news organizations pursuing different aspects of the story with differing degrees of success. What they have reported has depended greatly on their skill in persuading sources to disclose key data.

The editors and reporters involved have also felt the competing pressures to be first if possible and yet not embarrass themselves by trumpeting information that might later prove erroneous.

"It's the hardest story I've ever dealt with," said Fred Barbash, deputy national editor of The Washington Post, who is supervising The Post's shuttle coverage.

Caution Before Speed

Although most large news organizations have claimed to be ahead of others on at least some news developments, executives generally agreed that they had put caution before speed. "The pressure to be right far outweighed the pressure to be fast," said Lane Venardos, executive producer of "The CBS Evening News."

Soon after the shuttle explosion Jan. 28, NASA impounded virtually all information it had that related to the shuttle program and instructed its employees not to provide information to reporters, even on an off-the-record basis.

Former NASA employees and officials at private companies involved in the space program were also asked not to provide information to reporters.

NASA spokesmen said the agency wished to minimize speculation on the cause of the shuttle explosion until the official investigation could be completed and the precise cause known.

Many news executives said they thought NASA was making a serious mistake, especially in its refusal to confirm or discredit various reports. The NASA policy, the news people argued, seemed inevitably destined to make speculation all the more widespread.

Public Report Added Little

Many journalists expressed hope that NASA's public report Thursday to the Presidential commission appointed to investigate the explosion would prompt a new openness in NASA information policy. But NASA officials provided almost no information Thursday that had not previously been made public in unofficial reports.

The journalists noted in interviews that the members of the Presidential commission relied heavily on news reports to question NASA officials, underscoring the importance of the public dissemination of information.

But while news executives say they feel confident that their mission is to continue to report as fully as possible, even without the cooperation of NASA, they are also uncomfortable with having to rely so heavily on information from unnamed sources, a practice most news organizations try to avoid.

"It's not a good way to report it, but that's what we're backed into here," said Louis D. Boccardi, president of The Associated Press, who has been a persistent critic of the use of unnamed sources.

According to Mr. Boccardi and many other news executives, news organizations must rely heavily on the experience, connections and judgment of their reporters in such a situation.

Reporters' Contacts in NASA

The depth and quality of much of what has been reported so far without NASA's cooperation reflects the long tenure of many of the reporters, some of whom have been covering the space agency for 20 years or more and have long friendships with NASA and aerospace industry officials.

But for each news organization the coverage has been somewhat different, reflecting the ebb and flow of each organization's ability to get information in which it had confidence, and the editing process that determined when to publish the information and how prominently to display it.

Richard Flaste, director of science news for The New York Times, said that in such situations, the newspaper "depends, as it always does, on a basic trust in its reporters, and the knowledge reporters themselves have of who among their sources are reliable."

Mr. Flaste added, "You have to question the reporters very hard so you yourself can understand the information they have and the faith they place in it."

Evolution of Booster Theory

One example of the way information from unidentified sources has been developed and the important role it has played in the coverage is the evolution of the theory that a flame from the solid-fuel booster rocket on the shuttle's right side was the most likely trigger for the explosion.

The example demonstrates how news organizations generally would not, without seeking independent confirmation, publish information based on unnamed sources that was published by other organizations. The national wire services dealt with this problem by attributing the information to the news organization that published it.

Beginning shortly after the explosion on Tuesday, Jan. 28, many news organizations presented theories of the cause of the explosion. That the booster rocket might have been the source was presented as one theory among many.

At about noon Thursday, Jan. 30, Jay Barbree, a 52-year-old reporter for NBC Radio who has covered NASA since 1958 and lives near Cape Canaveral, was told by a NASA official who insisted on anonymity that the agency's investigation was now focused on the right booster rocket, and especially on the possiblity that a leak had developed in a joint connecting two sections of the rocket, creating a blow-torch effect.

CONT

Exhibit 1 (continued)

By midafternoon, according to Mr. Barbree, another NASA official had confirmed that information.

Confirmed by Two Sources

About an hour before air time at 6:30 P.M., William O. Wheatley, executive producer of "The NBC Nightly News," discussed the sources of the information with Mr. Barbree, and Mr. Barbree identified them by their positions in NASA and his estimate of their credibility, but not by name. According to Mr. Wheatley, without two sources for the information, "it would have been a much tougher call."

NBC led its broadcast with the item, with Tom Brokaw, the anchor, saying, "NBC News has learned that NASA is concentrating on one specific area in its investigation of the violent explosion." NBC then gave details.

Before 8 p.m. both The Associated Press and United Press International had reported what NBC had said, but had attributed the information to NBC News and did not embrace it themselves.

Before midnight, A.P. had received confirmation of the information from an unnamed official and added this further confirmation to its report.

Neither ABC nor CBS mentioned the booster rocket in their Thursday evening news shows, and the Cable News Network, in its 8 P.M. broadcast that night, mentioned the NBC report near the end of the newscast, attributing the information to "another network."

Most news organizations that carried the item Friday, Jan. 31, took pains to say that NBC had reported it, distancing themselves somewhat from it.

Independent Confirmations

In its Friday edition, which was printed Thursday night, The New York Times mentioned the rocket booster in a front page story as one of the two most likely sources of the explosion, and attributed the information to unnamed sources.

According to Mr. Flaste, the report in The Times was based on information from two independent sources, but not on the NBC report, and the NBC report was not mentioned by The Times.

In its leading front page article Saturday, Feb. 1, The Times reported, quoting an unnamed source, that there had been a drop in pressure in the right booster rocket, which supported the theory that the rocket was the source of the problem.

On Saturday some other news organizations, among them ABC News and Florida Today, the newspaper nearest Cape Canaveral, independently confirmed that the right booster was NASA's primary focus.

Most other large news organizations did not embrace the theory that the booster was the likely origin of the problem without describing it as one of several theories until Saturday evening, when NASA provided film showing a plume of flame coming from the right booster rocket.

NASA has still not specifically said that the right booster rocket is the primary focus of the agency's own investigation, but its decision to show films of the booster was interpreted as confirmation.

Exhibit 2

William V. Shannon

An Explosion of Lies From NASA

The recovery of the crew cabin from the Challenger space shuttle raises the strong possibility that on Jan. 28, when the disaster occurred, government officials engaged in a fraud upon the American people. The National Aeronautics and Space Administration may on that day have made a quick decision to conceal and distort the facts concerning the deaths of the seven on board. Their motive? To protect the space program's image and its future budgets.

It is now clear there was no "explosion." The astronauts did not die instantly, never knowing what had happened to them. Instant death in a huge, uncontrollable explosion is the fictitious picture that NASA officials chose to feed the public. Painful though it was, it was a picture that people would find less horrifying than the truth. After all, everyone knows "accidents will happen," and as long as the astronauts died painlessly, people could accept the tragedy.

