Interview with Dr. James Gast
Interviewers: Bryan DeMain and Katrina Schaal
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Bryan: So what motivated you to get into the field of oceanography?

Dr. Gast: I decided that when I was about thirteen years old. I said to myself I want to be in science and I want to live near the ocean, and the logical conclusion is that if I became an oceanographer I’d probably live near the ocean and I would be a scientist…o.k..

Bryan: How did you get into the field?

Dr. Gast: I lived in Southeastern Massachusetts and that was by water only about eight and a half miles away from Woods Hole, forty miles around by land because you had to go around by the Buzzards Bay, which is the body of water between my hometown and Woods Hole.

And so in 1947 I went down there—I was still in high school—I went down there and said I’m think I’m interested in oceanography. I’d like to find out if oceanography is interested in me, so I’ll do anything. Can I get some kind of summer jobs here and in ’47 they were still shorthanded from the shorthandedness that occurred during WWII, so they was still somewhat shorthanded and they needed gophers to do things. So I worked there in ’47 and in ’48. I think that’s right. Maybe it was ’46 and ’47, that’s better. ’46 and ’47 I worked there in summers and it turned out to be a compatible thing.

So after, after, I finished my undergraduate education, a person at Woods Hole who had taken his advanced degree at the University of Washington, I think, but at any rate, there was an individual at the University of Washington, Professor Thomas Thompson, who was an outstanding person in the field of chemical oceanography and so I was put in contact with the oceanography department in the University of Washington. And so I went. I graduated Amherst College in Massachusetts, and that school was rather rigorous. I did not have outstanding grades, but, um …

So I went to University of Washington in the summer time, sorta as a, to take a couple of courses at the Friday Harbor Marine Laboratory and in oceanography and that was sort of a probation period. And so then I stayed in Seattle and in Friday Harbor, uh, uh … (phone ring) excuse me.

Bryan: No problem.

Dr. Gast: For six and a half more years…at the University of Washington for six and a half years and at the end of that time I was looking for a job and I turned down
one offer, but I accepted an offer to come to Humboldt. Which I did and I arrived here in January of 1961 and so that brings us up to the starting the basis of how the oceanography department started.

I was, I came here at the request of the … in those days the division chairman of the division of natural resources, who was officially…and his name was Ernie Salo. Professor Salo asked me to come because they needed an oceanographer to teach, among other things, fisheries students, something about the environment in which the fish lived.

And that was, he felt that he was exhausting his capabilities of doing that, at least that’s what he told me, and so I came here and that was the initial … because there was no concept at that moment of starting a department or anything, it just happened later on.

I was to teach, be available to teach oceanography classes to anybody other majors that want to be able to take them.

Bryan and Katrina: o.k.

Dr. Gast: That wanted to take them I should say, o.k.

Bryan: So it began as classes and not a department?

Dr. Gast: That’s right. In fact the first year I was here to round out my teaching load, I taught laboratory sessions in general physics, which I enjoy teaching and it doesn’t make any difference what it is, if I know about it I’d be glad to. And so I had a lot of fun teaching those laboratory sessions in general physics and they were mostly people who were not science majors, which is fine.

Later on…that gets into a philosophy of general education but…At any rate…beginning courses in the department too, alright so go ahead next question.

Bryan: So I guess from here was there a struggle in getting the department going?

Dr. Gast: Let’s keep going then…After that, so we started in January of ’61 and by about ’62, ’62 and a half somewhere in there the idea was, well you know, maybe we should get another oceanographer to compliment my knowledge and what have you. And also, um, maybe we ought to see if we could get the board of trustees to approve a major in oceanography.

So I wrote up a program. I wrote up a list of classes, the requirements for a degree, and um I had it…why we were going to do it and who was going to be the majors, the various majors who were going to be in there. I had three categories: those who wanted to do it as a profession, those who felt that it
would, that the classes would augment their major, and broaden their major, and the third category was people who are curious, and want to take the classes because they’re curious.