The truth is that the astronauts were alive and conscious for several minutes after the disaster occurred. They were probably making frantic efforts to bring their craft under control as it hurtled downward. If the craft had been equipped, as it should have been, with parachutes and seat-ejection fail-safe systems, they could have saved themselves.

There is a good chance that they died only when their craft hit the water at 140 mph and broke up because of the impact. They died because of NASA's false economies and incompetence.

On the day the disaster occurred, I watched the television news reports in the company of a longtime friend, Dr. William Doering, professor of chemistry at Harvard University. He pointed out that what the newscasters kept describing as "a huge fiery explosion" was not an explosion at all:

"It is best described as a 'fast fire.' What the television people are calling a fireball is mostly a hot, watery vapor that hydrogen produces when it burns. If the fuel tank had actually exploded in that thin atmosphere, it would be producing something much bigger than we are seeing in these pictures," Doering said.

"And look at the two booster rockets taking off by themselves. They certainly haven't been shattered by any explosion. They have stopped showing the space module, but I am confident that it is intact also, or was until it hit the water. I predict that we will eventually learn the astronauts were alive until impact," Doering continued.

According to Doering, any competent scientist at NASA could tell immediately that there was no shattering explosion. Doering's analysis is now confirmed. Terry J. Armentrout, director of the National Transportation Safety Board's bureau of accident investigation, told reporters at Cape Canaveral on April 9 that "despite what appeared to be an instantly devastating explosion, the shuttle Challenger, including the crew compartment, apparently survived the blast mostly intact."

"The external tank did not explode," said Armentrout. "The optics were deceiving in some regard. . . . We don't have a lot of extremely high, visible evidence of blast or thermal distress."

As Doering had predicted, the astronauts died from the force of the impact as their craft hit the water. They were not burned to death nor were they "blown to bits" by an explosion.

Because the cabin survived intact, there is no reason to believe that the crew died because of sudden depressurization. The cabin is built to survive the stress of reentering the Earth's atmosphere, a stress much greater than that of falling nine miles to sea level.

Why did NASA cut off the transmissions of pictures after 72 seconds? Why did it impound all the film taken by the cameras set up by news organizations at different vantage points? Is it true there was "no down-link"—that is, no further radio communication from the shuttle crew after the vehicle broke away from its rocket boosters?

I suspect that the answer to these questions is that NASA officials did not want the public to know that cameras tracked the intact space vehicle on its agonizingly long journey of several minutes into the sea. That would raise even more disturbing questions.

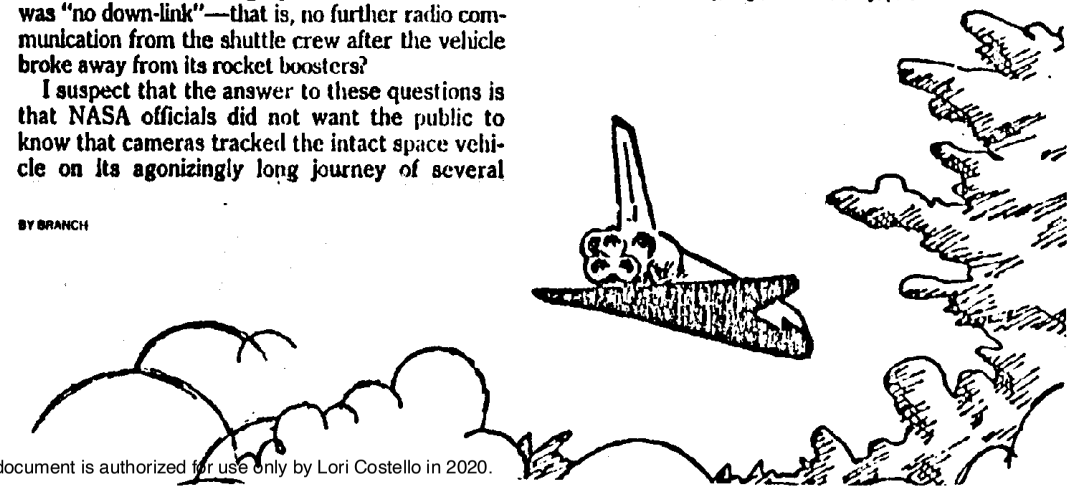
If NASA officials had a good fix on where the shuttle splashed down, why did it take five weeks for them to begin bringing bodies to the surface? Are we really to believe that it took them five weeks to decide where to search?

Why, 11 weeks later, are they still refusing to discuss how or at what point the crew perished? Why do they refuse to let the divers who recovered the bodies be interviewed? Are they protecting the astronauts' families or themselves?

It is futile to think that the investigatory commission will address these questions. It was appointed to find out why the Challenger fiasco happened, not how NASA managed the public relations effects of the fiasco.

Eventually the full truth of Challenger may emerge. But NASA officials will not worry so much then. They know that articles such as this one can never undo in people's minds the picture they artfully contrived at the time of the disaster.

Once again, everyone from the president of the United States to the nation's schoolchildren will have been nicely conned. The man-in-space program will proceed, complete with multibillion-dollar budgets, undisturbed by any public revulsion at the cost in human life. When something really important like money is at stake, why scruple about lying to the public?



THE WASHINGTON POST FRIDAY, APRIL 25, 1986

Exhibit 3

The Miami Herald / Sunday, April 6, 1986

Shaken up by Challenger, NASA turns against itself

By R.A. ZALDIVAR
Herald Staff Writer

WASHINGTON — Ten weeks after the cataclysmic explosion that destroyed the space shuttle Challenger, the National Aeronautics and Space Administration is like a family in crisis.

Partners are threatening to walk out, brothers are blaming each other and the world outside looms as a threat.

The head of the Kennedy Space Center talks bitterly of separation, of a "mass exodus" of people who feel the presidential commission investigating the Challenger disaster has tar and feathers in mind.

The chief astronaut fires off a memo accusing management of putting image before safety. A colonel in the Air Force space command shoots back a letter calling the chief astronaut a hypocrite.

And the media, once avidly courted by NASA to promote its reach-for-the-stars image, are angrily shunned.

Industrial psychologist James Mosel says there is nothing unusual about this — not for an organization whose cherished self-image has been dashed like some porcelain dainty.

"All organizations create myths about themselves, just as people create a self-concept," said Mosel, director of the graduate program in industrial psychology at George Washington University. "In this case, it was the myth of a powerful, nature-dominating, onward and upward, right-stuff organization, really cracking into the future.

"Like show-business people, they begin to believe their own press releases," added Mosel. "And then they cease preparing the fine detail work that made them a success, and they blow it."

The Challenger accident exploded the NASA myth. The presidential commission has stamped the launch decision as "flawed," implying that the agency must bear part of the blame, and one member has compared its decisions to launch in the face of known safety problems to Russian roulette.