So those things are…people we took and in the write up for the degree, that was the justification.

Bryan: Now was there, at the time, was there an influx of students toward that? Was there eagerness among students?

Dr. Gast: I was teaching … after I got started, I only did that physics thing for one semester, we were on a semester system at that time and so I taught it for one semester then started teaching a pair of oceanography classes in each semester. So I have 4 classes I was working with to cover the four particular sections or segments of oceanography, the specialties, plus the beginning classes that were open to everybody.

So I had 5 classes, and I was balancing them and going along. I sensed that it would be good to get it. And I got excited about this idea about an oceanography major. At that point after the trustees approved the major we uh, we were allowed to hire a person, and we hired a person from Scripps Institution of Oceanography down in La Jolla, and his name was Robert Thompson. And Dr. Thompson was a geology type. There are four specialties in oceanography, physical type, chemical type, biological type, and geological type.

Bryan: O.k.

Dr. Gast: It takes care of the life, it takes care of the water itself, and it takes care of the container that holds the water in it, because oceanography covers virtually everything that has to do about the marine environment and that includes the air above the marine environment so you got the air with the winds and what have you, the basin and then you have water and the life within.

Bryan: All the basic principles.

Dr. Gast: And so we did that and the next year in ’65—I think it was ’65; we hired one in ’64 and hired one in ’65—was professor George Crandell and he was a biological type, he came from Oregon State University.

Bryan: So you hired people with different teaching styles?

Dr. Gast: Yes, that was to cover the specialist of each one. I was … my thesis was in chemical oceanography so I did the chemical part and I also was doing the physical part. By 1965 we had the three of them and people were coming, people were being attracted, and the major was growing.
And about 1969 or so, somewhere in there, we had close to 200 majors. By then we hired more people. It’s interesting because in the sixties there was a lot of emphasis by the students on earth sciences. It was a big deal. In the end of 1959 or so was the International Geophysical Year, the IGY, and there were other things that were going that emphasized the earth and earth sciences. And so after about 1969-70, students were starting to drift away. One of the majors that sort of became attractive to them was business administration.

Because by about 1970 there was an urge on the part of a definite segment of student body that their college education was going to enable them to make money. In the seventies it was advised to be able to go into industry or what have you or entrepreneuring, to make money. That was the seedling, the thrust of the student orientation was to make money.

Bryan: Now in the 1960’s was that a complete different contrast, you had students that were there, like you said, that emphasized, perhaps, or they focused on their studies looking at the environment as the number one concern?

Dr. Gast: Yes. In the 60’s there was a definite thrust among a larger segment of the student population to learn more because they had an intense focus on the earth sciences and the earth and the environment and what have you. I think that popped back again later on. The pendulum was swinging back and forth, and then it swung the other way and then it would swing back. And as pendulums do they always swing quite a ways from dead center, so you end up with extreme things in various ways.

Bryan: But over time it balances?

Dr. Gast: Over time it balances out, sure. The main thing we lacked in the 1960’s was an adequate platform to go to sea. We didn’t have … we had a boat, a very small boat, a 36-foot boat. And we did things in the ocean and we did things in the bay. But it wasn’t big enough because you wanted to take a class out and a class had a laboratory section that might go up to as many as 24 students. It was the last sections that you really were taking out to sea, if you had 16, you took 16, if you had twenty, you took twenty. Some classes were small and so you took the whole class because there was only one lab section anyway. When you got to taking out OCEAN 100 people you had to take them out in groups because there just wasn’t enough room.

And then about 1971 we got a larger vessel and it a larger vessel that was owned off-campus but it was dedicated to being here for the students for educational purposes. There was not at this time the push for research. Up until, in the 70s up and through the 70s, it was acknowledged and everybody realized and everybody agreed that the principal mission, the primary mission, at Humboldt State was education, teaching the students, so the vessel was
dedicated to it for that purpose and that made this department different than virtually any other department in the U.S. Because they had big boats, they had expensive boats. They were supported by contract research and grants from the federal government. The larger institutions, the graduate institutions, had federally-owned [and] -built boats that had been turned over to the institution to use and they got grants from the Office of Naval Research, ONR, to do certain works, and that supported the vessel. Because most of the schools—Washington, Oregon, east coast, La Jolla … well La Jolla had only graduate programs. When this started there were only two undergraduate programs in the marine environment: here and Oregon State University. There was one more, but it was Ann Arbor, Michigan, and so they were doing their work, their activities, the activities they did, in the Great Lakes. They did the things, the same sort of things, but the water was not salty.

Katrina: Yeah, it was a lake, not the ocean.

Dr. Gast: It makes a difference. It makes a difference.

Bryan: All along throughout the sixties and seventies then, there was Oregon State and Humboldt and…?

Dr. Gast: There were no other undergraduate programs. Oh, the University of Washington had an undergraduate program, I’m sorry. The University of Washington, they had one since 1950. Oregon State developed one starting about 1959. That’s where I was offered a position but I turned it down for personal reasons. And then there was here. There were just these three places on the west coast. There are places now on the East Coast and various other places.

Bryan: O.k.

Dr. Gast: But for the most part … You have to understand that earlier, going back to pre-World War Two and right after World War two, people went into oceanography after they became a geologist or biologist or chemist. They had a PhD in physics or chemistry or biology or geology or what have you. Many people in the profession believed oceanography was a graduate activity. It had no business being in the undergraduate curriculum, because you didn’t get a good education if you did it then, because you had to, obviously, had to skimp on the basic sciences. That was their argument. I think we squashed that, we kinda put the kibosh on that argument, because of two things. One is all the majors in oceanography took the courses in the sciences that majors in that department took. So if they took math, they took the math that math majors took, they took the geology that geology majors—geology didn’t have non-majors, but biology was rife with non-major courses. But our students took biology that biology majors took. So they took all of the geology, the physics—the physics majors also had other courses too, but they took the
courses that physics majors took. So that meant that they got the rigor that the majors in those departments got. But we got more then because they didn’t take the majors of other departments. We were the only ones that took all the majors, the courses that the majors took in all the departments. And so I think that we had a greater strength and also diversity that I think oceanography majors, by the time they graduated…

Bryan: It was quite an accomplishment

Dr. Gast: …were able to do a great variety of things

Bryan: Right.

Dr. Gast: And they had the knowledge that they could build on. Now they weren’t oceanographers—no way, I’m not saying that they were oceanographers—but they had a foundation. Now I had students … The department, I shouldn’t say I, had graduates that went and actually went into masters programs in the basic sciences. We had people who were admitted to Washington State University in geology, we had other people who went in various places. We had graduates that went off and never did anything more with oceanography, but, for example early on one of our students went and took the junior executive program for Sears and Roebucks that was given down in Oakland. It sounds strange, but he had the best grades they’ve ever had in that program. Why? Because he had the basis that we gave him. Not only they were well founded in the sciences but we felt one of the things that were important in education was communication. We emphasized being able to communicate well in both the written and spoken modes.

Bryan: Right.

Dr. Gast: And going out to sea is generally is very often an arduous process. Boats are small, they bounce around, people do get motion sickness, or they are subjected to motion sickness, and it’s wet and it’s cold, and it could be all kinds of things. So the idea is that when you graduate from oceanography you have also developed not only communication skills, but skills that allow you to work as a team with other people to accomplish a common goal under difficult and often impossible situations and then also you know that sometimes you can’t do it. Things go bad and you don’t achieve your goals but you have to recognize that because you didn’t think of what might happen or you can’t screw around with mother nature because at times she’s more powerful than anyone else anyway so she bats last, so to speak…(laugh) You had to learn that failure is a part of this thing or the potential for a failure. So you give it the old college try and go as hard as you can.