This loss of face is painful, said Dr. Paul Buchanan, the director of health services at Kennedy Space Center. "It hurts like a Super Bowl-winning team learning they're about to lose the first game of the new season, and worse."

An engineer at Kennedy put it this way: "For years we had indoctrinated ourselves and our country to believe that we were the best and the brightest. We could do the impossible. And now it's blown up in our faces."

The sharp memos and gloomy predictions are bursts of old frustrations in the midst of a new crisis, said Mosel.

"When a trauma like this occurs, a lot of people use it to work out their own particular grievances," said Mosel. "This is the time to strike back; this is the time to get even; this is the time to resign and look like a hero. What you are seeing here can happen in any organization."

For many at NASA, the space program is much more than a job. It's not uncommon to find middle-aged engineers who have been with NASA since they got out of college. The agency has outlasted many marriages. If coping requires detachment, loyalty to NASA makes it harder to cope.

"Their identity is being demolished," said Richard Cook, a former NASA budget analyst. "They're fighting for their whole careers. The whole meaning of life is on the line."

Cook's memos, written a year ago and leaked to the press in the aftermath of the explosion, gave the first indication that NASA was flying the shuttle despite potentially serious problems with the rocket booster seals.

Though Cook denies leaking anything, he said memos are finding their way to the press because NASA is just not set up to handle internal dissent.

"I never worked in a more uptight organization," added Cook. "The overwhelming emphasis is on public image, keeping the smile on your face, looking good. The space shuttle had lots of problems, and people working on it knew it. But what was presented to Congress and to the public was that it was the most daring, heroic enterprise ever thought of."

William Rogers, chairman of the presidential commission, said last week that the panel views communications breakdowns within NASA as a critical fault. He said the commission likely will recommend the creation of a safety office to make certain that problems are widely known and dealt with, not postponed.

Kennedy's Buchanan said the image of perfection that NASA once exuded was "a perception the nation wanted." Mosel agrees: "The public helps to create those myths. It enjoys those myths."

Buchanan said the people he talks to are angry that the image is broken, that what was once perceived as reality is now debunked. But he insists that the new perception of a flawed and frayed NASA is no more the ultimate reality than the previous image of invincibility.

"It's like the silhouette of a tree," he said. "It gives an outline without filling the details that make one pine tree different from another."

Exhibit 4

THE NEW YORK TIMES, FRIDAY, FEBRUARY 14, 1986

Challenger, Disclosure and an 8th Casualty for NASA

By JOHN NOBLE WILFORD

Shock, confusion and a lapse of self-confidence seemed to lead the space agency to ignore its own contingency plans for giving the public all the known facts in the first hours and days after the explosion of the space shuttle.

News Analysis

Officials are now beginning to assess the damage this has done to the National Aeronautics and Space Administration's reputation as one of the most open and image-conscious Government agencies.

Two years ago NASA was concerned about how to provide information to the public in the event of a shuttle disaster and asked a few journalists on the beat for their advice. Shuttle officials were also consulted. Out of this emerged a document that emphasized the importance of "a full flow of accurate, timely and factual information to the news media."

One of the purposes, the document said, was to preclude "rumors and speculation" that would be likely to spread if information was delayed.

Plan Issued in March 1984

The contingency plan was issued in March 1984 by Frank S. Johnson Jr., then NASA's director of public affairs. Mr. Johnson was advised that NASA, in its own best interest, should be more forthcoming than it was after the Apollo fire, which killed three astronauts on the launching pad in 1967. At that time, after the initial statement of the few known facts and a news conference, all new information ceased. For days NASA stuck by its first account of the accident, even though engineers investigating the fire knew the facts to be different.

But when the plan was put to its first test, was a virtual repetition of the Apollo fire events resulted.

One of the guidelines dealt with an emergency in which knowledge of fatalities "will be apparent" on radio and television. "Delay by NASA in confirming such information serves no useful purposes," the document said.

Yet it was early evening, more than seven hours after the shuttle accident, before NASA would state unequivocally that all seven Challenger crew members were dead. This turned out to be a minor lapse, as against what followed.

'Continuing Flow' Urged

Another guideline stated: "Various materials may be impounded in the wake of a contingency situation. This does not mean an embargo is placed on release of information. Rather, this is an action aimed at preserving data so that it will be available for later study. Meantime, a continuing information flow must be maintained."

NASA's interim review board, appointed hours after the accident, did impound all flight data and other documents about preparations for the launching and the launching itself. Several days thereafter, news status reports were seldom more than a few sentences long and were sparse on new information. Public affairs officers at Houston and Cape Canaveral, Fla., cited as reasons the impounding of the data by the board and the requirement that the board approve news releases.

This led to some peculiar restrictions. Public affairs officers said they were not permitted to make public temperature readings in the hours before the liftoff. In time, reporters got the information, but from the Weather Service. Such information was considered potentially important because of the flurry of reports that cold might have had a deleterious effect on the booster rockets.

Five Days for Tape Release

It was five days, moreover, before NASA finally released videotapes and film showing the "abnormal" plume of fire and smoke venting from the right solid-fuel booster rocket. Unconfirmed news reports had already identified this rocket as the prime suspect. Television pictures of the ascent, reshown repeatedly in the days after, contained apparent clues pointing to trouble in that part of the shuttle.

The absence of information had thus created the conditions that NASA, in establishing its public affairs contingency plan, had sought to avoid. Rumors and speculation were rife. Public affairs officials stood around unable to supply facts that might quell rumors.

One reason, NASA officials conceded, was a too-strict interpretation of the meaning of the data impoundment. There was confusion also about who was authorized to release information, especially after President Reagan established the Presidential commission to investigate the explosion. NASA deferred to the commission and the commission lacked any structure for disseminating information. For that matter, in the beginning the only information it had was that provided by NASA.

There were also the human factors. In the first few days many NASA employees seemed too stunned to act forcefully to obtain relevant information for the public. Public affairs officers at Houston seemed not to know what those at Cape Canaveral were saying, doing or planning and vice-versa. Sometimes they seemed to resent reporters who were asking questions, as if they were intruders at a time of family mourning.

'Draw Wagons in Circle'

A certain defensiveness by the agency was probably natural. A former NASA employee said the first reaction was "to draw the wagons in a circle" to fight off attacks on the shuttle program and the agency's operations. There was also concern that the release of incomplete data might inspire wild speculation that could damage NASA's relations with its contractors.

By now, almost three weeks after the disaster, the flow of information from NASA and the Presidential commission has improved. Shirley Green, who became NASA's director of public affairs just weeks before the accident, said that every effort was being made to return to the agency's normal openness. A hard look, she said, would be given to the contingency plan for future emergencies.