So all of those things are a part of the oceanography curriculum, intrinsic in it, and that’s why we turn out very good people…we had one woman, bless her
soul, she not only got a degree in oceanography, but she got a degree in biology, and a degree in physics all at the same time. She had three … she walked out of commencement with three baccalaureates. We had a lot of people, not a lot, but we had some that took two, quite a few that took two degrees…

Bryan: You don’t see that very often

Katrina: No, you don’t

Dr. Gast: So they put the kibosh on what the people said, “Oceanography has no business being taught …ah! You don’t teach it to undergraduates, it’s a graduate program.” Well they got a degree in geology as well.

Bryan: You turned out impressive students basically.

Katrina: Yeah

Dr. Gast: I think so, I’d …we…I don’t think anybody applied to graduate school that had any kind of a reasonable expectation—obviously not everyone applied to graduate school, they weren’t graduate school material—but anybody who had any reasonable expectation of being a graduate student was admitted. I don’t think anybody failed to get admitted if they applied and had a reasonably good record here.

Katrina: Well uh…

Dr. Gast: That tells you what we felt about the program and there were times when there were difficulties. I can remember for example, there were some faculty members in the department, for example, that wanted to split general oceanography into two classes, those for majors and those for non-majors. And I resisted that very, very diligently for two reasons. One is I felt the non-majors and the majors learned from each other because they had a different outlook about the course, so they were able to sort of re-inoculate each other so that they could appreciate the fact that there was more than one viewpoint here.

Katrina: Exactly

Dr. Gast: Two, the other cliché that I always used to espouse was “if it isn’t worth teaching to anybody than it’s not worth teaching.” So I felt everybody profited by taking the class. And they said, “Well, you’re not making it rigorous enough for the majors and you’re making it too difficult for the non-majors” and all this sort of thing. I said, “Look, if it isn’t worth going to school, going to class to listen to, then it isn’t worth teaching in the first place. So as far as I know we never ever went that route. I can’t speak for after I left the
department, but there were things like that we had difference of opinion, but I have to confess that probably …I…uh…was in some occasions perhaps a little autocratic; a benign dictator, so to speak.

Katrina: Well you started the whole thing. It was hard to get it going.

Bryan: Right…sometimes

Dr. Gast: Actually by the time I left in 1992, virtually the same course descriptions and same program still existed.

Bryan: And it's…it's…sometimes you find yourself in a position where, like what you said, sometimes you find yourself in this autocratic position and “I don't want to be in this position” but when you find, when you are actually standing in those shoes you do make decisions that look … to other people …

Dr. Gast: Right, right. I never had any problems with the administration at all, faculty members used to complain about the administration. Maybe it’s because early on a middle- to upper-level administrator came to me and talking to me in the tone of voice and the language that an employer would talk to an employee. And I listened to it for awhile and I said, “now wait a minute, I don’t work for you, at all. I work for the State of California, the taxpayers of the state of California. And if anybody on this campus represents them, it’s the students. So in a sense I work for the students. And incidentally, your job is to make my job easier,” and I turned around and walked off. I never had any problem, nothing, I never had any problem at all with the administration. They never harassed me or anything like that. I made decisions, I made lots of decisions about the vessels and about this and that and nobody challenged them. Maybe that’s because uh…

Katrina: Wasn’t gonna give up (laugh)

Dr. Gast: Well back up (laugh)

Bryan: Well on that, with the California State system, was there any major differences in the CSU system to Humboldt before and then the CSU system afterwards? Were there any major differences?

Dr. Gast: Well, we went through the process of becoming Humboldt State University. There were three schools that maintained their original names. For awhile they were bandying about this “California State University comma Humboldt,” which every time I ran into it I pushed it, buried it so we and Chico State and San Francisco State, and San Diego State, those four, and Humboldt State—those other three and Humboldt State—kept their geographic names. And then in about 1969 we went on the quarter system until President McCrone came …
HERE THE TAPE MALFUNCTIONS AND THE REST OF THE INTERVIEW IS LOST.