Exhibit 5

OF THE NEWSLETTER OF THE NATIONAL ASSOCIATION OF SCIENCE WRITERS

VOLUME 34 NUMBER

JUNE 1986

NASA AND THE MEDIA:

TIME HAS COME FOR MID-COURSE CORRECTION

by George Alexander

It was Henry Hubbard, *Newsweek*'s Washington-based science and space reporter, who once taught me a valuable lesson. I happened to be with Henry one day when we bumped into a then high-ranking official of the National Aeronautics and Space Administration (NASA) and was quite impressed with the chummy familiarity he exhibited toward my fellow reporter. Later, Henry explained why he had politely ignored the official's request to be addressed by his first name: "There may come a day when I have to write a story that's critical of him or the agency, and that's a lot harder to do when it's 'good ol' Bob' or 'the gang over at L'Enfant Plaza' (NASA's location at the time) you're writing about."

It's impossible to cover a beat or an agency like NASA without making contacts, acquaintances, or even friendships. Most journalists keep these relationships in perspective, although those of us covering the space program over the years can remember several "space cadets" who did everything but shake pom-poms and lead cheers at different launches. The agency presented itself to the world as a smooth-running organization that was making routine what was, only a decade or so ago, spectacular. And as long as the hits kept coming (24 successful shuttle flights, a half-dozen or so superlative planetary probes), most journalists were content to report the agency that way.

The tragic loss of the Challenger space shuttle and its crew of seven last January 28, however, has raised many questions about the relationship between press and NASA. Had the press been too easy on the agency in the years before the disaster, a little too enthusiastic for the space program in general, and the shuttle project in particular? Had the agency been manipulative of journalists, for its own political and budgetary goals? The answers are "yes," but not a simple yes. Life, reporting, and relationships are too complex for that.

Some journalists (including myself, at times) have too readily accepted the agency's self-serving views of the space program as ultimate frontier, human adventure on the grandest scale, undreamed-of opportunities just waiting to be realized. And if the space shuttle really was the "wonderful flying machine" that astronauts and program officials repeatedly said it was, then each mission somehow had to be presented as exciting and novel—even if the spaceplane

MAJOR CHANGE PROPOSED IN NASW CONSTITUTION

Exhibit 5 (continued)

George Alexander works in broadcasting on a freelance basis.

was only hauling another batch of commercial communications satellites into space like so many UPS parcels. To be fair, some missions really were exciting—the resuscitation of the ailing Solar Max satellite comes to mind—and warranted this kind of upbeat coverage.

And yet no reporter who covered the space program on a semiregular basis could be unaware that the shuttle had a *lot* of problems, from inadequate experimental animal cages and balky human toilets to dandruffy exterior tiles and overly long turnaround cycles. Everyone flicked at these problems in passing, but only a few of us (like Mike Toner of the *Atlanta Constitution*, formerly of the *Miami Herald*, and a team from the *Orlando Sentinel)* came at them consistently as being symptomatic of some deeper flaw in the shuttle itself. NASA officials dismissed these stories as negative carping and predicted that the spaceplane's eventual performance would prove those reporters wrong. Perhaps if someone had been able to dig out one or more of those memoranda detailing engineers' apprehensions about the reliability of the O-rings on the shuttle's solid rockets before January 28, 1986, the Challenger and the other spaceplanes would have been grounded and the problems corrected.

> . . . no reporter who covered
> the space program . . .
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> shuttle had a lot of problems . . .

The Challenger accident, without question, has severely wounded both NASA and the press, and the scars will be evident on both for a long time. Granted there are two sides to every argument and granted there were some questionable journalistic actions, but I believe on balance the nation's press did better by the shuttle story than NASA—principally because NASA did so little to keep the public informed.

What happened in the immediate aftermath of the shuttle's disintegration is that *nothing* happened. At the moment of the disaster, all the computer-driven [illegible] at the Kennedy and Johnson Space

ly, "froze." The screens went blank and then repeatedly flashed the letter "S" for "static," meaning that no new data was being received or processed. The symbol could as well have characterized NASA public affairs' handling of information from beginning to end of the Challenger episode.

It wasn't as if the agency had been caught unprepared. NASA does have a special information plan for catastrophes like the Challenger. It was written partly because it was prudent to have one and partly because of two previous accidents—the Apollo 204 fire of January 1967 that killed three astronauts inside their spacecraft during a ground test and the Apollo 13 near-miss of 1970 that imperiled a moon-bound crew when an oxygen tank exploded halfway there.

Those two incidents had underlined the importance, for NASA at least, of getting out in front of a breaking story before rumor and speculation can be ignited. Accordingly, the agency's contingency plan calls for, among other things, a clear statement about the nature of any incident within 20 minutes of its occurrence. That didn't happen on January 28—in fact it was some five hours before NASA Associate Administrator Jess Moore appeared before the press at the Kennedy Space Center to provide the first meager details about the accident. More than a little lawyerly, the agency later maintained that it met the 20-minute requirement when it acknowledged the obvious: the shuttle had been lost.

According to one veteran NASA public affairs officer who worked both Apollo incidents, the contingency plan was pulled from the files (at least at Houston and Cape Canaveral) soon after the Challenger blew up and was ready for use, but officials in the agency's chain of command couldn't be bothered with it at the time. Asked if this was due more to the opacity of management or the timidity of public affairs, he thought for a moment before answering: "I'd have to say both."

That certainly fits with my impression of things: NASA managers pulled up the drawbridge within minutes of the disaster, the agency's press officers rushed to join them inside and from the start it was a classic case of siege mentality. With very few exceptions, NASA spokesmen either said "no comment" to almost every question or told us little of news value. This sit-tight attitude may have been imposed by top NASA management in the initial shock of the moment, as I was told, but I saw scant evidence as time

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passed that public affairs personnel were doing much to overturn it. (To be fair, there were two specialists—Charles Redmond and Jim Mizell—who did try to get some information out to the press, but as soon as NASA became aware of their work, both were reassigned to tasks that took them away from the Challenger investigation and the press.)

What a contrast with the way NASA handled the Apollo accidents more than 15 years ago! Then, it was clear to journalists that NASA public affairs people like Julian Scheer and Jack King were making strenuous efforts both to answer questions, as well as to get program managers to meet with the press. It was by no means clear during the Challenger episode that *any* efforts were ever made to *start* information flowing, let alone sustain a flow. From all appearances, NASA public affairs officers acquiesced easily to top management's gag order and then rationalized their inactivity by saying, "That subject is being investigated and we can't talk about anything under investigation."

> . . . from the start,
> it was a classic case
> of siege mentality.

More than a few NASA personnel, engineers as well as public affairs specialists, later seemed offended when the press promptly began digging elsewhere to find out what it couldn't find out from the agency. I'm still puzzled by this reaction. The engineers, unfamiliar with the workings of the press, might have had the misimpression that reporters would simply wait for the agency to reveal everything in due time, but the public affairs types certainly knew better. They had to have recognized within 24 hours after the accident that the story was quickly getting away from their control and that stonewalling was the wrong approach.

Why didn't they make this clear to the managers? NASA's official position is that it had to carry out an inquiry for the presidential commission into the facts of the Challenger's brief flight, and it was entirely up to the commission what should be done with those facts. The first part of this claim is obviously true, but the second is at best only partially true. I know that at least two presidential commissioners urged NASA to hold periodic press briefings and explain some aspects of the tragedy, but the agency declined. (The few briefings that NASA did put on were too little, too late, and too limited.) I have a suspicion, and it's only that, that NASA was mortified by the piles of dirty linen revealed by the accident and used the Rogers commission investigation as an excuse to hide out for 180 days.

It is widely believed, both by reporters and those public affairs officers distressed by their agency's handling of the tragedy, that Acting NASA Administrator William Graham and public affairs director Shirley Green failed to exercise the leadership role they significant event. Perhaps that was because both had been in their jobs only a few weeks before the tragedy, or perhaps because both were stunned by the magnitude of the event. But absent strong direction from the top, the middle and lower levels of the agency reacted in a typically bureaucratic way: They took absolutely no chances.

Reporters like William Broad of the *New York Times* and Bruce Hall of CBS News, who spent several frustrating months at Cape Canaveral, say it was clear who was managing the flow of information there—not the public affairs officers but astronauts like Navy Captain Bob Crippen and Air Force Colonel Bob Overmeyer, who were directing salvage operations for the agency. While individual astronauts and journalists may get along fine, neither side really trusts the other very much and so there's a long history of cool relations between the two. Add to that situation the military background of a large number of astronauts, with an emphasis on classified materials and "need to know" criteria, and it's not surprising that officials like Crippen and Overmeyer—when given the opportunity to control information—would place a very low priority on public accountablity.

I think there are some parallels between the way commercial nuclear power was covered in the 1950s-early 1960s and now, and the way the space program was covered pre-Challenger and will be covered post-Challenger. After a number of accidents and goofs at different nuclear power plants in the U.S. and elsewhere, the press's unquestioning attitude got to be very, very questioning. The same transformation will happen to the coverage of the space program. Bill Kovach, Washington bureau chief of the *New York Times*, feels there's a new, more sophisticated approach being followed by beat reporters, one that is ". . . neither accepting handouts nor always looking for scandal, but (instead is) intelligent, analytical reporting that raises the right questions." That approach, I'm sure, will be the hallmark of NASA coverage in the future—and everyone, including "good ol' Bob," "the gang over at 400 Maryland Avenue S. W." (NASA's current Washington address), and reporters will be the better for it.

The sudden dislocation of relations between NASA and the news media created special problems for veteran reporters who had the best relations with top NASA sources: The top sources weren't talking, but others were. According to *Washingtonian* magazine, it may have cost Tom O'Toole his job at the *Washington Post*: "The feeling around the newsroom was that the *New York Times* and the newsmagazines had out-reported the *Post*, primarily because the inside sources that O'Toole had cultivated for years suddenly dried up after the disaster."

According to the magazine, O'Toole was offered a transfer to the Metro section, but

THE WALL STREET JOURNAL FRIDAY, FEBRUARY 14, 1986

NASA, Once a Master of Publicity, Fumbles in Handling Shuttle Crisis

By Matt Moffett
And Laurie McGinley
Staff Reporters of The Wall Street Journal

When the space shuttle Challenger burst into flames two weeks ago, even the weather report became a secret.

With investigators from the National Aeronautics and Space Administration zealously guarding all information, a National Weather Service official in Miami informed a reporter that he had been instructed to refer questions to a nearby Air Force base. By then NASA had impounded all the weather data collected before, during and after the launch.

"I've been 19 years in the U.S. Air Force, and I've never been through anything like this," said a bewildered Lt. Col. Edward Kolczynski, head of the base's weather squadron.

Neither had anyone at NASA. The agency's muddled handling of the Challenger explosion has turned a major human and technological loss into a public-relations fiasco that could damage the agency's prestige and credibility for years.

Early in the crisis, NASA antagonized reporters and politicians by drastically restricting the flow of public statements and documents. The gaffes have continued through the accident investigation, in which several NASA officials have sometimes contradicted one another on safety and operating procedures.

"I don't think that any of them have deliberately lied, but they haven't been as candid as they could have been," asserts Rep. Manuel Lujan Jr. of New Mexico, the ranking Republican member of the House Science and Technology Committee.

NASA is trying to improve the situation. The agency held a lengthy press conference Wednesday featuring three top NASA propulsion experts, and released a 300-page book of internal documents about solid rocket boosters used on the shuttle.

David Garrett, NASA's chief of news and information, says: "We are doing our best to help everybody, and considering the stress we've been under, I think the staff has performed admirably."

Some media-watchers note that the sheer magnitude of the shuttle catastrophe put the agency under the kind of merciless scrutiny that few organizations can withstand. The crisis dramatically heightened the "tension between trying to keep the press reasonably satisfied, on one hand, and wanting to be sure that you're accurate, on the other," says Jody Powell, who was White House spokesman during the Iran hostage crisis. "It is a very tough balancing act."

The explosion of the shuttle on live television also put NASA on the defensive from the outset. "Everybody knew about the accident long before NASA had any chance to analyze it; the networks were coming up with potential causes an hour or two after the event," says Irvin Lipp, a public relations manager with Du Pont Co., a major chemical and oil producer.

Still, the space agency's fumbling has been all the more stunning because of its longtime reputation as one of the slickest self-promoters in Washington. "It's amazing to me that they could have been so ill-prepared for anything other than wonderful things to happen to them," says William Galvin, executive vice president and managing director of Carl Byoir & Associates, a large New York public relations firm.

In fact, NASA does have an emergency public-affairs plan. But after years of preoccupation with promoting the shuttle program and after 24 successful flights, the agency was clearly caught off guard.

The emergency plan emphasizes the importance of issuing a public statement within 20 minutes of an accident, noting that "rumors and speculation creating further problems will result if release is delayed." But by the time Jesse Moore, NASA's shuttle chief, held the agency's first news conference—nearly five hours after the explosion—swirling speculation was already attributing the disaster to everything from foreign sabotage to a puncture in the giant external fuel tank.

> "IT'S AMAZING to me that they could have been so ill-prepared for anything other than wonderful things to happen,' says a public relations consultant.

(NASA says that it fulfilled its disclosure obligations by announcing at the time that the shuttle had blown up.)

The space agency's subsequent reluctance to release engineering and quality-control records prompted dozens of reporters to seek other sources, some of whom leaked information that was damaging to NASA.

Administrative turmoil at the top probably contributed to the agency's halting response. NASA has been without a permanent chief administrator since James Beggs stepped down about six weeks ago, after his indictment on fraud charges related to his previous job at General Dynamics Corp. William Graham, the assistant administrator now acting as NASA's highest ranking official, had been on the job only a week when Challenger exploded.

The leadership vacuum has clearly hindered NASA employees, such as a veteran public-affairs staffer who recently offered an ironic reply to a reporter's request for documents. "Based on NASA's past record, I'd say yes," he said. "Based on what has happened around here in the past week, I'd say probably not." As it turned out, the documents weren't available that day.

Although President Reagan appointed a distinguished investigative commission at least partly to bring some luster to NASA's tarnished image, the public testimony it has heard from some agency officials may have only contributed to the problem.

Tuesday morning, for example, Lawrence Mulloy, overseer of the shuttle's suspect booster rockets, assured the commission that the main seals on the boosters hadn't suffered any damage since January 1985. He was promptly contradicted by the next witness, Richard Cook, a NASA budget analyst, who insisted there had been more-recent damage. In the afternoon, Mr. Mulloy conceded that some damage had occurred, but only within safety limits.

"I hope we don't develop any friction between the media, NASA and the commission," said William Rogers, the former secretary of state who heads the panel. "We're all working toward the same end."

NASA has been unusually dependent on the media ever since its birth in 1958. From the outset, however, image-conscious officials carefully managed the flow of information to avoid risk and to stimulate public and political support. When NASA initiated audio broadcasts from manned space capsules in the early 1960s, it looped a 60-second delay in the tape so that any catastrophe would never be broadcast live.

As successful space launches became routine during the shuttle program, NASA devised creative publicity campaigns to keep public interest alive. Schoolteacher Christa McAuliffe had been selected from among some 11,400 applicants competing for the chance to fly in the fateful Challenger mission and to conduct live lessons for broadcast into thousands of American classrooms.

NASA yesterday called a news conference to announce that the teacher-in-space project will continue and that [illegible]

Exhibit 6 (continued)

Barbara Morgan of Idaho will be offered the next chance to fly. After that announcement, she told reporters that she is willing to go.

NASA has also launched aggressive and expensive campaigns to woo politicians. A 1984 report by the General Accounting Office showed that during the first nine shuttle launches, the space agency paid $474,160 to fly 2,228 guests, most of them federal officials and their families, to shuttle launches in Cape Canaveral, Fla. NASA spent $504,601 more simply transporting its guests around the Cape, the report said.

But the space agency's carefully nurtured image suffered a devastating blow when Challenger exploded, and NASA's handling of the crisis has done little to repair the damage.

In fact, NASA's communications blunders may have cost it the political support it will badly need to get future projects off the launching pad. "Because of NASA's mystique and glamour, the hard questions haven't always been asked" by Congress, says Rep. Norman Mineta, a California Democrat and a member of the space science applications subcommittee.

Adds Rep. George Brown, a California Democrat who sits on the space science subcommittee, the Challenger disaster has made it plain that there are "sloppy designs, sloppy quality control and sloppy manufacturing that we have to root out."

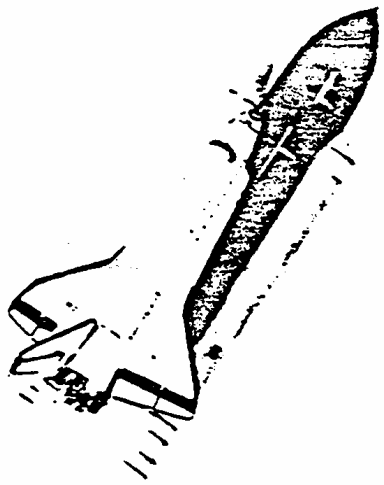
Exhibit 7

The Challenger Tragedy:

It Exposed TV's Failures— as Well as NASA's

In the wake of the disaster, some network news people admit to lazy, sarcastic, flawed coverage of the space program— but they charge that the agency blocked and misled them to cover up mistakes

By Neil Hickey



On Jan. 28, 1986, one year ago this week, the launch of yet another space shuttle was no longer major news, so routine had become the task. But 73 seconds after Challenger climbed into the Florida sky over Cape Canaveral, it exploded, and the seven crew members died—the worst accident in the almost

2

Exhibit 7 (continued)

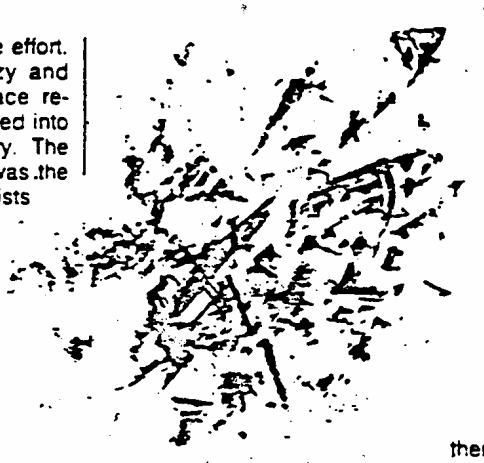
30-year history of America's space effort.

Suddenly a decades-old, cozy and familial relationship between space reporters and space officials dissolved into rancor, name-calling and hostility. The eighth casualty of the explosion was the trust and good will most journalists habitually afforded an agency that had been largely exempt—by reason of its splendid performance in the Mercury, Gemini and Apollo programs and the pride Americans took in it—from the same digging, skepticism and investigative reporting expended on Congress, the Pentagon and the White House. That era of good feeling ended last Jan. 28, and journalists say there is no chance of it returning soon.

". . . NASA let us down greatly," says ABC correspondent Lynn Sherr. "They were not forthcoming with the facts about the explosion. They were not wholly honest about the decision-making process [to launch or not to launch] until it came out in public testimony. They . . . botched the details about what happened to the crew." NASA is now facing "a hostile Congress, a disillusioned public and a mistrustful press. That is exactly as it should be."

Doors at NASA that "had once been wide open shut thunderously" after the disaster, says Tom Mintier, CNN's anchorman for shuttle launches. NASA spokesmen "obviously had orders from the top to stonewall." "They dropped a steel curtain of silence," claims CNN vice-president Ed Turner. "They were always accessible when the questions were pleasant and there was good news to report. But when the reporter on the NASA beat suddenly became like a police reporter, it got very tense."

NASA had its own list of grievances about the media. Richard G. Smith, who was head of the Kennedy Space Center in Florida at the time of the explosion, argued that snide news stories about aborted launches had created "98 per cent of the pressure" to go ahead with the ill-fated Challenger flight. "Every time there was a delay, the press would say, 'Look, there's another delay . . . here's a bunch of idiots who can't even handle a launch schedule'," Smith complained. "You think that doesn't have an impact? If you think it doesn't, you're stupid."



What Smith was reacting to (among other things) was Dan Rather's *CBS Evening News* coverage of Challenger on the day before the shuttle tragedy. "Yet another costly, red-faces-all-around space-shuttle launch delay," Rather had told his audience. "This time, a bad bolt on a hatch and a bad-weather bolt from the blue are being blamed." Rather then asked reporter Bruce Hall for "the latest on today's high-tech low comedy."

The *NBC Nightly News* was calling the bolt problem an "exasperating mishap" and "still another delay in efforts to put the first schoolteacher [astronaut Christa McAuliffe] into space." The ABC *World News Tonight* program was reporting: "Once again a flawless liftoff proved to be too much of a challenge for Challenger. This time, the delay was blamed on bad weather and a stubborn door handle." Tom Brokaw, reporting earlier in January about delays in the launch of the shuttle Columbia, let it be known that "these delays are becoming expensive. . . . A NASA official said today that →

continued

the agency loses as much as $300,000 every time there's a postponement." The next day, Jan. 8, he reported: "It's now 0 for 5 for the shuttle Columbia." And on Jan. 10: "By now the shuttle Columbia's crew members are experts at getting in and out of their spacecraft. They're 0 for 6." That same day, Dan Rather told his audience: "The launch has been postponed so often since its original date, December 18, that it's now known as Mission Impossible."

Most TV journalists reject the notion that such reporting—freighted with sarcasm though it might have been—pressured, goaded and badgered NASA into a launch on Jan. 28 that they might otherwise have postponed. Says CBS's Eric Engberg: "If somebody is paying that much attention to the press and what it says, he's not my idea of the kind of person I want pushing the button if I'm riding the spacecraft."

Dan Rather, however, responds to the accusation this way: "I think it's fair to say that the reporting of the failures of NASA may have contributed in some way [to the decision to launch Challenger on Jan. 28]. I can't rule that out as a possibility." But that kind of speculation avoids much larger issues, says Rather, such as the effects on NASA's decision-making process of "budget pressures" and "a highly politicized top bureaucracy" within the agency; as well as an "absolutely unrealistic launch schedule" that called for 15 shuttle missions in 1986. If NASA was paying so much attention to TV and press stories "that they'd risk people's lives with a launch they really didn't want to make," says Rather, "then they were damned sure paying too much attention to what was on TV and in the newspapers. But I don't happen to think that was the case."

NASA officials have, in fact, distanced themselves from the accusation that the media badgered them into launching the Challenger against their better judgment (Richard G. Smith is no longer with the agency). Nonetheless, Shirley Green, who directs NASA's public relations, confesses that "it really did rankle people in NASA a lot that we were ridiculed every time we

Exhibit 7 (continued)

scrubbed a launch." She insists, though, that the badgering was never a factor in their decisions to proceed or to postpone. "We were ridiculed if we didn't launch," she complains, "and the minute we launched and had a failure, the media's attitude was, 'My God, why weren't you more careful about safety?'" The agency "scrubbed when we thought it wasn't safe to go," says Green, "and we went when we thought it was safe to go."

In retrospect, the world knows that on Jan. 28, 1986, it was not "safe to go." Officials within NASA were told it was not safe to go. Engineers at Morton Thiokol, which designed the spacecraft's solid-fuel rocket boosters (SRB), not only knew it was not safe to go, but strongly urged NASA to scrub the flight on grounds that expected cold weather at launch time might cause seals in the SRB—called O-rings—to malfunction, allowing gases to burn through the booster and thus explode the vehicle. TV and print reporters did *not* know of the imminent danger because they had failed to do the basic digging and investigative work that would have brought to light NASA's and Morton Thiokol's *years-old* concern about the O-rings' reliability.

If NASA botched the launch [illegible] its public-relations aftermath, TV journalists and their print colleagues botched the coverage of NASA in the years, months and days before Challenger exploded—partly, it is clear, out of intellectual laziness bred of too heavy and unquestioning reliance on the space agency's bland and utterly unwarranted assurances that all was well. On Feb. 17, nearly three weeks after the disaster, Eric Engberg, reporting for a team of CBS journalists, broke the story that "on the night before the flight, 'strong and unanimous' opposition to a launch was registered by engineers for Morton Thiokol." That report proved to be true—even though tragically late—and in the ensuing days several scientists, including Allan McDonald, Thiokol's chief engineer at the Kennedy Space Center, confessed they had tried desperately to stop the launch because of low temperatures at the launch pad. (Top continued on page 8

continued from page 4

executives at Morton Thiokol reluctantly approved the launch, over their engineers' objections.) Moreover, as a mass of testimony and documents began flowing toward the Presidential commission that had been established to investigate the accident (called the Rogers Commission after its chairman, former Secretary of State William Rogers), it was quickly apparent—for the first time to the press and the public—that the O-rings had been cause for serious concern for years to NASA and Morton Thiokol; that partial malfunctioning of the O-rings had occurred on several earlier flights; and that the seriousness of the situation was well-known throughout the NASA bureaucracy. (The O-ring assembly had proven itself less resilient in cold weather. NASA had never before launched at temperatures below 51 degrees, on Jan. 28, the O-ring temperature was 28 degrees.)

To this day, no fully coherent explanation has emerged as to why NASA proceeded with the launch. Similarly, it is almost incomprehensible that the press did not know about—or fully understand the gravity of—the O-ring controversy that raged within NASA. But it did not. Television's anchormen and reporters were content with the trivial task of counting launch delays in terms tinged with sarcasm. They should have been crying out an ear-shattering warning to the world that Challenger was not safe enough to fly. Seven lives might have been spared.

To the mystification and wrath of news people at the Kennedy Space Center, NASA—the U.S. agency most renowned for its public-relations skills—drew a veil of silence between itself and the media immediately after the explosion. Part of the reason, obviously, was its immobilizing shock at the loss of seven colleagues and a nightmare vision of the shuttle program in shambles. But the main reason, it's now clear, was that NASA officials suspected their own tragic miscalculation with the O-rings, knew that the news of it would soon leak out and were mounting a holding action to delay the inevitable and devastating recriminations.

That decision was a "disaster" for the space agency's image, says CBS's Bruce Hall, but "in the long run a boon to the public" because it "loosed hordes of reporters to go over every aspect of the shuttle program and the more they dug, the more they found—document after document outlining mechanical problems, poor judgments, safety shortcuts. We found an immense number of memos and internal documents that had never been released before and the end result is that the image of NASA has suffered greatly." NASA knew "a lot of things that we did not know" about the history of O-ring unreliability, Hall says, "and they knew that most of it, if not all of it, was going to prove to be eventually embarrassing to them." The NASA public-relations posture hardened from "we don't know" shortly after the explosion to "no comment" later in the investigation, says Hall. Even sources he'd been using for years gave him "a very blunt, very straight 'no comment'" to simple queries. That decision to foreclose colloquy with the press "came from high up in NASA or higher levels than that, even. It was not a decision reached at the Johnson Space Center in Houston or the Kennedy Space Center in Florida. It was a Washington decision and it came down quickly."

Other TV news people confirm the spirit of Hall's remarks. CNN executive Charles Hoff thinks NASA simply behaved the way many other corporations in crisis have behaved: "They withhold information because they're afraid of the results. I can understand the kinds of pressures and fears NASA was under. They didn't know what would happen to the program, hence to their jobs and their way of life." They should have been prepared for a disaster of that magnitude, "but they were not."

NASA recalls those days rather differently. In the first eight days after the accident, the agency points out, it held six press briefings, released the celebrated photo showing plumes of fire emitting from the SRB and delivered NASA's acting administrator, William Graham, to all three Sunday morning network interview →

Exhibit 7 (continued)

continued

programs: "We were not stonewalling at all," says NASA's Green. "There were lots of days that we didn't know anything. When we knew something, we tried to get it out." Among the constraints on NASA, says Green, was the need to first inform the Rogers Commission and the Congress, and to make sure that the families of the dead astronauts were notified about significant information before releasing it.

NASA perceives a major dilemma in the press's clamorous insistence on getting all information at the earliest moment—including preliminary, unassimilated and potentially erroneous information—rather than waiting until all the facts are nailed down. It's a Catch-22, NASA insists: If they release preliminary information to reporters and it turns out later to have been wrong, will the press accuse them of having lied? Or if they wait to confirm a fact or suspicion, will the press accuse them of stonewalling?

On the other hand, describing a launch delay as "high-tech, low-comedy," as Dan Rather did the night before the explosion, is "totally irresponsible," says Green. (Dr. James C. Fletcher, the current NASA administrator, declined requests to be interviewed for this article.) Such things wouldn't happen, she is sure, if the working reporter on the beat had more to say about what comes out of anchormen's mouths. "I don't think Bruce Hall [CBS's man on the scene] thought it was 'high-tech, low comedy'." But after the news gets sifted through producers and news writers in New York, and perhaps the anchorman's own typewriter, errors of fact in interpretation often creep in, she believes. As a result, "Some of the most shocking statements came out of network news, time and again, that to me were like bolts from the blue. It was as if they were reporting on something that hadn't happened in the briefing I attended."

Green "nearly went through the ceiling" on several occasions when one network—in reporting on NASA's investigation into the accident—used expressions such as "NASA refuses to comment" when in fact (Green felt) the agency had provided every scrap of pertinent information on the point in question. "For an anchor to say [in such circumstances] NASA 'won't comment'," says Green, "was irresponsibility that still leaves me almost speechless."

For months after the explosion, Coast Guard and Navy salvage vessels searched for debris in a 500-square-mile area of the Atlantic Ocean off the Florida coast while hundreds of journalists pleaded, often to no avail, for news about the search operation. The competition among the legions of reporters was intense, and, for television, with its need for pictures, NASA's recalcitrance was particularly troublesome. Even in the face of video- and audio-taped evidence of what the recovery ships were finding, says Bruce Hall, NASA regularly would tender a "no comment" or a simple denial of what was being dredged up from the bottom.

Suddenly, TV journalists were faced with the biggest domestic news event in years and were not prepared for it.

One reason for TV news's fervor during the search, some NASA officials believe, was the medium's retrospective regret that it had largely come to ignore shuttle launches, believing them to be as routine as airliner takeoffs. Now, suddenly, TV journalists were faced with the biggest domestic news event in years and were not prepared for it. Their response was to commit massive resources to the story, which made them avid to amortize their huge investment with daily reports from the recovery scene, even when there was no news. That "fierce competition and the need to produce," Shirley Green says, "caused an awful lot of erroneous and speculative [reports] that the press was very wrong on." She confesses that "there was also a lot of really good reporting on this story. Unfortunately, some of the erroneous stories cast a pall."

CBS, for example, reported late in February that the crew compartment had been found when, in fact, salvagers didn't lo-

Exhibit 7 (continued)

cate it until March 7. "There were excesses" in television's handling of the story, ABC's Lynn Sherr admits, growing at least partly out of the networks' desire "to get ratings" from the public's newly recharged interest in the shuttle program. Thus, in what appears to her to have been an effort to "make up for past omissions" and neglect by some TV journalists in covering the space agency, "It suddenly became fashionable to hit NASA whatever the charge, and report the charge whatever the source. Some organizations shamelessly, breathlessly, reported every rumor as fact and offered no discrimination between what was significant and what was not." While affirming her dismay over NASA's dreary performance, Sherr is "disappointed about what I found out about my own business."

But the competitive frenzy, in any case came tragically late. The Rogers Commission began its hearing on Feb. 6 and released its report on June 9, and throughout that period it became alarmingly clear—in testimony, unearthed documents and leaks to the press—that apprehension within NASA over the faulty performance of O-rings on earlier shuttle flights was so pervasive that the agency's decision to launch on Jan. 28 had indeed defied all logic. TV journalists (along with their print brethren) had missed that story cold. It was a story that cried out for exposé, for angry, illuminating, hour-long documentaries at any time in the several years preceding the catastrophe; documentaries—in the tradition of "Harvest of Shame" and "The Selling of the Pentagon"—of the sort television created in the days when it took its public-service obligations seriously; when it was leading the public's interest, not following it.

Many television journalists concur that better reporting might have spared Challenger. "We didn't ask more of the tough questions," muses CNN's Ed Turner, because the shuttle program seemed to be working reasonably well. Alarm bells should have gone off many times in the years preceding the accident, he says. "Watching the hearings, their cumulative effect was: 'Why didn't we ask those questions before?' It's not a happy or proud period for anybody."

CBS's Dan Rather admits, "Yes, we should have dug harder and deeper into things," and it's "a fair criticism" that they didn't. But NASA "makes it difficult to do that; they don't want you to know of the trouble they're having with O-rings." Basic "police reporting," says Eric Engberg, "is what was missing all along." Says Lynn Sherr: "We didn't do enough. We were all kicking ourselves for not asking more questions. If more reporting would have spared Challenger and its crew, then we should have done it." Says NBC News vice-president Joseph Angotti: "It did not occur to us at the time to raise serious questions about whether the intense launch schedule was resulting in safety cutbacks. In retrospect, I wish we had."

NASA's determination to hew to its (several-times delayed) launch schedule for Jan. 28 may have derived, at least in part, from the coincidence that President Reagan's State of the Union message was scheduled to be televised, live, to the Nation that night. Like other Federal agencies, NASA had drafted and submitted to the President's speechwriters a few paragraphs they hoped might be included in the address. Challenger's destruction obviated that moment of glory for NASA; and the State of the Union message was postponed out of respect for the dead and the grief of the living.

Lessons, clearly, have been learned in the last 12 months. Television news people will cast their coldest and most skeptical eye on the U.S. space program, and that alone may help prevent so monumental a calamity from ever happening again. And NASA, it is fervently hoped, will more scrupulously observe the mandate of its own charter—unique among Government agencies—requiring it to "provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof."

Challenger may not have been lost in vain. BC